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10CFR50.55a

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January 29, 2003

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

Dear Sirs:

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 1, Docket No. STN 50-528
Unit 1 Second 10-Year Interval – Tenth Refueling Outage Inservice Inspection Summary

Pursuant to 10 CFR 50.55a and IWA-6230 of Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, 1992 Edition, 1992 Addenda, Arizona Public Service Company (APS) hereby provides in Enclosure 1 the PVNGS Unit 1 Inservice Inspection Report for the tenth refueling outage. APS completed Unit 1's Refueling Outage on October 30, 2002. Also included in this summary report are four pressure tests performed at the end of the first inspection period that were omitted from the ninth refueling outage summary report for Unit 1.

This letter does not make any commitments to the NRC. Please contact Thomas N. Weber at (623) 393-5764 if you have any questions or require additional information.

Sincerely,

Scott A Bauer

SAB/TNW/RJR/kg

Enclosure

cc: E. W. Merschoff
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A047

ENCLOSURE

SECOND 10-YEAR ISI INTERVAL SUMMARY REPORT

TENTH REFUELING OUTAGE

PALO VERDE NUCLEAR GENERATING STATION, UNIT 1

PALO VERDE NUCLEAR GENERATING STATION

UNIT 1

INSERVICE INSPECTION REPORT

TENTH REFUELING OUTAGE

ARIZONA PUBLIC SERVICE

5801 S. WINTERSBURG ROAD

TONOPAH, AZ 85354

PREPARED BY: _____ DATE: 1/24/03

REVIEWED BY: _____ DATE: 1-24-03

APPROVED BY: _____ DATE: 1-24-03

COMMERCIAL SERVICE DATE: 01/28/86

REPORT DATE: 01/24/03

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UNIT 1 INSERVICE INSPECTION REPORT

1.0 Introduction

This report is a summary of the examinations performed during the tenth refueling outage at the Palo Verde Nuclear Generating Station (PVNGS) Unit 1. This report also includes all applicable examinations conducted since the last refueling outage. This was the first refueling for Interval 2, Period 2 which was conducted from September 28, 2002 through October 30, 2002. Palo Verde Unit 1 began commercial operation on January 28, 1986.

This report identifies the components examined, the examination methods used, the examination report numbers, and summarizes the examination results for each of the following categories:

1. ASME Section XI, Class 1 and 2 pressure retaining components and their supports.

2. Augmented High Energy Piping systems in accordance with PVNGS UFSAR Section 6.6.8.

This report is a summary of the ISI examinations performed during the Second Interval. This report is a summary of the Period 1 examinations and examinations performed through the tenth refueling outage. All of the examination report numbers listed in Appendix A for the tenth refueling and examinations performed since the last Summary Report are in bold type. Four pressure tests performed at the end of the first period were not included in the ninth refueling outage summary report. These reports were included in this report, listed under the first period and are also in bold. CRDR 2579575 has been initiated to address this issue.

2.0 Examination Summary

The evaluation of the results from the ISI examinations indicated the integrity of the systems have been maintained. All discrepancies were corrected or determined "use-as-is" in accordance with PVNGS work control practices and ASME Section XI.

Boric acid residue was detected on the tubing connected to the reactor vessel in-core instrument nozzles (ASME Class 1 Item B4.13, Zone 1). The condition was investigated under CRDR 2312850 and determined to be the result of a prior packing leak and leakage from the ICI seal table. No indications of leakage of the tubes, nozzles, or reactor vessel were detected. (Ref. CRDR 2564714 and report VT-02-705)

Visual examination of SI240H3 and SI240H5 (ASME Class 1 Item F1.10, Zone 21) identified that the load pin spherical bearing had moved 3/16" and 1/8" beyond the edge of the paddle. The spherical bearing on SI240H3 was cracked. The cracked spherical bearing was replaced and the other spherical bearing was reworked. The supports were examined based on identified vibration during a walk down and were not scheduled for examination. The cause was vibration on the system, induced by an adjacent valve. The evaluation determined that the supports would have continued to perform their design function in the as found condition. A stress analysis was performed under CRDR 2557486 and determined that sufficient margins exist in the system and support designs to handle these increases. Therefore, the piping system was not compromised. (Ref reports VT-02-431, VT-02-605, VT-02-432 and VT-02-607)

Visual examination of SI193H3, SI175H21, SG5H5, SG5H13, SG8H8, SI202H4 and SI220H20 (ASME Class 1 & 2 Item F1.10 & F1.20, Zone 22, 26, 55, 58, 96 and 97) identified that the sway strut lock nut was not fully engaged. The lock nuts were tightened. An evaluation was performed and determined that the loose lock nuts would have no impact on the support or system and would have continued to perform their design function in their as found condition. Therefore, the piping system and supports were not compromised. (Ref CRDR's 2559339 & 2560602, Report #s VT-02-496, VT-02-652, VT-02-507, VT-02-655, VT-02-560, VT-02-656, VT-

02-563, VT-02-657, VT-02-451, VT-02-649, VT-02-469, VT-02-651, VT-02-443 and VT-02-648)

Various non-rejectable indications were detected during the performance of examinations. These indications were recorded and are maintained on file.

3.0 Examination Techniques

3.1 The three types of examinations utilized to perform the Inservice Examinations, along with the actual nondestructive examination techniques, are identified in the legend below:

VT - Visual	VT-1	General Condition
	VT-2	Leakage
	VT-3	Structural Condition / Operability
S - Surface	PT	Liquid Penetrant
	MT	Magnetic Particle
VOL - Volumetric	UT	Ultrasonic
	RT	Radiographic

3.2 All of the nondestructive examinations were performed using specific techniques and procedures that are indicated in ASME Section XI, or alternative examinations that are demonstrated to be equivalent or superior to those identified.

4.0 Accessibility

4.1 All items were examined to the extent practical. Code limitations encountered during the examination that exceed the criteria of code case N490 are documented in Appendix B.

5.0 Personnel

5.1 All nondestructive examinations were performed by Arizona Public Service Co. (APS), Lambert, MacGill, Thomas, Inc. (LMT), or MQS. All personnel were certified in accordance with programs written to comply with the applicable requirements of ASME Section XI. Copies of all certifications are maintained on file. Hartford Steam Boiler Inspection and Insurance Company of Connecticut provided the Authorized Nuclear Inservice Inspector (ANII).

6.0 Equipment and Materials

6.1 The equipment and materials utilized were certified to the requirements of ASME Section XI. Copies of all certifications are maintained on file.

7.0 Repairs and Replacements

One replacement and no repairs were performed, as a result of ISI examinations performed during U2R10. The replacement is as follows and is further addressed in the Section 2 Summary:

ZONE	WO / CRDR	ITEM SUMMARY #	DISCREPANCY
021	2558934 / 2557486	2-105-CH-149-H004	Cracked spherical bearing replaced

The applicable records and reports for the specific maintenance repair or replacements performed after the last summary report are maintained on file at Palo Verde. The applicable NIS-2 forms are an attachment to Appendix D and are submitted for review with this report.

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

APPENDIX A

Definition of Terms

The column headings for the tables on the following pages are defined below:

ASME Item No - The ASME Section XI Category/Item Numbers are listed in the Code, Subsections IWB and IWC. The item number prefixes are defined below:

AHE -	Augmented high energy systems piping
B -	ASME Class 1 systems
BFLYWH -	Reactor coolant pump flywheels
BIWF -	ASME Class 1 supports
C -	ASME Class 2 systems
CIWF -	ASME Class 2 supports
FR -	10 CFR 50 augmented examinations

Zone No - Area designation per PVNGS design

Comp/Sys - Component or system description

Insp Per - Inspection period

Amt Reqd - Number of items ***required*** to be completed in the period

Amt Comp - Number of ***required*** items completed

Item ID - Item identification per ISI program/zone drawings

Reports (VOL) - Volumetric exam report number

(SURF) - Surface exam report number

(VIS) - Visual exam report number

Remarks - Re-exam or replacement remarks indicate acceptable examination results

Definition of terms continued

Acc -	Accessible
ADV -	Atmospheric Dump Valve
Aux -	Auxiliary
Atmos -	Atmospheric
CEDM -	Control Element Drive Mechanism
Circ -	Circumferential
Cont -	Containment
CS -	Containment Spray
CSP -	Containment Spray Pump
FW -	Feedwater
HPSI -	High Pressure Safety Injection
HTRS -	Heaters
ICI -	In Core Instrumentation
IEB -	Inspection and Enforcement Bulletin
Letdown HT Exch -	Letdown Heat Exchanger
LPSI -	Low Pressure Safety Injection
MS -	Main Steam
MT -	Magnetic Particle Test
Press Bound -	Pressure Boundary
PSE -	Preservice Examination
PSV -	Pressurizer Safety Valve
PZR -	Pressurizer
RCP -	Reactor Coolant Pump
RCS -	Reactor Coolant System
Reg HT Exch -	Regenerative Heat Exchanger
SD -	Shutdown
SG -	Steam Generator
Snub -	Snubber Reduction Program
Surf -	Surface
UT -	Ultrasonic Testing
Vis -	Visual
Vol -	Volumetric

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Reports Vol	Reports Surf	Visual	Remarks
ASME Class 2 Augmented High Energy Piping										
AHE 5.51 & 5.52	47	MS SG1	One	13	13	47-1	99-1361	99-1280		
						47-2	99-1360	99-1280		
						47-4	99-1305	99-1281		
						47-8	99-1306	99-1281		
						47-12	99-1307	99-1281		
						47-14A	99-1356	99-1280		
						47-16	99-1308	99-1281		
						47-20	99-1309	99-1281		
						47-24	99-1352	99-1280		
						47-25	99-1350	99-1280		
						47-28	99-1348	99-1282		
						47-29	99-1349	99-1282		
						47-30	99-1351	99-1280		
	51	Atmos Dump SG1	One	13	13	51-1	99-1345	99-1287		
						51-2	99-1362	99-1287		
						51-3	99-1363	99-1287		
						51-4	99-1364	99-1287		
						51-5	99-1365	99-1287		
						51-6	99-1366	99-1287		
						51-7	99-1367	99-1288		
						51-8A	99-1368	99-1288		
						51-8B	99-1369	99-1287		
						51-9	99-1370	99-1287		
						51-51	99-1371	99-1287		
						51-84	99-1346	99-1287		
						51-85	99-1347	99-1287		
	53	Steam to Aux FW	One	10	10	53-11	99-1538	99-1506		
						53-12	99-1539	99-1506		
						53-13	99-1540	99-1506		PSE
						53-14	99-1541	99-1506		
						53-15	99-1542	99-1506		
						53-21	99-1543	99-1506		
						53-22	99-1544	99-1506		
						53-23	99-1545	99-1506		
						53-24	99-1546	99-1506		PSE
						53-25	99-1547	99-1506		
			Two	9	9	53-1	UT-02-262	MT-02-187		
							UT-02-278			
						53-2	UT-02-263	MT-02-175		
						53-4	UT-02-264	MT-02-188		
						53-5	UT-02-265	MT-02-189		
						53-6	UT-02-267	MT-02-190		
						53-7	UT-02-268	MT-02-191		
						53-8	UT-02-269	MT-02-192		
						53-9	UT-02-270	MT-02-193		
						53-10	UT-02-271	MT-02-194		
	56	Feedwater SG1	One	7	7	56-1	01-1411	01-1328		
						56-3	01-1412	01-1328		
						56-4	01-1429	01-1328		
						56-6	01-1413	01-1328		
						56-7	01-1414	01-1328		
						56-9	01-1415	01-1328		
						56-11	01-1416	01-1328		
	60	Downcomer SG1	One	9	9	60-7	99-1708	99-1646		
						60-8	01-1221	01-1230		
						60-9	01-1222	01-1230		
						60-11	01-1223	01-1230		
						60-12	01-1224	01-1230		
						60-14	99-1625	99-1646		
						60-15	99-1658	99-1646		
						60-16	99-1666	99-1646		
						60-17	99-1667	99-1646		
	66	Blowdown SG1	One	9	9	66-1	99-1469	99-1416		
						66-2	99-1470	99-1416		
						66-3	99-1471	99-1416		

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						66-5	99-1472	99-1416		
						66-6	99-1473	99-1416		
						66-7	99-1474	99-1416		
						66-8	99-1475	99-1416		
						66-9	99-1476	99-1416		
						66-26	99-1477	99-1416		
AHE 5.81 & 5.82	47	MS SG1	One	7	6	47-3	99-1359	99-1280		
						47-7	99-1358	99-1280		
						47-11	99-1357	99-1280		
						47-15	99-1355	99-1280		
						47-19	99-1354	99-1280		
						47-23	99-1353	99-1280		
						47-27		99-1280		
ASME Class 1										
B 1.22	02	Closure Head	One	33%	33%	2-4	99-1466	99-1458		Accessible Areas RR#14
							99-1479			
							99-1481			
							99-1483			
B 1.30	01	Reactor Vessel	One	50%	50%	1-14	*			Examined 0°-180°
B 1.40	02	Closure Head	One	33%	33%	2-1	99-1465	99-1458		Examined 0°-120°
							99-1478			*Separate Report by Wesdyne. Exam completed in 1R8
							99-1480			
							99-1482			
B 2.11 & 2.12	5	Pressurizer	One	66%	66%	5-2	99-1448			Examined 0°-240°
							99-1450			
							99-1452			
							99-1454			
						5-3	99-1449			1' long seam for 5-2
							99-1451			
							99-1453			
							99-1455			
			Two	66%	66%	5-6	UT-02-243			1' long seam for 5-8
							UT-02-244			
							UT-02-245			
							UT-02-246			
						5-8	UT-02-238			Examined 0°-240°
							UT-02-240			
							UT-02-241			
							UT-02-242			
B 2.31	03	Steam Generator 1	One	33%	33%	3-5	01-1200			Examined 0°-120°
							01-1211			
							01-1214			
							01-1234			
			Two	33%	33%	3-5	UT-02-139			Examined 120°-240°
							UT-02-140			
							UT-02-147			
							UT-02-149			
B 2.32	03	Steam Generator 1	One	33%	33%	3-3	01-1199			
							01-1212			
							01-1213			
							01-1233			
						3-10	01-1203			
							01-1208			
							01-1218			
							01-1237			
						3-11	01-1200			
							01-1201			
							01-1210			
							01-1211			
							01-1214			
							01-1215			
							01-1234			
							01-1235			
						3-12	01-1201			
							01-1210			
							01-1215			

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Reports Vol	Reports Surf	Reports Visual	Remarks
							01-1235			
B 2.40	03	Steam Generator 1	One	50%	50%	3-6	01-1201			Examined 0°-180°
							01-1210			
							01-1215			
							01-1235			
	04	Steam Generator 2	Two	50%	50%	4-6	UT-02-260			Examined 180°-360°
							UT-02-280			
							UT-02-281			
							UT-02-282			
B 3.90	01	Reactor Vessel	One	2	2	1-15	*			*Separate Report by Wesdyne. Exam completed in 1R8
						1-18	*			
B 3.100	01	Reactor Vessel	One	2	2	1-15	*			
						1-18	*			
B 3.110	05	Pressurizer	One	2	2	5-9	01-1283			
							01-1284			
							01-1286			
							01-1287			
						5-11	01-1267			
							01-1268			
							01-1269			
							01-1270			
			Two	2	2	5-10	UT-02-252			
							UT-02-253			
							UT-02-254			
							UT-02-255			
						5-13	UT-02-247			
							UT-02-248			
							UT-02-250			
							UT-02-251			
B 3.120	05	Pressurizer	One	2	2	5-9	01-1285			
							01-1406			
						5-11	01-1365			
							01-1366			
			Two	2	2	5-10	UT-02-266			
						5-13	UT-02-272			
B 3.130	03	Steam Generator 1	One	1	1	3-9	01-1202			
							01-1209			
							01-1217			
							01-1236			
			Two	1	1	3-7	UT-02-134			
							UT-02-143			
							UT-02-145			
							UT-02-146			
	04	Steam Generator 2	One	1	1	4-9	01-1376			
							01-1377			
							01-1378			
							01-1379			
			Two	1	1	4-7	UT-02-138			
							UT-02-142			
							UT-02-144			
							UT-02-148			
B 3.140	03	Steam Generator 1	One	1	1	3-9	01-1367			
							01-1368			
			Two	1	1	3-7	UT-02-132			
	04	Steam Generator 2	One	1	1	4-9	01-1369			
							01-1370			
			Two	1	1	4-7	UT-02-135			
B 4.12	02	Closure Head	One	8	8	CEDM			01-1627	
			Two	8	8	CEDM			VT-02-700	
B 4.13	01	Reactor Vessel	One	5	5	Inst. Noz.			01-1627	
			Two	5	5	Inst. Noz			VT-02-705	Reject – eval by CRDR 2312850
B 4.20	05	Pressurizer	One	12	12	Heater			01-1627	CEIB 89-06
			Two	12	12	Heater			VT-02-699	CEIB 89-06
B 5.40	20	PZR Surge	One	1	1	5-34	01-1288	01-1232		
							01-1290			
	31	PZR Safeties	One	1	1	5-29	01-1238	01-1010		
							01-1239			
							01-1240			

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
							01-1278			
	29	PZR Spray	Two	1	1	5-33	RT-02-003	PT-02-147		
	31	PZR Safeties	Two	1	1	5-31	UT-02-257	PT-02-155		
B 6.10	02	Closure Head	One	18	18	1 thru 18		99-1510	99-1589	
			Two	18	18	19 thru 36		MT-02-167	VT-02-592	
B 6.30	02	Closure Head	One	18	18	1 thru 18	99-1511	99-1509		
			Two	18	18	19 thru 36	UT-02-211	MT-02-166		
B 6.50	02	Closure Head	One	18	18	1 thru 18			99-1613	
			Two	18	18	19 thru 36			VT-02-593	
B 6.180	16	RCP 1A	One	5	5	1 thru 5	99-1705		99-1601	
									01-1654	
			Two	5	0	6 thru 10			VT-02-626	IEIN 80-27
	17	RCP 1B	One	5	5	1 thru 5	99-1706		99-1603	
									01-1654	
			Two	5	0	6 thru 10			VT-02-630	IEIN 80-27
	18	RCP 2A	One	5	5	1 thru 5	99-1487		99-1500	
							99-1464			PSE
									01-1654	
			Two	5	0	6 thru 10			VT-02-634	IEIN 80-27
	19	RCP 2B	One	5	5	1 thru 5	99-1707		99-1602	
									01-1654	
			Two	5	0	6 thru 10			VT-02-638	IEIN 80-27
B 6.190	18	RCP 2A	One	When Disassembled		Flange			99-1488	
B 6.200	16	RCP 1A	One	5	5	1 thru 5			99-1601	
			Two	5	5	6 thru 10			VT-02-625	
	17	RCP 1B	One	5	5	1 thru 5			99-1603	
			Two	5	5	6 thru 10			VT-02-629	
	18	RCP 2A	One	5	5	1 thru 5			99-1500	Rejected 6 nuts, PSE
									99-1197	6 nuts/clamp ring
			Two	5	5	6 thru 10			VT-02-633	
	19	RCP 2B	One	5	5	1 thru 5			99-1602	
			Two	5	5	6 thru 10			VT-02-637	
B 7.20	05	Pressurizer	One	20	20	20 studs/nuts			99-1498	
									01-1272	Removed
			Two	20	20	20 studs/nuts		MT-02-172	VT-02-596	IEB 82-02
B 7.30	03	SG1	One	40	40	40 studs/nuts			99-1492	
									01-1271	Removed
			Two	40	40	40 studs/nuts		MT-02-173	VT-02-594	IEB 82-02
	04	SG2	One	40	40	40 studs/nuts			99-1493	
									01-1294	Removed
			Two	40	40	40 studs/nuts		MT-02-174	VT-02-595	IEB 82-02
B 7.50	31	Pzr Safeties	One	1	1	PSV200			99-1499	
									01-1431	Removed
						PSV201			99-1499	
									01-1431	Removed
						PSV202			99-1499	
									01-1431	Removed
						PSV203			99-1499	
									01-1431	Removed
			Two			PSV200		MT-02-168	VT-02-597	IEB 82-02
						PSV201		MT-02-169	VT-02-598	IEB 82-02
						PSV202		MT-02-170	VT-02-599	IEB 82-02
						PSV203		MT-02-171	VT-02-600	IEB 82-02
	37	Charging	One	1	1	V435			99-1263	
B 7.60	16	RCP 1A	One	5	5	1 thru 5			99-1490	
						1 thru 16			01-1476	Disassembled
			Two	5	5	6 thru 10			VT-02-627	
									VT-02-628	
	17	RCP 1B	One	5	5	1 thru 5			99-1491	
			Two	5	5	6 thru 10			VT-02-631	
									VT-02-632	
	18	RCP 2A	One	5	5	1 thru 5			99-1489	
						1 thru 16			01-1475	Disassembled / 2 rejects
						2			01-1501	PSE
			Two	5	5	6 thru 10			VT-02-635	
									VT-02-636	
	19	RCP 2B	One	5	5	1 thru 5			99-1602	

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
			Two	5	5	6 thru 10			VT-02-639	
									VT-02-641	
B 7.70	21	SD Cooling 1	One	1	1	UV653			99-1224	
	22	SD Cooling 2	One	1	1	UV654			01-1533	
			Two	1	1	UV652			VT-02-514	
	23	SI 1A	One	1	1	V237			01-1004	
			Two	2	2	V235			VT-02-516	
						UV634			VT-02-517	
	24	SI 1B	One	1	1	V543			99-1228	
			Two	2	2	V245			VT-02-478	
						UV644			VT-02-506	
	25	SI 2A	One	1	1	V540			99-1219	
			Two	1	1	V217			VT-02-515	
	26	SI 2B	One	1	1	V225			99-1614	
			Two	2	2	V541			VT-02-553	PSE
						UV624			VT-02-518	
	27	PZR Spray 1A	Two	1	1	V100E			VT-02-614	
	28	PZR Spray 1B	One	2	2	V241			99-1283	Reject
									99-1665	Re-exam
									01-1024	Re-Exam
						V242			99-1283	
			Two	1	1	V100F			VT-02-615	
	31	Pzr Safeties	One	1	1	PSV200			99-1713	
			Two	1	1	PSV202			VT-02-601	
	32	Drain Line 1A	One	2	2	V234			99-1588	
						V334			99-1587	
	34	Drain Line 2A	Two	2	2	V233			VT-02-539	
						V333			VT-02-540	
	37	Charging	One	1	1	PDV240			99-1263	
	38	Drain Line Loop 1	One	1	1	V215			01-1042	
	39	HPSI Long Term 1	One	1	1	V523			01-1040	
			Two	2	2	V522			VT-02-421	
						V957			VT-02-578	
	40	HPSI Long Term 2	Two	1	1	V532			VT-02-579	
B 7.80	02	RVLMS	One	1	1	2-21			01-1600	CEDM 92 & 96
B 8.20	5	Pressurizer	One	66%	66%	5-1	99-1445	01-1006		Examined 0°-240°
							99-1446			
							99-1447			
							99-1486			
B 8.30	03	SG 1	One	33%	33%	3-1	01-1304	01-1292		Examined 0°-120°
							01-1330			
							01-1331			
							01-1332			
	4	SG2	Two	33%	33%	4-1	UT-02-130	MT-02-165		Examined 120°-240°, MT on OD only.
							UT-02-136			
							UT-02-137			
							UT-02-141			
B 9.11 & 9.12	06	RCS Piping	One	7	7	1-31	*	01-1599		*Separate report by Wesdyne. Exams completed in U1R8
						1-34	*	01-1599		
						6-7	*	01-1599		
						3-30	01-1356	01-1299		
							01-1359			
						4-30	01-1357	01-1291		
							01-1360			
						7-7	*	01-1599		
						17-2	01-1361	01-1291		
							01-1362			
			Two	6	0	16-1		MT-02-179		
						17-1		MT-02-181		
						18-1		MT-02-178		
						19-1		MT-02-180		
	20	PZR Surge	One	1	1	20-1	01-1289	01-1232		
	21	SD Cooling 1	One	3	3	6-11	01-1380	01-1275		
							01-1383			
						21-18	01-1381	01-1275		
						21-20	01-1382	01-1275		
			Two	2	2	21-14	UT-02-190	PT-02-119		
						21-15	UT-02-191	PT-02-120		
	22	SD Cooling 2	One	2	1	22-11	99-1600	99-1590		

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INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						22-14	99-1599	99-1590		
						22-23	01-1510	01-1327		Needs PDI re-exam
							01-1511			Needs PDI re-exam
			Two	3	0	22-1		PT-02-103		
						7-9		PT-02-105		
						22-18		PT-02-112		
	23	SI 1A	One	4	3	9-10	01-1541	01-1007		
							01-1542			
						23-1	01-1543	01-1007		
						23-2	01-1544	01-1007		
						23-4	01-1545	01-1007		Needs PDI re-exam
							01-1546			Needs PDI re-exam
			Two	0	0	23-6	UT-02-287	PT-02-172		Aug. Limited UT exam
							UT-02-289			
	24	SI 1B	Two	3	3	24-6	UT-02-179	PT-02-116		Aug. Limited UT exam
							UT-02-182			
						24-14	UT-02-185	PT-02-098		Limited UT exam
							UT-02-189			
						24-16	UT-02-177	PT-02-101		Limited UT exam
							UT-02-188			
						24-19	UT-02-176	PT-02-099		Limited UT exam
							UT-02-178			
	25	SI 2A	One	2	2	25-26	99-1512	99-1503		
						25-27	99-1617	99-1606		
						25-29	99-1618			
			Two	4	4	25-1	UT-02-227	PT-02-145		
						25-4	UT-02-224	PT-02-146		Limited UT exam
							UT-02-226			
						25-6	UT-02-221	PT-02-173		Limited UT exam
							UT-02-222			
						13-10	UT-02-228	PT-02-174		
	26	SI 2B	One	2	2	26-9	99-1615	99-1586		
						26-11	99-1616	99-1586		
			Two	1	1	26-6	UT-02-181	PT-02-114		Aug. Limited UT exam
							UT-02-184			
						26-17	UT-02-180	PT-02-113		Limited UT exam
							UT-02-183			
	29	PZR Spray	One	2	2	29-10	99-1467	99-1436		
						29-11	99-1468	99-1436		
			Two	1	0	29-1	UT-02-233	PT-02-149		PSE, Need PDI re-exam
							UT-02-234			
						29-2	UT-02-235	PT-02-150		PSE, Limited UT exam, Need PDI re-exam
							UT-02-236			
						29-9	UT-02-237	PT-02-148		PSE, Need PDI re-exam
							UT-02-239			
	31	PZR Safeties	One	1	1	31-1	01-1220	01-1010		
			Two	2	2	31-9	UT-02-249	PT-02-156		
						31-10	UT-02-256	PT-02-157		
	36	Letdown Line	Two	1	1	36-75	UT-02-223	PT-02-144		
B 9.21 & 9.22	27	PZR Spray 1A	One	4	4	9-11		01-1044		
						27-42		01-1044		
						27-43		01-1044		
						27-44		01-1044		
	28	PZR Spray 1A	One	4	4	28-31		99-1459		
						28-32		99-1459		
						28-39		99-1437		
						28-40		99-1437		
			Two	4	4	28-9		PT-02-167		
						28-11		PT-02-168		
						11-11		PT-02-115		
						28-20		PT-02-169		
	30	Aux PZR Spray	One	2(2)	2(2)	30-7		99-1233		()Identifies augment
						30-13		99-1233		
						30-1	01-1621	01-1640		88-08
							01-1623			88-08
						30-2	01-1622	01-1640		88-08
							01-1624			88-08

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INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
			Two	2	2 (2)	30-5		PT-02-153		
						30-6		PT-02-154		
						30-1	UT-02-229	PT-02-151		PSE, IEB 88-08,
							UT-02-230			Limited UT exam
						30-2	UT-02-231	PT-02-152		PSE, IEB 88-08,
							UT-02-232			Limited UT exam
	32	Drain 1A	One	3	3	8-18		99-1504		
						32-1		99-1504		
						32-2		99-1504		
	33	Drain Line 1B	Two	3	3	33-1		PT-02-106		
						33-5		PT-02-107		
						10-18		PT-02-104		
	36	Letdown Line	One	2	2	36-8		01-1186		
						36-9		01-1186		
			Two	8	8	36-25		PT-02-138		
						36-26		PT-02-139		
						36-28		PT-02-141		
						36-35		PT-02-142		
						36-43		PT-02-085		
						36-44		PT-02-086		
						36-45		PT-02-087		
						36-80		PT-02-088		
	37	Charging	One	5	5	37-41		99-1301		
						37-42		99-1301		
						37-43		99-1301		
						37-45		01-1045		
						37-46		01-1045		
						37-47		01-1045		
			Two	7	7	13-11		PT-02-128		
						37-28		PT-02-122		
						37-29		PT-02-123		
						37-30		PT-02-124		
						37-32		PT-02-125		
						37-33		PT-02-126		
						37-34		PT-02-127		
	38	Drain Line 1	Two	1	1	38-1		PT-02-170		
	39	HPSI A	One	2	2	39-1		99-1234		
						39-5		99-1234		
			Two	3	3	39-12	UT-02-290	PT-02-131		
						39-13	UT-02-292	PT-02-175		
						39-24	UT-02-302	PT-02-162		Limited UT exam
							UT-02-303			
	40	HPSI B	One	3	3	40-1		01-1043		
						40-2		01-1043		
						40-3		01-1043		
			Two	2	2	40-6	UT-02-285	PT-02-163		
						40-7	UT-02-288	PT-02-164		
B 9.31	06	RCS Piping	One	1	1	9-8	01-1355	01-1291		
							01-1358			
			Two	1	0	13-8	UT-02-212	MT-02-176		Limited UT exam, Re-examine weld
B 9.32	06	RCS Piping	One	1	1	8-17		99-1505		
			Two	1	1	13-9		MT-02-177		
	22	SD Cooling	One	1	1	22-7A		99-1607		
	36	Letdown	Two	2	2	36-41		PT-02-084		
						36-76		PT-02-143		
B 9.40	32	Drain 1A	One	1	1	32-6		99-1504		
						32-8		99-1504		
	33	Drain Line 1B	Two	1	1	33-6		PT-02-108		
	34	Drain Line 2A	Two	1	1	34-6		PT-02-171		
	38	Drain 1	One	1	1	38-5		01-1041		Removed
						38-12		01-1500		PSE
B 10.10	36	Letdown	One	1	1	RC91H5		99-1591		
						RC91H6		99-1591		
			Two	1	1	RC91H6		PT-02-089		91% CC N460
B 12.20	18	RCP 2A	One	When Disassembled		Bowl Interior			99-1497	
B12.50	24	SI 1B	Two	When Disassembled		V543			VT-02-523	Internal surfaces
B 13.10	01	Reactor Vessel	One	33%	33%	Interior			01-1534	accessible areas

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INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 14.10	02	Closure Head	One	2	2	2-9	01-1519	01-1655		CEDM 84
						2-9	01-1519	01-1655		CEDM 88
				2	2	2-10	01-1518	01-1655		CEDM 84
						2-10	01-1518	01-1655		CEDM 88
			Two	2	2	2-9	UT-02-206	PT-02-136		CEDM 83
						2-9	UT-02-207	PT-02-137		CEDM 91
				2	2	2-10	UT-02-203	PT-02-134		CEDM 83
						2-10	UT-02-204	PT-02-135		CEDM 91
B 15.10, 20, 30, 40, 50, 60 & 70	Various	RCS Piping	One	ALL	ALL	Press Bound			99-1585	RR#11 & 12
									99-1647	SIBPSV169 disassy.
									99-1711	
									01-1012	
									01-1013	
									01-1557	
									01-1627	
									01-1628	reject
									01-1629	
									01-1630	
									01-1646	
									01-1647	
			Two	100%	*	Press Bound			VT-02-698	*100% ea. outage
B Flywh	16	RCP 1A	One	1	1	Flywheel	01-1273			
			Two	1	1	Flywheel	UT-02-201			
	17	RCP 1B	One	1	1	Flywheel	01-1363			
			Two	1	1	Flywheel	UT-02-202			
	18	RCP 2A	One	1	1	Flywheel	01-1364			
			Two	1	1	Flywheel	UT-02-208			
	19	RCP 2B	One	1	1	Flywheel	01-1434			
			Two	1	1	Flywheel	UT-02-205			
F 1.10	20	PZR Surge	One	2	2	RC28H1			99-1284	
						RC28H2			99-1218	
	21	SD Cooling A	One	7	7	SI240H10			99-1227	
						SI240H11			99-1226	
						SI240H13			99-1225	
						RC51H1			01-1182	Support Deleted
						RC51H2			01-1181	
						RC51H3			01-1180	
						RC51H821			01-1433	
			Two	7	7	RC51H2			VT-02-640	Expansion
						RC51H3			VT-02-429	Expansion
						RC51H4			VT-02-422	Support Deleted
						RC51H5			VT-02-423	
						RC51H6			VT-02-703	PSE
						RC51H822			VT-02-474	
						SI240H1			VT-02-430	Support Deleted
						SI240H2			VT-02-425	
						SI240H3			VT-02-431	Reject
									VT-02-605	Re-exam
						SI240H4			VT-02-433	Expansion
						SI240H5			VT-02-432	Reject
									VT-02-607	Re-exam
						SI240H6			VT-02-434	Support Deleted
						SI240H7			VT-02-435	Expansion
						SI240H9			VT-02-659	Expansion
						SI240H10			VT-02-661	Expansion
						SI240H11			VT-02-662	Expansion
						SI240H12			VT-02-424	Support Deleted
						SI240H823			VT-02-427	
						SI240H824			VT-02-428	
	22	SD Cooling B	One	4	4	RC68H5			01-1177	
						RC68H6			01-1176	Support Deleted
						SI193H17			01-1178	
						SI193H19			01-1179	Support Deleted
			Two	4	4	RC68H3			VT-02-663	Expansion
						SI193H8			VT-02-496	Rej
									VT-02-652	Re-exam
						SI193H9			VT-02-497	RR #4
						SI193H17			VT-02-664	Expansion

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INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI193H20			VT-02-508	
						SI193H23			VT-02-665	Expansion
						SI193H25			VT-02-498	Support Deleted
	23	SI 1A	One	1	1	SI207H5			01-1005	Support Deleted
			Two	2	2	SI207H3			VT-02-666	Expansion
						SI207H7			VT-02-509	
						SI207H11			VT-02-510	
	24	SI 1B	One	2	2	SI223H3			99-1230	
						SI223H4			99-1229	Support Deleted
			Two	2	2	SI223H1			VT-02-475	
						SI223H2			VT-02-477	Support Deleted
	25	SI 2A	One	2	2	SI156H7			99-1221	Support Deleted
						SI156H9			99-1220	
			Two	1	1	SI156H9			VT-02-667	Expansion
						SI160H1			VT-02-511	
	26	SI 2B	One	2	2	SI179H9			99-1223	Support Deleted
						SI179H11			99-1222	
			Two	3	3	SI175H021			VT-02-507	Rej
									VT-02-655	Re-exam
						SI175H22			VT-02-512	Support Deleted
						SI175H23			VT-02-513	
						SI179H11			VT-02-669	Expansion
	27	PZR Spray 1A	One	9	9	RC62H26			99-1209	
						RC62H27			99-1208	
						RC62H28			99-1207	
						RC62H29			99-1206	Support Deleted
						RC62H30			99-1205	
						RC62H31			99-1204	Support Deleted
						RC62H32			99-1203	
						RC62H33			99-1202	
						RC62H34			99-1262	Support Deleted
			Two	8	8	RC16H5			VT-02-537	
						RC16H6			VT-02-608	
						RC16H7			VT-02-609	
						RC16H15			VT-02-536	Support Deleted
						RC62H35			VT-02-610	
						RC62H36			VT-02-611	Support Deleted
						RC62H37			VT-02-612	
						RC62H38			VT-02-613	
	28	PZR Spray 1B	One	9	9	RC17H24			99-1217	
						RC17H34			99-1216	
						RC17H35			01-1172	
						RC17H36			99-1215	
						RC17H38			99-1214	
						RC17H39			99-1213	Support Deleted
						RC17H40			99-1212	
						RC17H41			99-1211	Support Deleted
						RC17H42			99-1210	
			Two	8	8	RC17H43			VT-02-616	
						RC17H44			VT-02-617	Support Deleted
						RC17H45			VT-02-618	
						RC17H46			VT-02-619	
						RC18H9			VT-02-620	
						RC18H10			VT-02-534	Support Deleted
						RC18H11			VT-02-621	Support Deleted
						RC18H12			VT-02-535	
	29	PZR Spray	One	2	2	RC18H16			99-1439	
						RC18H18			99-1440	
	32	Drain 1A	One	2	2	RC60HA			99-1326	Support Deleted
						RC60HB			99-1327	Support Deleted
	33	Drain Line 1B	Two	2	2	RC58HA			VT-02-493	
						RC58HB			VT-02-494	Support Deleted
	34	Drain Line 2A	Two	2	2	RC96HA			VT-02-532	
						RC96HB			VT-02-533	Support Deleted
	36	Letdown	One	9	9	RC91H1			99-1592	
						RC91H5			99-1593	
						RC91H6			99-1594	
						RC91HB			99-1325	Support Deleted
						RC91HD			99-1323	

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INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						RC91HE			99-1319	Support Deleted
						RC91HY			99-1321	
						RC91HZ			99-1324	
						RC91HAA			99-1322	
						RC91HAK			99-1320	
			Two	10	3	RC91H6			VT-02-415	
						RC91HAJ			VT-02-416	
						RC91HP			VT-02-417	
	37	Charging	One	14	14	CH5H2			99-1265	Support Deleted
						CH5H3			99-1266	
						CH5H25			99-1267	
						CH5H26			99-1268	Support Deleted
						CH5H27			99-1269	
						CH5H28			99-1270	
						CH5H30			99-1271	
						CH5H34			99-1272	
						CH5H35			99-1273	
						CH5H36			99-1274	
						CH5H42			99-1275	
						CH5H43			99-1276	Support Deleted
						CH5H44			99-1277	
						CH5HAA			99-1264	Support Deleted
			Two	9	9	CH5H13			VT-02-580	
						CH5H17			VT-02-581	
						CH5H18			VT-02-582	
						CH5H19			VT-02-583	
						CH5H20			VT-02-584	
						CH5H21			VT-02-585	
						CH5H22			VT-02-586	
						CH5H32			VT-02-587	
						CH5H37			VT-02-588	
	39	HPSI 1	One	4	4	SI248H26			99-1238	Support Deleted
						SI248H27			99-1237	
						SI248H28			99-1236	
						SI248H30			99-1235	Support Deleted
						SI248H25			99-1239	
			Two	5	5	SI248H17			VT-02-418	
						SI248H18			VT-02-419	Support Deleted
						SI248H19			VT-02-572	
						SI248H20			VT-02-573	
						SI248H29			VT-02-420	
	40	HPSI 2	One	3	3	SI199H13			01-1016	
						SI199H14			01-1017	
						SI199H21			01-1015	Support Deleted
			Two	4	4	SI199H15			VT-02-574	
						SI199H16			VT-02-575	
						SI199H17			VT-02-576	
						SI199H18			VT-02-577	
F 1.40	3	SG 1	One	1	1	3-40			01-1329	
	4	SG 2	Two	1	1	4-40			VT-02-623	
	5	Pressurizer	One	0	0	5-40			99-1712	
	16	RCP 1A	One	2	2	16-20			99-1259	
						16-21			99-1259	
			Two	4	4	16-12			VT-02-524	
						16-13			VT-02-525	
						16-14			VT-02-526	
						16-15			VT-02-527	
	17	RCP 1B	One	2	2	17-20			99-1260	
						17-21			99-1260	
			Two	4	4	17-12			VT-02-528	
						17-13			VT-02-529	
						17-14			VT-02-530	
						17-15			VT-02-531	
	18	RCP 2A	One	4	4	18-12			99-1663	
						18-13			99-1663	
						18-14			99-1663	
						18-15			99-1663	
			Two	2	2	18-20			VT-02-643	
						18-21			VT-02-645	

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ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Reports Vol	Reports Surf	Reports Visual	Remarks
	19	RCP 2B	One	4	4	19-12			99-1664	
						19-13			99-1664	
						19-14			99-1664	
						19-15			99-1664	
			Two	2	2	19-20			VT-02-646	
						19-21			VT-02-647	
ASME Class 2										
C 1.10	41	SG 1	One	2	2	41-3	01-1384			Examined 0°-180°
							01-1387			
							01-1390			
							01-1408			
						41-4	01-1385			Examined 0°-180°
							01-1388			
							01-1391			
							01-1407			
	68	Regen HTEXCH	Two	3	3	68-3	UT-02-194			
						68-5	UT-02-196			
						68-7	UT-02-198			
	69	Letdown HTEXCH	One	1	1	69-1	99-1485			Examined 0°-180°
C 1.20	41	SG 1	One	1	1	41-5	01-1386			Examined 0°-180°
							01-1389			
							01-1392			
							01-1393			
							01-1394			
							01-1395			
							01-1409			
							01-1410			
	68	Regen HTEXCH	Two	2	2	68-4	UT-02-195			
						68-6	UT-02-197			
C 1.30	41	SG 1	One	1	1	41-1	01-1206			Examined 0°-180°
							01-1207			
							01-1219			
							01-1241			
	42	SG 2	Two	1	1	42-1	UT-02-261			Examined 0°-180°
							UT-02-258			
							UT-02-259			
							UT-02-275			
	68	Regen HTEXCH	Two	4	4	68-1	UT-02-192			
						68-2	UT-02-193			
						68-8	UT-02-199			
						68-9	UT-02-200			
	69	Letdown HTEXCH	One	1	1	69-2	99-1484			Examined 0°-180°
C 2.21	41	SG 1	One	1	1	41-34	01-1279	01-1008		
							01-1280			
	42	SG 2	One	1	1	42-35	01-1281	01-1009		
							01-1282			
C 3.10	41	SG 1	One	1	1	41-42		01-1447		
	68	Regen HTEXCH	Two	2	2	68-10		PT-02-132		96% CC N460
						68-11		PT-02-133		96% CC N460
C 3.20	44	MS SG1 270	Two	1	1	SG33H16		MT-02-184		
	45	MS SG2 270	One	1	1	SG42H14		99-1430		
			Two	2	2	SG42H15		MT-02-185		
						SG42H16		MT-02-186		
	55	Feedwater SG 2	One	1	1	SG5H9		01-1184		
								01-1185		
	64	Blowndown SG 1	One	3	3	SG39H15		01-1298		
								01-1302		
						SG39H17		01-1303		Support Deleted
						SG53H1		01-1002		Support Deleted
			Two	2	2	SG39H1		MT-02-203		
						SG53H5		MT-02-200		
								PT-02-176		
	65	Blowdown SG 2	One	2	2	SG48H20		01-1295		Support Deleted

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INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SG52H1		01-1003		Support Deleted
	71	LPSI Discharge	One	1	1	SI87H11		99-1435		
	76	CS Suction	One	1	1	SI9H4		99-1373		
	88	East Wrap	One	1	1	SI72H13		99-1516		
	89	East Wrap	One	1	1	SI194H14		99-1619		
	91	West Wrap	One	4	4	SI70H9		99-1374		
						SI70H11		99-1256		
						SI70H12		99-1456		
						SI70H16		99-1256		
	92	West Wrap	One	1	1	SI241H21		99-1605		
	94	SI A	Two	2	2	SI070H5		PT-02-121		
						SI070H8		PT-02-130		
	99	LPSI to Loop 2B	Two	1	1	SI174H13		PT-02-129		
	100	LPSI Suction	One	1	1	SI369H1		99-1457		
			Two	1	1	84-5		PT-02-178		
	102	SI Suction	One	3	3	SI307H2		01-1446		
						SI307H3		01-1446		
						SI307H15		01-1446		
	103	Refuel Suction A	Two	2	1	CH424H6		PT-02-118		
	104	SI Suction B	Two	1	1	SI308H3		PT-02-159		
	113	HPSI Discharge	One	1	1	SI107H22		01-1198		Limited exam
C 3.30	72	LPSI Pump A	One	3	3	72-3A		01-1471		
						72-3B		01-1471		
						72-3C		01-1471		
	116	HPSI Pump A	One	4	4	116-1A		01-1473		Limited exam
						116-1B		01-1473		
						116-1C		01-1473		
						116-1D		01-1473		Limited exam
C 4.40	47	Main Steam SG 1	One	20	20	UV170	01-1372			
	48	Main Steam SG 1	One	20	20	UV180	01-1373			
	56	Feedwater SG 1	Two	40	40	V132	UT-02-209			20 Studs
						V174	UT-02-210			20 Studs
C 5.11 & 5.12	59	Aux & Dwncmr SG2	Two	2	2	59-1	UT-02-219	PT-02-140		PSE
							UT-02-220			
							UT-02-225			
						59-16	UT-02-159	PT-02-097		PSE, AUG (IEB 79-13)
							UT-02-160			
							UT-02-161			
						59-16A	UT-02-273	PT-02-160		PSE, AUG (IEB 79-13)
						59-16C	UT-02-274	PT-02-161		PSE
						59-34	UT-02-283	PT-02-091		
							UT-02-284			
	63	Aux Feed SG 2	One	1	0	63-4	01-1525	01-1188		needs PDI re-exam
							01-1526			
	70 & 73	LPSI Suction A & B	One	1	1	70-58	99-1258	99-1257		
			Two	1	1	70-56	UT-02-174	PT-02-111		
							UT-02-175			
	82 & 85	SD Cooling A & B	One	2	2	72-50	99-1372	99-1316		
						73-49	01-1428	01-1189		
	83 & 86	SD Cooling A & B	One	4	4	74-19	99-1381	99-1315		
						74-21	99-1383	99-1317		
						74-22	99-1384	99-1317		
						74-105	99-1382	99-1314		
	88 & 91	East & West Wrap	One	6	6	78-16	99-1604	99-1515		
						74-44	99-1311	99-1279		
						76-2	99-1310	99-1279		
						76-21	01-1535	01-1190		
							01-1547			
						77-7	01-1521	01-1371		Limited exam
							01-1540			
						77-14	01-1522	01-1371		Limited exam
							01-1523			
							01-1524			
	94 & 95	SI A & B	One	1	1	74-40	01-1427	01-1430		
			Two	2	2	74-37	UT-02-172	PT-02-109		
							UT-02-173			
						74-38	UT-02-170	PT-02-110		
							UT-02-171			

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ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
	96,97,98& 99	LPSI Loop 1A, 1B, 2A, 2B	One	3	3	78-45	99-1513	99-1502		
						78-47	99-1514	99-1502		
						79-23	01-1276	01-1293		
							01-1277			
			Two	2	2	77-22	UT-02-162	PT-02-095		
						77-27	UT-02-163	PT-02-096		Limited UT exam
							UT-02-164			
	100	LPSI A Suction	Two	2	2	70-121	UT-02-165	PT-02-093		Limited UT exam
							UT-02-166			
						84-3	UT-02-291	PT-02-177		Limited UT exam
							UT-02-293			
	102	SI Suction A	One	1	0	84-12	01-1487	01-1191		needs PDI re-exam
							01-1488			
			Two	1	0	84-26	UT-02-150	PT-02-090		Limited UT exam
							UT-02-169			Re-examine weld
	103	Refuel. Suction A	One	1	1	86-57	01-1305	01-1300		
			Two	1	1	86-1	UT-02-186	PT-02-117		Limited UT exam
							UT-02-187			
	104	SI Suction B	One	1	1	85-46	01-1307	01-1301		Limited exam
							01-1308			
							01-1309			
			Two	1	1	85-31	UT-02-276	PT-02-158		
	105	Refuel. Suction B	One	1	1	87-23	01-1306	01-1192		
			Two	1	1	87-37	UT-02-277	PT-02-165		
							UT-02-279			
C 5.21	106 & 107	HPSI Discharge A & B	One	4	4	106-1	01-1244	01-1193		Limited exam
							01-1248			
							01-1252			
						106-21	01-1254	01-1193		Limited exam
							01-1257			
							01-1260			
						107-11	01-1245	01-1194		Limited exam
							01-1249			
							01-1253			
						107-42	01-1225	01-1194		Limited exam
							01-1226			
							01-1227			
	108 & 109	HPSI	One	2	2	109-4	01-1246	01-1195		Limited exam
							01-1250			
						109-21	01-1489	01-1502		
	110 & 111	HPSI	One	2	2	110-6	01-1247	01-1229		Limited exam
							01-1251			
										Limited exam
						110-39	01-1261	01-1196		Limited exam
							01-1263			
							01-1265			
	112 & 113	HPSI Discharge A & B	One	3	3	112-1	01-1255	01-1197		Limited exam
							01-1258			
						112-33		01-1197		
						112-34	01-1259	01-1183		Limited exam
							01-1256	01-1374		
						112-45	01-1262	01-1197		Limited exam
							01-1264			
							01-1266			
	114 &115	HPSI1A, 1B, 2A & 2B	One	1	1	115-13	01-1310	01-1274		Limited exam
							01-1311			
			Two	1	1	115-20	UT-02-298	PT-02-102		Limited UT exam
							UT-02-299			
	118& 119	HPSI Long Term	Two	4	2	118-49	UT-02-167	PT-02-094		Limited UT exam
							UT-02-168			
						119-52	UT-02-300	PT-02-166		Limited UT exam
							UT-02-301			
C 5.30	106&107	HPSI Discharge A & B	One	1	1	107-53		01-1194		
C 5.41 &	82 & 85	SD Cooling A & B	One	1	1	72-49A		99-1316		
5.42	88 & 91	East & West Wrap	One	1	1	74-102		99-1279		
	96	LPSI to Loop 1A	Two	1	1	76-78		PT-02-100		
C 5.51 &	43	MS SG1 90	One	1	1	43-2	99-1443	99-1432		

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INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
5.52	44	MS SG1 270	One	1	1	44-1	99-1442	99-1431		
			Two	2	2	44-5	UT-02-217	MT-02-182		
						44-30	UT-02-218	MT-02-183		
	46	MS SG2 90	One	1	1	46-25	99-1444	99-1433		
	54	Feedwater SG 1	One	1	1	54-41	01-1520	01-1296		
						54-10	01-1616	01-1610		PSE (Vol is RT)
						54-11A	01-1613	01-1610		PSE
						54-24	01-1617	01-1610		PSE (Vol is RT)
						54-25A	01-1614	01-1610		PSE
			Two	2	2	54-1	UT-02-296	MT-02-201		PSE
						54-11A	UT-02-295	MT-02-202		
	55	Feedwater SG 2	One	2	2	55-1	01-1204	01-1001		
						55-15	01-1205	01-1001		
						55-10	01-1620	01-1532		PSE (Vol is RT)
						55-11	01-1618	01-1532		PSE (Vol is RT)
							01-1619			
			Two	1	1	55-26	UT-02-294	MT-02-196		PSE
	58	Aux & Dwncmr SG1	One	1(5)	1(5)	41-39	99-1495	99-1508		()Identifies augment
						58-1	99-1494	99-1501		EXAM (IEB 79-13
						58-12	99-1286	99-1231		& SER 83-07)
						58-13	99-1289	99-1231		
						58-16	01-1529	99-1285		
								01-1297		
						58-16A	01-1528	99-1285		
								01-1297		
						58-6	01-1559	01-1530		PSE (Vol is RT)
							01-1560			
							01-1561			
						58-35	01-1562	01-1530		PSE (Vol is RT)
						58-36	01-1563	01-1530		PSE (Vol is RT)
			Two	0(5)	0(4)	58-12	UT-02-157	MT-02-161		AUG (IEB 79-13)
						58-13	UT-02-158	MT-02-162		AUG (IEB 79-13)
						58-16	UT-02-156	MT-02-163		AUG (IEB 79-13)
						58-16A	UT-02-155	MT-02-164		AUG (IEB 79-13)
	59	Aux & Dwncmr SG2	One	0(5)	0(5)	59-1	99-1496	99-1507		
						59-2	01-1641	01-1531		PSE (Vol is RT)
						59-12	99-1292	99-1232		
						59-13	99-1293	99-1232		
						59-16	99-1290	99-1198		
							01-1512	01-1231		PSE
							01-1514			
							01-1516			
						59-16A	99-1291	99-1198		
							01-1513	01-1231		PSE
							01-1515			
							01-1517			
						59-6	01-1417	01-1375		PSE
							01-1419			
							01-1421			
							01-1424			
						59-35	01-1418	01-1375		PSE
							01-1420			
							01-1422			
							01-1425			
						59-36	01-1423	01-1375		PSE
							01-1426			
							01-1527			
			Two	1(5)	1(0)	59-12		MT-02-197		AUG (IEB 79-13)
						59-13		MT-02-198		AUG (IEB 79-13)
						59-25	UT-02-151	MT-02-160		
							UT-02-152			
	64	Blowdown SG 1	One	1	1	64-1	01-1242	01-1002		
	65	Blowdown SG 2	One	1	1	65-28	01-1243	01-1003		
			Two	1	1	65-52	UT-02-153	MT-02-159		
							UT-02-154			
C 6.10	116	HPSI Pump A	by end of interval		116-2		01-1473			
C 7.10	N/A	Pressure Vessels	One	All	All	Press Bound			*	
C 7.30	N/A	Piping	One	All	All	Press Bound			*	

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ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
C 7.50	N/A	Pumps	One	All	All	Press Bound			*	
C 7.70	N/A	Valves	One	All	All	Press Bound			*	* see list by system
						AF			01-1635	
									01-1636	
			Two	All	**	AF			VT-03-007	**Period
			One			CH			01-1012	Requirement
									01-1642	Partially completed
									VT-03-002	
									VT-03-003	
									VT-03-005	
			Two	All	**	CH			VT-03-004	
									VT-03-006	
									VT-03-010	
									VT-03-011	
									VT-03-012	
									VT-03-013	
									VT-03-015	
									VT-03-016	
									VT-03-017	
									VT-03-018	
									VT-03-019	
									VT-03-020	
									VT-03-021	
									VT-03-022	
									VT-03-024	
									VT-03-028	
									VT-03-031	
									VT-03-032	
									VT-03-033	
									VT-03-034	
									VT-03-035	
			One	All	All	CL			01-1644	
									01-1648	
									01-1653	
						CP			01-1485	
									01-1486	
									01-1625	
									01-1626	
						DW			01-1319	
						FP			01-1317	
						GA			01-1440	
									01-1441	
						GR			01-1432	
						HC			01-1436	
									01-1437	
									01-1507	
									01-1536	
									01-1649	
									01-1650	
						HP			01-1011	
									01-1496	
									01-1537	
									01-1645	
									VT-03-001	
			Two	All	**	HP			VT-03-029	
									VT-03-030	
			One	All	All	IA			01-1320	
									01-1321	
						NC			01-1318	
						PC			01-1323	
									01-1324	
									01-1325	
						RC			01-1326	
									01-1557	
									01-1627	
						RD			01-1597	
						SG			01-1631	
									01-1638	
			Two	All	**	SG			VT-03-008	

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ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
									VT-03-009	
									VT-03-023	
									VT-03-025	
									VT-03-026	
									VT-03-027	
			One	All	All	SI			01-1013	
									01-1014	
									01-1312	
									01-1443	
									01-1444	
									01-1504	
									01-1508	
									01-1509	
									01-1538	
									01-1539	
									01-1615	Re-exam VT-1
									01-1629	
									01-1630	
									01-1632	
									01-1633	
									01-1646	
									01-1647	
						SS			01-1634	
						WC			01-1445	
F 1.20	43	MS SG 1 90	One	2	2	SG36H17			99-1240	
						SG36H884			99-1242	
						SG36H885			99-1241	
			Two	1	1	SG36H11			VT-02-622	RR #4
	44	MS SG1 270	One	2	2	SG33H17			99-1278	
						SG33H18			99-1243	Support Deleted
			Two	3	3	SG33H16			VT-02-694	RR #4
						SG33H881			VT-02-693	RR #4
						SG33H882			VT-02-695	RR #4
	45	MS SG 2 270	One	1	1	SG42H14			99-1244	
			Two	3	1	SG42H11			VT-02-690	RR #4
	46	MS SG 2 90	One	2	2	SG45H17			99-1441	
						SG45H18			99-1463	Support Deleted
			Two	3	3	SG45H11			VT-02-691	RR #4
						SG45H887			VT-02-689	RR #4
						SG45H888			VT-02-692	RR #4
	47	MS SG1 270	One	1	1	SG206H1			99-1318	
	51	Atm Dump SG1	One	1	1	SG59H6			99-1575	
	52	Atm Dump SG2	One	0	1	SG103H6			01-1566	PSE
	53	Steam to Aux FW	One	4	4	SG81H1			99-1679	
						SG81H2			99-1680	
						SG83H1			99-1681	
						SG83H2			99-1682	
			Two	2	2	SG81H4			VT-02-602	Support Deleted
						SG83H4			VT-02-603	Support Deleted
	54	Feedwater SG 1	One	7	7	SG2H2			01-1602	Expansion
						SG2H4			01-1022	
						SG2H5			01-1021	
						SG2H12			01-1062	Reject
									01-1603	Re-exam
						SG2H13			01-1020	
						SG2H14			01-1019	
						SG2H15			01-1018	
						SG2H803			01-1025	
						SG13H1			01-1612	Expansion
	55	Feedwater SG 2	One	9	9	SG5H9			01-1173	
						SG5H10			01-1174	
						SG5H11			01-1175	
						SG5H12			01-1036	
						SG5H14			01-1477	PSE
						SG5H805			01-1037	
						SG5H809			01-1038	
						SG5H812			01-1039	
						SG14H1			01-1034	
						SG14H804			01-1035	

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ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
			Two	7	7	SG5H4			VT-02-559	
						SG5H5			VT-02-560	Reject
									VT-02-656	Re-exam
						SG5H6			VT-02-561	RR #4
						SG5H7			VT-02-562	
						SG5H8			VT-02-564	RR #4
						SG5H13			VT-02-563	Reject
									VT-02-657	Re-exam
						SG5H14			VT-02-565	
	58	Aux & Dwncmr SG1	One	7	7	SG8H2			01-1604	
						SG8H3			01-1606	
						SG8H4			01-1608	
						SG8H5			01-1607	
						SG8H20			01-1609	
						SG8H901			01-1448	
						SG8H903			01-1605	
			Two	7	7	SG8H6			VT-02-520	RR #4
						SG8H7			VT-02-449	RR #4
						SG8H8			VT-02-451	Reject
									VT-02-649	Re-exam
						SG8H9			VT-02-452	
						SG8H10			VT-02-453	
						SG8H11			VT-02-454	
						SG8H17			VT-02-519	RR #4
	59	Aux & Dwncmr SG2	One	6	6	AF6H1			99-1261	
						SG11H8			99-1201	
						SG11H9			99-1246	
						SG11H10			99-1245	
						SG11H11			99-1200	
						SG11H12			99-1199 99-1332	
			Two	6	5	SG11H3			VT-02-702	PSE
						SG11H13			VT-02-566	
						SG11H14			VT-02-567	
						SG11H15			VT-02-568	
						SG11H18			VT-02-455	
						SG11H19			VT-02-570	
	60	Dwncmr FW SG1	One	1	1	SG200H9			99-1668	
						SG200H13			99-1669	PSE
						SG200H14			99-1670	PSE
	61	Dwncmr FW SG2	One	0	0	SG203H13			99-1671	PSE
						SG203H14			99-1672	PSE
	62	Aux FW SG1	One	1	1	AF4H3			99-1461	
	63	Aux FW SG2	One	2	2	AF6H2			99-1462	
						AF16H1			99-1460	
	64	Blowdown SG 1	One	12	12	SG39H10			01-1449	
						SG39H11			01-1450	Support Deleted
						SG39H12			01-1451	
						SG39H13			01-1452	Support Deleted
						SG39H14			01-1453	Support Deleted
						SG39H15			01-1454	
						SG39H16			01-1455	
						SG39H17			01-1456	Support Deleted
						SG39H26			01-1457	
						SG53H1			01-1031	Support Deleted
						SG53H2			01-1032	Support Deleted
						SG53H924			01-1033	
			Two	13	12	SG39H1			VT-02-480	Support Deleted
						SG39H2			VT-02-481	Support Deleted
						SG39H3			VT-02-482	Support Deleted
						SG39H4			VT-02-483	
						SG39H5			VT-02-484	
						SG39H6			VT-02-485	Support Deleted
						SG39H27			VT-02-486	Support Deleted
						SG53H3			VT-02-488	Support Deleted
						SG53H4			VT-02-489	
						SG53H5			VT-02-490	

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SG53H6			VT-02-491	Support Deleted
						SG53H7			VT-02-492	Support Deleted
	65	Blowdown SG 2	One	12	12	SG48H2			01-1030	Support Deleted
						SG48H3			01-1478	Support Deleted
						SG48H4			01-1479	
						SG48H19			01-1480	Support Deleted
						SG48H20			01-1481	Support Deleted
						SG48H21			01-1482	
						SG48H925			01-1029	
						SG52H1			01-1026	Support Deleted
						SG52H2			01-1027	Support Deleted
						SG52H3			01-1483	Support Deleted
						SG52H4			01-1484	
						SG52H923			01-1028	
			Two	11	11	SG48H13			VT-02-456	Support Deleted
						SG48H14			VT-02-457	RR #4
						SG48H15			VT-02-458	Support Deleted
						SG48H16			VT-02-459	RR #4
						SG48H17			VT-02-460	Support Deleted
						SG48H18			VT-02-461	RR #4
						SG48H22			VT-02-462	Support Deleted
						SG48H23			VT-02-463	RR #4
						SG48H24			VT-02-464	RR #4
						SG48H25			VT-02-465	Support Deleted
						SG48H26			VT-02-466	Support Deleted
	68	Regen Htexch	Two	2	2	68-10			VT-02-590	
						68-11			VT-02-591	
	70	LPSI Suction A	One	1	1	SI67H4			99-1248	
						SI307H16			99-1428	PSE
	71	LPSI Discharge A	One	1	1	SI87H11			99-1247 99-1375	
			Two	5	5	SI78H1			VT-02-541	
						SI78H2			VT-02-542	
						SI87H1			VT-02-543	
						SI87H2			VT-02-544	
						SI87H3			VT-02-545	
	73	LPSI Suction B	Two	1	1	SI308H14			VT-02-546	
	76	CS Suction A	One	1	1	SI9H4			99-1376	
									99-1438	
						SI67H1			99-1427	PSE
						SI67H3			99-1426	PSE
	77	CS Discharge A	One	4	4	SI79H1			99-1377	
						SI79H2			99-1378	
						SI79H3			99-1379	
						SI79H4			99-1380	
	79	CS Suction B	One	3	3	SI34H1			99-1517	
						SI34H2			99-1518	
						SI34H3			99-1519	
	80	CS Discharge B	One	3	3	SI119H7			99-1527	
						SI119H8			99-1528	
						SI119H9			99-1529	
	82	SD Cooling A	One	2	2	SI78H4			99-1296	
						SI78H5			99-1595	
									01-1564	PSE
						SI79H10			99-1297	
									01-1458	
	83	SD Cooling A	One	4	4	SI87H9			99-1312	
						SI89H1			99-1300	
						SI89H2			99-1299	
						SI89H3			99-1298	
	85	SD Cooling B	One	3	3	SI119H10			99-1530	
						SI123H6			99-1531	
						SI123H7			99-1532	
	86	SD Cooling B	One	3	3	SI129H10			99-1406	
						SI129H11			99-1405	
						SI129H12			99-1407	
			Two	7	1	SI129H9			VT-02-672	Expansion, RR #4
						SI135H1			VT-02-675	Expansion, RR #4
	88	East Wrap	One	8	8	SI72H11			99-1533	

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI72H13			99-1534	
						SI72H14			99-1535	
						SI72H21			01-1333	
						SI72H22			01-1334	
						SI73H1			01-1459	
						SI73H2			01-1460	
						SI73H3			01-1461	
			Two	0	0	SI72H11			VT-02-685	Expansion, RR #4
						SI72H13			VT-02-686	Expansion, RR #4
						SI72H14			VT-02-687	Expansion, RR #4
						SI73H2			VT-02-688	Expansion, RR #4
	89	East Wrap	One	4	4	SI194H12			99-1536	
						SI194H13			99-1537	
						SI194H14			99-1640	
						SI194H23			99-1641	
			Two	0	0	SI194H13			VT-02-668	Expansion, RR #4
	91	West Wrap	One	7	7	SI70H9			99-1255	
						SI70H10			99-1254	
						SI70H11			99-1253	
						SI70H12			99-1252	
						SI70H13			99-1249	
						SI70H15			99-1251	
						SI70H16			99-1250	
	92	West Wrap	One	5	5	SI239H1			99-1673	Expansion
						SI239H2			99-1674	Expansion
						SI239H3			99-1598	
									01-1565	PSE
						SI241H9			99-1418	PSE
						SI241H12			99-1417	PSE
						SI241H14			99-1419	PSE
						SI241H15			99-1597	
						SI241H21			99-1596	
			Two	5	1	SI241H9			VT-02-653	Expansion, RR #4
						SI241H12			VT-02-654	Expansion, RR #4
						SI241H14			VT-02-658	Expansion, RR #4
						SI241H21			VT-02-660	Expansion, RR #4
	94	LPSI A	One	3	3	SI89H7			99-1398	
						SI89H8			99-1399	
						SI89H9			99-1400	
						SI241H5			99-1302	PSE
						SI241H7			99-1423	PSE
						SI241H8			99-1421	PSE
			Two	7	5	SI70H4			VT-02-589	
						SI70H5			VT-02-697	
						SI70H8			VT-02-495	
						SI241H6			VT-02-624	RR #4
						SI241H7			VT-02-642	RR #4
	95	LPSI B	One	6	6	SI72H8			99-1401	
						SI72H10			99-1402	
						SI134H11			99-1403	
						SI134H12			99-1404	
						SI194H3			99-1414	
						SI194H5			99-1415	
			Two	10	0	SI72H10			VT-02-644	Expansion, RR #4
						SI194H5			VT-02-650	Expansion, RR #4
	96	LPSI to Loop 1A	One	3	3	SI202H7			99-1342	
						SI202H8			99-1343	Support Deleted
						SI202H9			99-1344	Support Deleted
			Two	8	7	SI202H1			VT-02-670	Expansion
						SI202H2			VT-02-467	RR #4
						SI202H3			VT-02-468	RR #4
						SI202H4			VT-02-469	Reject
									VT-02-651	Re-exam
						SI202H6			VT-02-470	RR #4
						SI202H7			VT-02-671	Expansion
						SI202H10			VT-02-471	Support Deleted
						SI202H11			VT-02-472	Support Deleted
						SI202H12			VT-02-673	Expansion
						SI202H15			VT-02-473	RR #4

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI202H16			VT-02-674	Expansion
						SI202H18			VT-02-676	Expansion
	97	LPSI to Loop 1B	One	10	10	SI220H8			01-1468	
						SI220H9			99-1333	
						SI220H10			99-1334	
						SI220H11			99-1335	Support Deleted
						SI220H12			99-1336	
						SI220H13			99-1337	
						SI220H14			99-1338	Support Deleted
						SI220H15			99-1339	
						SI220H19			99-1340	
						SI220H22			99-1341	Support Deleted
			Two	7	7	SI220H1			VT-02-444	
						SI220H5			VT-02-677	Expansion
						SI220H16			VT-02-446	RR #4
						SI220H17			VT-02-447	
						SI220H18			VT-02-448	
						SI220H20			VT-02-443	Reject RR #4
									VT-02-648	Re-exam
						SI220H21			VT-02-445	Support Deleted
						SI220H27			VT-02-678	Expansion
						SI220H28			VT-02-450	Support Deleted
	98	LPSI to Loop 2A	One	2	2	SI155H5			99-1329	
						SI155H6			99-1328	
			Two	5	1	SI155H6			VT-02-679	Expansion
	99	LPSI to Loop 2B	Two	5	4	SI174H4			VT-02-680	Expansion
						SI174H7			VT-02-554	Support Deleted
						SI174H8			VT-02-555	
						SI174H9			VT-02-556	Support Deleted
						SI174H11			VT-02-681	Expansion
						SI174H12			VT-02-682	Expansion
						SI174H13			VT-02-558	
	100	LPSI A Suction	One	2	2	SI241H19			99-1330	Reject
									99-1642	Re-exam
									01-1469	Re-exam
						SI369H1			99-1331	
			Two	1	1	84-5			VT-02-696	
	101	LPSI B Suction	Two	0	0	SI194H16			VT-02-683	Expansion
						SI194H22			VT-02-684	Expansion
	102	SI Suction A	One	6	6	SI8H4			99-1303	PSE
						SI9H1			99-1429	PSE
						SI307H2			99-1422	PSE
						SI307H5			99-1304	PSE
						SI307H6			99-1425	PSE
						SI307H7			99-1424	PSE
						SI307H2			01-1462	
						SI307H3			01-1463	
						SI307H4			01-1464	Support Deleted
						SI307H5			01-1465	
						SI307H8			01-1466	
						SI307H15			01-1467	
			Two	7	7	SI8H1			VT-02-436	RR #4
						SI8H2			VT-02-437	Support Deleted
						SI8H3			VT-02-438	RR #4
						SI8H4			VT-02-439	RR #4
						SI307H6			VT-02-440	RR #4
						SI307H7			VT-02-441	RR #4
						SI307H14			VT-02-442	Support Deleted
	103	Refuel Suction A	One	6	6	CH142H3			99-1420	PSE
						CH142H13			99-1408	
						CH142H14			99-1409	
						CH142H15			99-1410	
						CH142H19			99-1412	
						CH142H22			99-1411	
						CH424H1			99-1413	
						CH424H2			99-1386	PSE
						CH424H3			99-1385	PSE
			Two	6	6	CH142H8			VT-02-504	
						CH142H20			VT-02-522	

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						CH142H21			VT-02-505	
						CH424H2			VT-02-499	
						CH424H3			VT-02-500	RR #4
						CH424H6			VT-02-521	
	104	SI Suction B	One	7	7	SI33H1			99-1520	Support Deleted
						SI33H2			99-1521	
						SI33H3			99-1522	
						SI308H5			99-1523	
						SI308H8			99-1524	
						SI308H10			99-1525	
						SI308H11			99-1526	
			Two	7	6	SI308H1			VT-02-547	
						SI308H2			VT-02-548	
						SI308H3			VT-02-549	
						SI308H4			VT-02-550	
						SI308H6			VT-02-571	Support Deleted
						SI308H7			VT-02-551	Support Deleted
	105	Refuel. Suction B	One	7	7	CH149H9			01-1396	
						CH149H10			01-1397	
						CH149H12			01-1398	
						CH149H13			01-1399	
						CH149H14			01-1400	
						CH149H21			01-1401	
						CH149H28			01-1402	
	106	HPSI Discharge A	One	8	8	SI99H1			01-1046	
						SI99H2			01-1047	
						SI100H1			01-1048	
						SI100H2			01-1049	
						SI100H3			01-1050	
						SI100H5			01-1051	
						SI100H34			01-1052	
						SI106H1			01-1053	
	107	HPSI Discharge B	One	6	6	SI107H3			01-1057	
						SI107H11			01-1056	
						SI107H12			01-1059	
						SI112HC			01-1055	
						SI112HG			01-1054	
						SI112HH			01-1058	
	108	HPSI Discharge	One	11	11	SI100H22			99-1388	
						SI100H23			99-1387	
						SI100H24			99-1389	
						SI100H25			99-1390	
						SI100H26			99-1391	
						SI100H27			99-1392	
						SI100H28			99-1393	
						SI100H29			99-1394	
						SI100H31			99-1395	
						SI100H32			99-1396	
						SI100H35			99-1397	
	109	HPSI Discharge	One	7	7	SI107H13			01-1335	
						SI107H14			01-1336	
						SI107H15			01-1337	
						SI107H16			01-1338	
						SI107H21			01-1339	
						SI107H47			01-1340	
						SI107H50			01-1341	
	110	HPSI Discharge	One	7	7	SI103HB			01-1403	
						SI103HD			01-1404	
						SI103HE			01-1405	
						SI218H1			01-1342	
						SI218H2			01-1343	
						SI218H3			01-1344	
						SI218H4			01-1345	
	111	HPSI Discharge	One	3	3	SI100H37			01-1348	
						SI100HA			01-1346	
						SI100HB			01-1347	
	112	HPSI Discharge	One	3	3	SI176H1			01-1349	
						SI176H2			01-1350	

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI176H3			01-1351	
	113	HPSI Discharge	One	5	5	SI107H22			01-1061	
						SI107H24			01-1060	
						SI157H2			01-1352	
						SI157H3			01-1353	
						SI157H4			01-1354	
	115	HPSI 2A & 2B	Two	3	3	SI157H10			VT-02-502	Support Deleted
						SI157H11			VT-02-503	RR #4
						SI176H4			VT-02-501	RR #4
F 1.40	41	Steam Generator 1	One	2	2	41-42			01-1498	
						41-43			01-1499	
	72	LPSI Pump A	One	3	3	72-3A			01-1472	
						72-3B			01-1472	
						72-3C			01-1472	
	116	HPSI Pump A	One	4	4	116-1A			01-1474	
						116-1B			01-1474	
						116-1C			01-1474	
						116-1D			01-1474	

APPENDIX B

CODE LIMITATIONS

REFUELING OUTAGE NUMBER TEN

CODE LIMITATIONS

ASME ITEM	ZONE/COMPONENT	ITEM ID	REPORT NO.
B 9.11	23 SI 1A	23-6	UT-02-287, UT-02-289
B 9.11	24 SI 1B	24-14	UT-02-185, UT-02-189
B 9.11	24 SI 1B	24-16	UT-02-177, UT-02-188
B 9.11	24 SI 1B	24-19	UT-02-176, UT-02-178
B 9.11	24 SI 1B	24-6	UT-02-179, UT-02-182
B 9.11	25 SI 2A	25-4	UT-02-224, UT-02-226
B 9.11	25 SI 2A	25-6	UT-02-221, UT-02-222
B 9.11	26 SI 2B	26-17	UT-02-180, UT-02-183
B 9.11	26 SI 2B	26-6	UT-02-181, UT-02-184
B 9.11	29 PZR Spray	29-2	UT-02-235, UT-02-236
B 9.21	30 Aux PZR Spray	30-1	UT-02-229, UT-02-230
B 9.21	30 Aux PZR Spray	30-2	UT-02-231, UT-02-232
B 9.21	39 HPSI A	39-24	UT-02-302, UT-02-303
C 5.11	100 LPSI Train A	70-121	UT-02-165, UT-02-166
C 5.11	100 LPSI Train A	84-3	UT-02-291, UT-02-293
C 5.11	102 SI Suction A	84-26	UT-02-150, UT-02-169
C 5.11	103 Refuel. Suction A	86-1	UT-02-186, UT-02-187
C 5.11	97 LPSI Loop 1B	77-27	UT-02-163, UT-02-164
C 5.21	115 HPSI 2A & 2B	115-20	UT-02-298, UT-02-299
C 5.21	118 HPSI A Long Term	118-49	UT-02-167, UT-02-168
C 5.21	119 HPSI B Long Term	119-52	UT-02-300, UT-02-301

Limitation: Single-sided Austenitic weld examinations less than 90% coverage based on the Section XI Appendix VIII PDI demonstration.

APPENDIX C

FORM
NIS-1

APS

NIS-1 FORM

OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

1. OWNER - *ARIZONA PUBLIC SERVICE COMPANY, et al*

   ADDRESS - *P.O. BOX 52034, PHOENIX, ARIZONA 85072*

2. PLANT - *PALO VERDE NUCLEAR GENERATING STATION*

   ADDRESS - *5801 SOUTH WINTERSBURG ROAD; TONOPAH, ARIZONA 85354-7529*

3. UNIT NUMBER - *1*

4. OWNERS' CERTIFICATE OF AUTHORIZATION - *NONE*

5. COMMERCIAL SERVICE DATE - *January 28, 1986*

6. COMPONENTS INSPECTED:

COMPONENT OR APPURTENANCE	MANUFACTURER OR INSTALLER	SERIAL NUMBER	STATE OR PROVINCE	NATIONAL BOARD NO

This report is a summary of the second interval second period examinations performed to date for Unit 1. The items examined, along with the examination report numbers, are listed in Appendix A.

APS

NIS-1 BACK

OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

7. EXAM DATES 9-28-2002 TO 10-30-2002

8. INSPECTION INTERVAL FROM 7-18-1998 TO 7-17-2008

9. ABSTRACT OF EXAMINATIONS. INCLUDE A LIST OF EXAMINATIONS AND A STATEMENT CONCERNING STATUS OF WORK REQUIRED FOR CURRENT INTERVAL.

The items examined, along with the examination report numbers, are listed in Appendix A. The examinations are listed by ASME Catagory and Item Numbers with the corresponding examination report numbers.

10. ABSTRACT OF CONDITIONS NOTED

The ten rejectable conditions documented during this outage were corrected or determined "use as is" in accordance with PVNGS work control practices and ASME Section XI. Two supports were damaged, seven supports had loose lock nuts and boron was on instrumentation tubes. Section 2 Examination Summary of the summary report addresses these conditions .

11. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN

The rejectectable portion of the support was replaced on one support, the bearing was adjusted on another support and the seven supports with loose lock nuts were tightened in accordance with ASME Section XI and APS Work Control procedures. The instrumentation tubes were verified to remain essertially unchanged from the original evaluation.

Several repairs and replacements have been performed since the last summary report due to routine or corrective maintenance. The work was performed in accordance with ASME Section XI and APS Work Control procedures. Applicable NIS-2 forms are included in Appendix D and a copy maintained on file at Palo Verde Nuclear Generating Station by Arizona Public Service

WE CERTIFY THAT THE STATEMENTS MADE IN THIS REPORT ARE CORRECT AND THE EXAMINATIONS AND CORRECTIVE MEASURES TAKEN CONFORM TO THE RULES OF THE ASME CODE, SECTION XI.

DATE 1/24/03 SIGNED: ARIZONA PUBLIC SERVICE COMPANY BY Michael Meehan

CERTIFICATE OF INSERVICE 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 ARIZONA EMPLOYED BY HSB CT OF HARTFORD, CONNECTICUT HAVE INSPECTED THE COMPONENTS DESCRIBED IN THIS OWNERS REPORT DURING THE PERIOD 5-13-01 TO 1-24-03 , AND STATE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE OWNER HAS PERFORMED EXAMINATIONS AND TAKEN CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT IN ACCORDANCE WITH THE REQUIREMENTS OF THE ASME CODE, SECTION XI. BY SIGNING THIS CERTIFICATE NEITHER THE INSPECTOR NOR HIS EMPLOYER MAKES ANY WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE EXAMINATIONS AND CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT. FURTHERMORE, NEITHER THE INSPECTOR NOR HIS EMPLOYER SHALL BE 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 [signature] COMMISSIONS NB 9685 "A" "N" "T" "C" Az 264

NAT'L BOARD, STATE, PROVINCE

DATE 1-24-03

APPENDIX D

FORMS
NIS-2

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PRCEV244 2. Code Class ASME Section III Class 1
3. Item Description: 4" Pressurizer Spray Check Valve
4. N-5 Data Package Number: 1RC01-1 5. W.O. Number: 219437
6. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: To Remove the 4" Check Valve 1PRCEV244 per DMWO# 219184
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Check Valve internals removed during start-up testing, the valve is currently leaking at the body to bonnet connection and has been Furmanited. Reference DMWO 219184 evaluation.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 1, 1974 w/Winter 1975
13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 1, 1974 w/Winter 1975
14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda
15. Preservice Inspection Required: ☑ YES ☐ NO

Initial KJS Date 6/26/2002 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☑ YES ☐ NO

Initial KJS Date 6/26/2002 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial KJS Date 6/26/2002 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial KJS Date 6/26/2002 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
4" Pipe	APN 00053306	N/A	MR443	MR# 644199
4" Elbow	APN 00054113 9/13/02	N/A	F8685	MR# 644199
4" Reducing Tee	APN ~~00053306~~ 54469	N/A	1219B	MR# 644199
2" Pipe	APN 43510642	N/A	HC# 3707H	MR# 644199
1" Weldolet	APN 43541147	N/A	242 5NA	MR# 644199

19. Planner Karl V. Savage 6/26/2002 Printed Name: Karl V. Savage
Signature Date

20. ISI RPIndap 6/26/02 Printed Name: Ramakant P. Indap
Signature Date

21. ANII RG Hogstrom 6-27-02 Printed Name: Robert G. Hogstrom
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. — Date: 06/24/20

   P. O. Box 53999, Phoenix Arizona 85072-2034 — Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station — Unit: 1

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 — Work Order Number 219437

3. Work Performed by: Arizona Public Service — Type of Code Stamp None

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: RC, (Reactor Coolant) ASME Section III Class 1

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
4" Pipe	N/A	N/A	N/A	1PRCEL018	2002	Replacement	NO
4" Elbow	N/A	N/A	N/A	1PRCEL018	2002	Replacement	NO
4" Reducing Tee	N/A	N/A	N/A	1PRCEL018	2002	Replacement	NO
2" Pipe	N/A	N/A	N/A	1PRCEL018	2002	Replacement	NO

7. Description of Work: Removal of Pressurizer Spray Check Valve 1PRCEV244

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-1 ☒

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: Pressure Test per Code Case N416-1. Removed Pressurizer Spray line Check Valve. Reference DMWO 219437. EDC 1998-00651.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: [illegible], Consulting Metallurgical Engineer Date: 10-29-2002
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 6-27-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible]
Inspectors Signature

Commissions NB 9685 "N" "I" AZ264
National Board, State, Province, and Endorsements

Date: 10-29-02

ASME SECTION XI – REPAIR / REPLACEMENT

Page of

1. Component ID 1JEWAHCV0053
2. Code Class ASME Secton III Class 3
3. Item Description: 20" BUTTERFLY VALVE
4. N-5 Data Package Number: 1EW01-1
5. W.O. Number: 224907
6. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: REPLACEMENT OF VALVE
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Like for like valve replacement, to correct seat leakage. No failure in the ASME boundary RPIndap 10-4-02

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 3, 1974 Edition 1975 Summer Addenda RPI 10-4-02
13. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 3, 1974 Edition 1975 Winter Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO

Initial JW Date 10/04/02 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☒ YES ~~☒ NO~~ RPI 10-4-02

Initial JW Date 10/04/02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial JW Date 10/04/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial JW Date 10/04/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1JEWAHCV0053	45002941	D-112456-1-1		MR# 686795

19. Planner John Waltman 10/04/02 Printed Name: John Waltman
Signature Date

20. ISI RPIndap 10-4-02 Printed Name: R.P. INDAP
Signature Date

21. ANII [illegible] 10-4-02 Printed Name: R.G. HOGSTROM
Signature Date

PV-E0093 Ver. 7

73DP-9ZZ17

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

   P. O. Box 53999, Phoenix Arizona 85072-2034

2. Plant: Palo Verde Nuclear Generating Station

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

3. Work Performed by: Arizona Public Service

Date: 10/04/2001

Sheet: 1 of 2

Unit: 1

Work Order Number 224907

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: EW

5. (a) Applicable Construction Code ASME Section III ND, Class 3 1974 Edition, Summer 1976 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Butterfly valve	Henry Pratt Co.	D-112456-1-1		1JEWAHCV0 053	1992	Replacement	YES

7. Description of Work: Complete valve replacement with new like for like.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-1 ☐

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

Remarks: Complete valve replacement with new like for like valve. WO# 224907

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: Alan Morrow Sr ISI Engineer Date: 10/9/02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-9-02 to 10-9-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264
National Board, State, Province, and Endorsements

Date: 10-9-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1PSGEV032 2. Code Class ASME III Class 2

3. Item Description 2" Kerotest GLOBE VALVE

4. N-5 Package Number 1SG02-1 5. W.O. Number 2387151

6. Original Construction Code Edition ASME III Class 2, 1974 Ed., Summer 1976 Add.

7. Original Installation Code Edition ASME III Class 2, 1974 Ed., Winter 1975 Add.

8. Work Description VALVE REPLACEMENT

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.

N/A; Not a pressure boundary failure. The valve is being replaced due to worn seat condition not allowing tight shutoff.

11. Repair/Replacement Work Organization APS Maintenance

12. Replacement Item Construction or reconciled Code/Edition ASME III Class 2, 1974 Ed., Summer 1976 Add.

13. Repair/Replacement Activity Construction Code/Edition ASME III Class 2, 1974 Ed., Winter 1975 Add.

14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/21/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO

DMG (Initial) 06/21/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/21/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/21/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1PSGEV032	45000250	AFE2-20	E522R-1-1	00538779-0001
	P/N# AR2-D-215KG-(2)			

19. Planner [signature] (Signature) 6-21-02 (Date) Print Name David Goodlet

20. ISI Engineer [signature] (Signature) 6-26-02 (Date) Print Name Ramakant Indap

21. ANII [signature] (Signature) 6-26-02 (Date) Print Name Robert Hogstrom

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 06/21/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2387151 (Work Order Number)

3. Work Performed by PVNGS Maintenance Dept. (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd., Tonopah, Az. 85354-7529 (Address) Expiration Date N/A

4. Identification of System SG-Feedwater system, wet layup.

5. (a) Applicable Construction Code ASME III Cl 2 19 74 Edition, S' 76 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Kerotest	AFE2-20	N/A	1PSGEV032	1984	Replacement	Yes

7. Description of Work Replacement of valve.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-1 ☑

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks WO# 2387151 for valve 1PSGEV032 replacement due to seat condition not allowing tight shut-off.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed R Fondop, Consulting Metallurgical Engineer (Owner or Owner's Designee, Title) Date 10-29-02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-26-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB 9685 "ANIC" Az 264 (National Board, State, Province, and Endorsements)

Date 10-29-02

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JCHNUV0500
2. Code Class ASME Section III Class 2
3. Item Description: 3" FISHER 3-WAY CONTROL VALVE
4. N-5 Data Package Number: 1CH01-1
5. W.O. Number: 2391525
6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Rework valve to correct seat leakage.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
    Not a pressure boundary failure. The valve plug / stem assembly is being replaced to improve seat condition.
11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO

Initial [illegible] Date 10-12-02 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial [illegible] Date 10-12-02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 10-12-02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial [illegible] Date 10-12-02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
PLUG	N/A	6552839	21953-1	MR 563601

19. Planner [illegible] Signature 10-12-02 Date Printed Name: David Goodlet
20. ISI [illegible] Signature 10/12/02. Date Printed Name: R.L. BROWNING
21. ANII [illegible] Signature 10/12/02 Date Printed Name: R.G. HUNTSMAN

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

   P. O. Box 53999, Phoenix Arizona 85072-2034

2. Plant: Palo Verde Nuclear Generating Station

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

3. Work Performed by: Arizona Public Service

Date: 10-12-2002

Sheet: 1 of 2

Unit: 1

Work Order Number 2391525

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: CH: Chemical and Volumn Control System

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Summer 1975 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
PLUG	Fisher	6552839	n/a	1JCHNUV-0500	1984	Replacement	YES

7. Description of Work: Rework valve to correct seat leakage.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: WO# 2391525 on valve 1JCHNUV0500 was disassemble and inspected for cause of seat leakage. The valve was in good shape with some wear on plug to seat ring sealing surface. The valve was reassembled with a new plug to improve seat condition.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: [signature], Consulting Metallurgical Engineer Date: 10-15-2002
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-12-02 to 10-16-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature]
Inspectors Signature

Commissions: NB 9685 "N" "P" AZ264
National Board, State, Province, and Endorsements

Date: 10-16-02

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIBV532
2. Code Class ASME Section III Class 1
3. Item Description: HPSI Injection to Loop 2 check valve
4. N-5 Data Package Number: 1RC01-1C
5. W.O. Number: 2412331
6. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Replace the bonnet / disc assembly
9. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO

Initial J.O Date 10-14-02 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☒ YES ☐ NO

Initial J.O Date 10-14-02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.O Date 10-14-02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.O Date 10-14-02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet/disc assembly	76356	~~76355~~ RRI 10-29-02	N/A	WO 00888782

19. Planner [signature] 10-14-02 Printed Name: James I.Davis
Signature Date

20. ISI Alan Morrow 10/14/02 Printed Name: Alan Morrow
Signature Date

21. ANII [signature] 10-14-02 Printed Name: Robert G. Hagstrom
Signature Date

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 10/14/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2412331 (Work Order Number)

3. Work Performed by Arizona Public Service (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd., Tonapah, Arizona 85354-7529 (Address) Expiration Date N/A

4. Identification of System Safety Injection

5. (a) Applicable Construction Code ASME Sec III, Cl 2 19 74 Edition, W75 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Borg-Warner	27603	N/A	1PSIBV532	1983	Repaired	Yes
Bonnet /Disc assy.	Borg-Warner	~~76355~~ RRI 10-29-02	N/A	1PSIBV532	2002	Replacement	Yes

7. Description of Work Replace the bonnet/disc assembly with the assembly removed from 1PSIEV143

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work Order 2412331 replaced the bonnet /disc assembly removed from 1PSIEV143 by Work Order 00888782 and reworked by Work Order 00917904.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed R P Fredlap, Consulting Metallurgical Engineer (Owner or Owner's Designee, Title) Date 10-29-02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-14-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R A [illegible] (Inspector's Signature) Commissions NB 9685 "ANIC" Az 264 (National Board, State, Province, and Endorsements)

Date 10-29-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1PSGEL011 2. Code Class ASME Section III Class 2

3. Item Description Pipe Spool

4. N-5 Package Number 1SG02-1 5. W.O. Number 2417233

6. Original Construction Code Edition 1974 Edition, Summer 1975 Addenda

7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda

8. Work Description Replacement of Pipe spool due to Flow Accelerated Erosion Corrosion, DIDM 2417232 EDC# 2001-00562.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.

Replacement of Eroded piping with Stainless Steel as Described in DIDM 2417232, EDC# 2001-00562. There was no failure of the Code Pressure Boundry.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition Sec.III Cl2/'74 Edition '75 Summer Addenda

13. Repair/Replacement Activity Construction Code/Edition Sec.III Cl.2/'74 Edition '75 Winter Addenda

14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☑ YES ☐ NO

KVS (Initial) 5/27/2002 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO

KVS (Initial) 5/27/2002 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

KVS (Initial) 5/27/2002 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

KVS (Initial) 5/27/2002 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
8" Pipe S. S	APN 00061187		297830	MR# 604187
8" Pipe C.S.	APN 00064731		27589	~~MR# 647316~~
8" Elbow	APN 00067691		LXLX-1	MR# 604187
				MR# 679684

19. Planner [signature] (Signature) 5/27/2002 (Date) Print Name Karl V. Savage

20. ISI Engineer [signature] (Signature) 6/18/02 (Date) Print Name Ramakant P. Indap

21. ANII [signature] (Signature) 6-18-02 (Date) Print Name Robert G. Hogstrom

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

   P. O. Box 53999, Phoenix Arizona 85072-2034

   Date: 05/27/2002

   Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

   Unit: 1

   Work Order Number 2417233

3. Work Performed by: Arizona Public Service

   Type of Code Stamp None

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: SG, ASME Section III, Class 2

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Winter 1975 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
8" Pipe and Elbow	N/A	N/A	N/A	1PSGELOII	2002	Replacement	NO

7. Description of Work: Replaced Pipe Spool due to Flow Accelerated Erosion Corrosion of the Original Piping.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-1 ☒

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: Pressure Test per Code Case N-416-1, Work Order 2417233, Replaced 8" Pipe and Elbow in Spool S-007 of Line 1PSGEL011 with Stainless Steel.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: R Pordage, Consulting Metallurgical Engineer Date: 10-29-2002
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 6-18-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264
National Board, State, Province, and Endorsements

Date: 10-29-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1PSGEL011 2. Code Class ASME Section III Class 2

3. Item Description Pipe Spool

4. N-5 Package Number 1SG02-1 5. W.O. Number 2417247

6. Original Construction Code Edition 1974 Edition, Summer 1975 Addenda

7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda

8. Work Description Replacement of Pipe spool due to Flow Accelerated Erosion Corrosion, DIDM 2417232 EDC# 2001-00563. Additional Scope Replacing Drain Valve 1PSGEV103, which is experiancing seat leakage.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
Replacement of Eroded piping with Stainless Steel as Described in DIDM 2417232, EDC# 2001-00563. There was no failure of the Code Pressure Boundry.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition Sec.III Cl2/'74 Edition '75 Summer Addenda

13. Repair/Replacement Activity Construction Code/Edition Sec.III Cl.2/'74 Edition '75 Winter Addenda

14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☑ YES ☐ NO

KVS (Initial) 5/27/2002 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO

KVS (Initial) 5/27/2002 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

KVS (Initial) 5/27/2002 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

KVS (Initial) 5/27/2002 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
8" Pipe	APN 00061187		297830	MR# 604189~~7~~
8"X6" Reducing Tee	APN 00067692		LXLX-1	MR# 604189~~7~~
1" Valve	APN 45000252	E2226R-1-3		MR# ~~641956~~ 546616

19. Planner Karl V. Savage (Signature) 5/27/2002 (Date) Print Name Karl V. Savage

20. ISI Engineer RPIndap (Signature) 6/18/02 (Date) Print Name Ramakant P. Indap

21. ANII RG Hogstrom (Signature) 6-18-02 (Date) Print Name Robert G. Hogstrom

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

   P. O. Box 53999, Phoenix Arizona 85072-2034

2. Plant: Palo Verde Nuclear Generating Station

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

3. Work Performed by: Arizona Public Service

Date: 05/27/2002

Sheet: 1 of 2

Unit: 1

Work Order Number 2417247

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG, ASME Section III, Class 2

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Winter 1975 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
8" Pipe and Tee	N/A	N/A	N/A	IPSGELOII	2002	Replacement	NO

7. Description of Work: Replaced Pipe Spool due to Flow Accelerated Erosion Corrosion of the Original Piping.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-1 ☒

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: Pressure Test per Code Case N-416-1. Replaced 8" Reducing Tee and Pipe in Spool S-004 of Line 1PSGEL011 with Stainless Steel.

W.O. 2417247

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: RPhillips, Consulting Metallurgical Engineer Date: 10-29-2002
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 6-18-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264
National Board, State, Province, and Endorsements

Date: 10-29-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1PSGEL011 2. Code Class ASME Section III Class 2

3. Item Description Pipe Spool

4. N-5 Package Number 1SG02-1 5. W.O. Number 2419643

6. Original Construction Code Edition 1974 Edition, Summer 1975 Addenda

7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda

8. Work Description Replacement of Pipe spool due to Flow Accelerated Erosion Corrosion, DIDM 2417232 EDC# 2001-00561.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.

Replacement of Eroded piping with Stainlwss Steel as Described in DIDM 2417232, EDC# 2001-00561. There was no failure of the Code Pressure Boundry.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition Sec.III Cl2/'74 Edition '75 Summer Addenda

13. Repair/Replacement Activity Construction Code/Edition Sec.III Cl.2/'74 Edition '75 Winter Addenda

14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☑ YES ☐ NO

KVS (Initial) 5/27/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO

KVS (Initial) 5/27/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

KVS (Initial) 5/27/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

KVS (Initial) 5/27/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
6" Elbow	APN 00061184		LXCM1 ✓	MR# 604187
6" Pipe	APN 00061183		F00777 ✓	MR# 604187
8" Pipe	APN 00061187		297830 ✓	MR# 604187
8" Elbow	APN 00067691		LXLX-1 ✓	MR# 604187
8" X 6" Reducer	APN 00061185		LWYG-1 ✓	MR# 604187

19. Planner [signature] (Signature) 6/27/02 (Date) Print Name Karl V. Savage

20. ISI Engineer [signature] (Signature) 6/18/02 (Date) Print Name Ramakant P. Indap

21. ANII [signature] (Signature) 6-18-02 (Date) Print Name Robert G. Hogstrom

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. — Date: 05/27/2002

   P. O. Box 53999, Phoenix Arizona 85072-2034 — Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station — Unit: 1

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 — Work Order Number 2419643

3. Work Performed by: Arizona Public Service — Type of Code Stamp None

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: SG, ASME Section III, Class 2

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Winter 1975 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
6" and 8" Pipe	N/A	N/A	N/A	10SGELOW	2002	Replacement	NO

7. Description of Work: Replaced Pipe Spool due to Flow Accelerated Erosion Corrosion of the Original Piping.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-1 ☒

   Other ☐ Pressure 1168 psi Test Temperature 565 °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: Pressure Test per Code Case N-416-1, Work Order 2419643, Replaced 6" Spool S-001 and 8" Spool S-009 of Line 1PSGEL011 with Stainless Steel.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: [illegible] ISI ENGINEER Date: 10/29/02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 6-18-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible]
Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264
National Board, State, Province, and Endorsements

Date: 10-29-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1PSIAVA07 2. Code Class 1 Drain Valve 6/25/02

3. Item Description 1JSICUV0653 PRESSURE LOCK PREVENTION SYSTEM ~~CHECK VALVE~~ 6-25-02

4. N-5 Package Number DIWO 1008568 5. W.O. Number 2439909

6. Original Construction Code Edition ASME SECT. III, CL 1 1974 EDITION S'76 ADD

7. Original Installation Code Edition ASME SECT. III, CL 1 1974 EDITION W'75 ADD

8. Work Description REPLACE THE STEM AND DISC ASSEMBLY (IF REQUIRED) AND THE BONNET TO BODY SEAL WELD.

9. ☐ ISI Flaw NDE Method of Flaw Detection

Report Number

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.

Valve leaking by the seat. No failure in the ASME sec. III boundary.

11. Repair/Replacement Work Organization ARIZONA PUBLIC SERVICE / J.O. 10-9-02

12. Replacement Item Construction or reconciled Code/Edition ASME SECT. III, CL 1 1974 EDITION ~~W'75~~ ADD S'76 ADD 6/25/02

13. Repair/Replacement Activity Construction Code/Edition ASME SECT. III, CL 1 1974 EDITION W'75 ADD

14. ASME Section XI Code/Edition 1992 EDITION, 1992 ADD. / J.O. 10-9-02

15. Preservice Inspection Required. ☐ YES ☑ NO

N/A (Initial) 06/24/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

N/A (Initial) 06/24/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

JD (Initial) 06/24/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

JD (Initial) 06/24/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.

19. Planner (Signature) 06/24/01 (Date) Print Name JAMES I. DAVIS

20. ISI Engineer (Signature) 6/25/01 (Date) Print Name: R. P. INDAP

21. ANII (Signature) 6-25-02 (Date) Print Name R.G. HOLSTROM

PV-E0093 Ver. 6 73DP-6ZZ17

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 10/09/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2439909 (Work Order Number)

3. Work Performed by Arizona Public Service (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd., Tonapah, Arizona 85354-7529 (Address) Expiration Date N/A

4. Identification of System Safety Injection

5. (a) Applicable Construction Code ASME Sect III, Cl 1 19 74 Edition, S76 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Borg-Warner	96SN0404	N/A	1PSIAVA07	1996	Repaired	Yes

7. Description of Work Rework the valve to correct leakage past the seat, replace the seal weld.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work Order 2439909 reworked the stem/disc assembly and removed and replaced the seal weld between the bonnet and body.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Alan Monow Sr ISI Engineer (Owner or Owner's Designee, Title) Date 10/9/02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-25-02 to 10-9-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB 9685 [illegible] AZ 264
National Board, State, Province, and Endorsements

Date 10/9/02

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PRCEL032 2. Code Class ASME Section III Class 1

Item Description: Reactor Coolant System Hot Leg #1 line 1PRCEL032, Spool S001.

4. N-5 Data Package Number: 1RC01-4 & 1RC01-18A 5. W.O. Number: 2455746

6. Original Construction Code Edition: ASME Section III Class 1, 1974 w/ Summer 1974

7. Original Installation Code Edition: ASME Section III Class 1, 1974 w/Winter 1975

8. Work Description: Replace existing Inconel 600 thermowells with Inconel 690 thermowells. The modification includes RTDs 1JRCCTW0112HC, 1JRCATW0112HA, 1JRCETW0111X, 1JRCBTW0112HB and 1JRCDTW0112HD. This work order applies to RCS Hot Leg #1. Ref. DMWO 2376926 and N001-0607-00397 and 00398.

9. ☐ ISI Flaw NDE Method of Flaw Detection:

Report Number:

10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Existing inconel 600 nozzles are susceptible for PWSCC. As a preventive measure, being replaced by inconel 690 material.
RPI 6/26/02

11. Repair/Replacement Work Organization: Arizona Public Service

12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 1, 1974 w/ Summer 1974

13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 1, 1974 w/Winter 1975

14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda

15. Preservice Inspection Required: ☐ YES ☒ NO

Initial [illegible] Date 6/15/02 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial [illegible] Date 6/15/02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 6/15/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial [illegible] Date 6/15/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
1JRCETW0111X, Nozzle	APN 00067199	~~N/A~~ 19	N/A	684468
1JRCETW0111X, Thermowell	APN 00067116	~~N/A~~ 19	N/A	684468
1JRCATW0112HA, Nozzle	APN 00067199	~~N/A~~ 18	N/A	684463
1JRCATW0112HA, Thermowell	APN 00067116	~~N/A~~ 18	N/A	684463
1JRCCTW0112HC, Nozzle	APN 00067199	~~N/A~~ 20	N/A	684466
1JRCCTW0112HC, Thermowell	APN 00067116	~~N/A~~ 20	N/A	684466

19. Planner [illegible] (Signature) 6/15/02 (Date) Printed Name: Herbert L. Green

20. ISI [illegible] (Signature) 6/26/02 (Date) Printed Name: R. P. INDAP

21. ANII [illegible] (Signature) 6-26-02 (Date) Printed Name: R. G. HOGSTROM

ASME SECTION XI – REPAIR / REPLACEMENT PAGE 2 OF 2

1. Component ID 1PRCEL032 2. Code Class ASME Section III Class 1

Item Description: Reactor Coolant System Hot Leg #1 line 1PRCEL032, Spool S001.

4. N-5 Data Package Number: 1RC01-4 & 1RC01-18A 5. W.O. Number: 2455746

6. Original Construction Code Edition: ASME Section III Class 1, 1974 w/ Summer 1974

7. Original Installation Code Edition: ASME Section III Class 1, 1974 w/Winter 1975

8. Work Description: Replace existing Inconel 600 thermowells with Inconel 690 thermowells. The modification includes RTDs 1JRCCTW0112HC, 1JRCATW0112HA, 1JRCETW0111X, 1JRCBTW0112HB and 1JRCDTW0112HD. This work order applies to RCS Hot Leg #1. Ref. DMWO 2376926 and N001-0607-00397 and 00398.

9. ☐ ISI Flaw NDE Method of Flaw Detection:

Report Number:

10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

see page 1

11. Repair/Replacement Work Organization: Arizona Public Service

12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 1, 1974 w/ Summer 1974

13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 1, 1974 w/Winter 1975

14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda

15. Preservice Inspection Required: ☐ YES ☒ NO

Initial ✓ Date _____ If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial ✓ Date _____ If required, include a step in the W.O. for ISI & ANII Inspection.

Initial ✓ Date _____ 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial ✓ Date _____ 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
1JRCBTW0112HB, Nozzle	APN 00067199	~~N/A~~ 41	N/A	684469
1JRCBTW0112HB, Thermowell	APN 00067116	~~N/A~~ 41	N/A	684469
1JRCDTW0112HD, Nozzle	APN 00067199	~~N/A~~ 23	N/A	684470
1JRCDTW0112HD, Thermowell	APN 00067116	~~N/A~~ 23	N/A	684470

19. Planner [signature] 6/26/02 Printed Name: Herbert L. Green
Signature Date

20. ISI [signature] 6/26/02 Printed Name: R.P-INDAP
Signature Date

21. ANII [signature] 6-26-02 Printed Name: R.G. HOGSTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

   P. O. Box 53999, Phoenix Arizona 85072-2034

   Date: 06/14/2002

   Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

   Unit: 1

   Work Order Number 2455746

3. Work Performed by: Arizona Public Service

   Type of Code Stamp None

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: Reactor Coolant System line number 1PRCEL032, Spool S001

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1974 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
RCS Hot Leg #1	Combustion Engineering	771-301	N/A	1PRCEL032	1978	Repaired	YES

7. Description of Work: Replace a section of existing Inconel 600 RTD nozzles with a new design Inconel 690 RTD nozzles, and replace existing Inconel 600 thermowells with Inconel 690 thermowells. The modification includes RTDs 1JRCCTW0112HC, 1JRCATW0112HA, 1JRCETW0111X, 1JRCBTW0112HB and 1JRCDTW0112HD. This work order applies to RCS Hot Leg #1. Ref. DMWO 2376926 and N001-0607-00397 and 00398.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

Remarks:

W.O. 2455746

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: R P Indeg, Consulting Metallurgical Engineer Date: 10-29-2002
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 6-26-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264
National Board, State, Province, and Endorsements

Date: 10-29-02

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PRCEL063 2. Code Class ASME Section III Class 1
3. Item Description: Reactor Coolant System Hot Leg #2 line 1PRCEL063, Spool S001.
4. N-5 Data Package Number: 1RC01-4 & 1RC01-18A 5. W.O. Number: 2455748
6. Original Construction Code Edition: ASME Section III Class 1, 1974 w/ Summer 1974
7. Original Installation Code Edition: ASME Section III Class 1, 1974 w/Winter 1975
8. Work Description: Replace existing Inconel 600 thermowells with Inconel 690 thermowells. The modification includes RTDs 1JRCCTW0122HC, 1JRCATW0122HA, 1JRCETW0121X, 1JRCBTW0122HB and 1JRCDTW0122HD. This work order applies to RCS Hot Leg #2. Ref. DMWO 2376926 and N001-0607-00397 and 00398.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Existing inconel 600 nozzles susceptible for PWSCC. As a preventive measure, it is being replaced by Inconel 690 material. RPI 6/26/02
11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 1, 1974 w/ Summer 1974
13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 1, 1974 w/Winter 1975
14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO
Initial [illegible] Date 6/05/02 If required, include a step in the W.O. to perform Preservice Inspection
6. ASME Section XI Pressure Test Required: ☐ YES ☒ NO
Initial [illegible] Date 6/05/02 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial [illegible] Date 6/05/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial [illegible] Date 6/05/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
1JRCETW0121X, Nozzle	APN 00067199	~~N/A~~ 39	N/A	684474
1JRCETW0121X, Thermowell	APN 00067116	~~N/A~~ 39	N/A	684474
1JRCATW0122HA, Nozzle	APN 00067199	~~N/A~~ 17	N/A	684473
1JRCATW0122HA, Thermowell	APN 00067116	~~N/A~~ 17	N/A	684473
1JRCCTW0122HC, Nozzle	APN 00067199	~~N/A~~ 32	N/A	684472
1JRCCTW0122HC, Thermowell	APN 00067116	~~N/A~~ 32	N/A	684472

19. Planner [illegible] Signature 6/05/02 Date Printed Name: Herbert L. Green
20. ISI [illegible] Signature 6/26/02 Date Printed Name: R. P. INDAP
21. ANII [illegible] Signature 6-26-02 Date Printed Name: R.G. HOGSTROM

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PRCEL063 2. Code Class ASME Section III Class 1

. Item Description: Reactor Coolant System Hot Leg #2 line 1PRCEL063, Spool S001.

4. N-5 Data Package Number: 1RC01-4 & 1RC01-18A 5. W.O. Number: 2455748

6. Original Construction Code Edition: ASME Section III Class 1, 1974 w/ Summer 1974

7. Original Installation Code Edition: ASME Section III Class 1, 1974 w/Winter 1975

8. Work Description: Replace existing Inconel 600 thermowells with Inconel 690 thermowells. The modification includes RTDs 1JRCCTW0122HC, 1JRCATW0122HA, 1JRCETW0121X, 1JRCBTW0122HB and 1JRCDTW0122HD. This work order applies to RCS Hot Leg #2. Ref. DMWO 2376926 and N001-0607-00397 and 00398.

9. ☐ ISI Flaw NDE Method of Flaw Detection:

Report Number:

10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

See page 1.

11. Repair/Replacement Work Organization: Arizona Public Service

12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 1, 1974 w/ Summer 1974

13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 1, 1974 w/Winter 1975

14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda

15. Preservice Inspection Required: ☐ YES ☒ NO

Initial ✓ Date _____ If required, include a step in the W.O. to perform Preservice Inspection

6. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial ✓ Date _____ If required, include a step in the W.O. for ISI & ANII Inspection.

Initial ✓ Date _____ 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial ✓ Date _____ 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	~~Serial No.~~ Heat No	~~Heat No.~~ MR No	MR/ROS No. Pick list
1JRCBTW0122HB, Nozzle	APN 00067199	~~N/A~~ ~~41~~ 27	684475	617358
1JRCBTW0122HB, Thermowell	APN 00067116	~~N/A~~ ~~41~~ 27	684475	617358
1JRCDTW0122HD, Nozzle	APN 00067199	~~N/A~~ 29	684476	617359
1JRCDTW0122HD, Thermowell	APN 00067116	~~N/A~~ 29	684476	617359
		G. Wiley 10-15-02		

19. Planner _____ Signature 6/26/02 Date *See Pg 1 Printed Name: Herbert L. Green

20. ISI _____ Signature 6/26/02 Date Printed Name: R. P. INDAP

21. ANII _____ Signature 6-26-02 Date Printed Name: R.G. Hogstrom

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. — Date: 06/14/2002

   P. O. Box 53999, Phoenix Arizona 85072-2034 — Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station — Unit: 1

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 — Work Order Number 2455748

3. Work Performed by: Arizona Public Service — Type of Code Stamp None

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: Reactor Coolant System line number 1PRCEL063, Spool S001

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1974 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
RCS Hot Leg #2	Combustion Engineering	771-501	N/A	1PRCEL063	1978	Repaired	YES

7. Description of Work: Replace a section of existing Inconel 600 RTD nozzles with a new design Inconel 690 RTD nozzles, and replace existing Inconel 600 thermowells with Inconel 690 thermowells. The modification includes RTDs 1JRCCTW0122HC, 1JRCATW0122HA, 1JRCETW0121X, 1JRCBTW0122HB and 1JRCDTW0122HD. This work order applies to RCS Hot Leg #2. Ref. DMWO 2376926 and N001-0607-00397 and 00398.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

Remarks: W.O. 2455748

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: R Prodlap, Consulting Metallurgical Engineer Date: 10-29-02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 6-26-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264
National Board, State, Province, and Endorsements

Date: 10-29-02

ASME SECTION XI - REPAIR/REPLACEMENT

RPI 10-29-02 ~~Page 1 of 4~~

1. Component ID 1JRCEPSV0200 2. Code Class ASME III, CLASS 1
3. Item Description PRESSURIZER SAFETY VALVE; DRESSER 31709N; 2460 PSIG
4. N-5 Package Number 1RC03-2 5. W.O. Number 2456198
6. Original Construction Code Edition ASME III CLASS 1, 1974 EDITION, SUMMER 1975 ADDENDA
7. Original Installation Code Edition ASME III CLASS 1, 1974 EDITION, WINTER 1975 ADDENDA
8. Work Description Replace Pressurizer safety valve with reconditioned spare.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____
Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support vendor testing.

11. Repair/Replacement Work Organization ARIZONA PUBLIC SERVICE
12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 1, 1974 ED., S'75 ADD.
13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 1, 1974 ED., W'75 ADD.
14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO
DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO
DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.
DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1JRCEPSV0200	N/A	BY-14537	N/A	00689970-1

19. Planner [signature] (Signature) 6-3-02 (Date) Print Name David Goodlet
20. ISI Engineer [signature] (Signature) 6-4-02 (Date) Print Name Ramakant Indap
21. ANII [signature] (Signature) 8-8-02 (Date) Print Name Robert Hogstrom

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 07/10/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2456198 (Work Order Number)

3. Work Performed by PVNGS Maintenance Dept. (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd., Tonopah, Az. 85354-7529 (Address) Expiration Date N/A

4. Identification of System RC - Reactor Coolant system

5. (a) Applicable Construction Code ASME III Class 1 19 74 Edition, S'75 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BY-14537	N/A	RCEPSV0200	91	Replacement	Yes

7. Description of Work Replace pressurizer safety valve with reconditioned and tested spare.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ Exempt ☐ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work order; # 2456198 , for the replacement of pressurizer safety valve 1JRCEPSV0200. This valve is replaced to support off-site testing and reconditioning.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [illegible], Consulting Metallurgical Engineer (Owner or Owner's Designee, Title) Date 10-29-2002

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-8-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] (Inspector's Signature) Commissions NB 9685 "ANIC" Az 264 (National Board, State, Province, and Endorsements)

Date 10-29-02

ASME SECTION XI - REPAIR/REPLACEMENT

RRF 10/24/02 Page 2 of 4

1. Component ID 1JRCEPSV0201 2. Code Class ASME III, CLASS 1
3. Item Description PRESSURIZER SAFETY VALVE; DRESSER 31709N; 2460 PSIG
4. N-5 Package Number 1RC03-2 5. W.O. Number 2456199
6. Original Construction Code Edition ASME III CLASS 1, 1974 EDITION, SUMMER 1975 ADDENDA
7. Original Installation Code Edition ASME III CLASS 1, 1974 EDITION, WINTER 1975 ADDENDA
8. Work Description Replace Pressurizer safety valve with reconditioned spare.

9. ☐ ISI Flaw NDE Method of Flaw Detection
Report Number

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support vendor testing.

11. Repair/Replacement Work Organization ARIZONA PUBLIC SERVICE
12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 1, 1974 ED., S'75 ADD.
13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 1, 1974 ED., W'75 ADD.
14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA
15. Preservice Inspection Required. ☐ YES ☑ NO
DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.
16. ASME Section XI Pressure Test Required ☑ YES ☐ NO
DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.
DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1JRCEPSV0201	N/A	BQ-07679	N/A	00689974-1

19. Planner [signature] (Signature) 6-3-02 (Date) Print Name David Goodlet
20. ISI Engineer [signature] (Signature) 6-4-02 (Date) Print Name Ramakant Indap
21. ANII [signature] (Signature) 8-8-02 (Date) Print Name Robert Hogstrom

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 07/10/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2456199 (Work Order Number)

3. Work Performed by PVNGS Maintenance Dept. (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd., Tonopah, Az. 85354-7529 (Address) Expiration Date N/A

4. Identification of System RC - Reactor Coolant system

5. (a) Applicable Construction Code ASME III Class 1 19 74 Edition, S'75 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BQ-07679	N/A	RCEPSV0201	78	Replacement	Yes

7. Description of Work Replace pressurizer safety valve with reconditioned and tested spare.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ Exempt ☐ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work order; # 2456199 , for the replacement of pressurizer safety valve 1JRCEPSV0201. This valve is replaced to support off-site testing and reconditioning. This valve was constructed to ASME III Class 1, 1971 Edition, Winter 1972 Addendum and reconciled to the 1974., S'75 Add.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [signature], Consulting Metallurgical Engineer (Owner or Owner's Designee, Title) Date 10-29-02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-8-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] (Inspector's Signature) Commissions NB 9685 "ANIC" Az 264 (National Board, State, Province, and Endorsements)

Date 10-29-02

ASME SECTION XI - REPAIR/REPLACEMENT

RPI 10-21-02 Page 3 of 4

1. Component ID 1JRCEPSV0202 2. Code Class ASME III, CLASS 1

3. Item Description PRESSURIZER SAFETY VALVE; DRESSER 31709N; 2460 PSIG

4. N-5 Package Number 1RC03-2 5. W.O. Number 2456200

6. Original Construction Code Edition ASME III CLASS 1, 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition ASME III CLASS 1, 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Replace Pressurizer safety valve with reconditioned spare.

9. ☐ ISI Flaw NDE Method of Flaw Detection

Report Number

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.

No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support vendor testing.

11. Repair/Replacement Work Organization ARIZONA PUBLIC SERVICE

12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 1, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 1, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1JRCEPSV0202	N/A	BQ-07678	N/A	00689981-1

19. Planner [signature] (Signature) 6-3-02 (Date) Print Name David Goodlet

20. ISI Engineer [signature] (Signature) 6-4-02 (Date) Print Name Ramakant Indap

21. ANII [signature] (Signature) 6-6-02 (Date) Print Name Robert Hogstrom

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 07/10/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2456200 (Work Order Number)

3. Work Performed by PVNGS Maintenance Dept. (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd., Tonopah, Az. 85354-7529 (Address) Expiration Date N/A

4. Identification of System RC - Reactor Coolant system

5. (a) Applicable Construction Code ASME III Class 1 19 74 Edition, S'75 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BQ-07678	N/A	RCEPSV0202	78	Replacement	Yes

7. Description of Work Replace pressurizer safety valve with reconditioned and tested spare.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ Exempt ☐ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work order; # 2456200 , for the replacement of pressurizer safety valve 1JRCEPSV0202. This valve is replaced to support off-site testing and reconditioning. This valve was constructed to ASME III Class 1, 1971 Edition, Winter 1972 Addendum and reconciled to the 1974., S'75 Add.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [signature], Consulting Metallurgical Engineer (Owner or Owner's Designee, Title) Date 10-29-02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-8-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] (Inspector's Signature) Commissions NB 9685 "ANIC" Az. 264 (National Board, State, Province, and Endorsements)

Date 10-29-02

ASME SECTION XI - REPAIR/REPLACEMENT

RPZ 10-29-02 Page 4 of 4

1. Component ID 1JRCEPSV0203 2. Code Class ASME III, CLASS 1

3. Item Description PRESSURIZER SAFETY VALVE; DRESSER 31709N; 2460 PSIG

4. N-5 Package Number 1RC03-2 5. W.O. Number 2456201

6. Original Construction Code Edition ASME III CLASS 1, 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition ASME III CLASS 1, 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Replace Pressurizer safety valve with reconditioned spare.

9. ☐ ISI Flaw NDE Method of Flaw Detection

Report Number

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support vendor testing.

11. Repair/Replacement Work Organization ARIZONA PUBLIC SERVICE

12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 1, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 1, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1JRCEPSV0203	N/A	BY-14538	N/A	00689982-1

19. Planner [signature] (Signature) 6-3-02 (Date) Print Name David Goodlet

20. ISI Engineer [signature] (Signature) 6-4-02 (Date) Print Name Ramakant Indap

21. ANII [signature] (Signature) 6-6-02 (Date) Print Name Robert Hogstrom

PV-E0093 Ver. 6 73DP-9ZZ17

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 07/10/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2456201 (Work Order Number)

3. Work Performed by PVNGS Maintenance Dept. (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd., Tonopah, Az. 85354-7529 (Address) Expiration Date N/A

4. Identification of System RC - Reactor Coolant system

5. (a) Applicable Construction Code ASME III Class 1 19 74 Edition, S'75 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BY-14538	N/A	RCEPSV0203	91	Replacement	Yes

7. Description of Work Replace pressurizer safety valve with reconditioned and tested spare.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ Exempt ☐ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form..

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 08/06/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2456236 (Work Order Number)

3. Work Performed by Arizona Public Service (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S Wintersburg Rd Tonopah, AZ 85354 (Address) Expiration Date N/A

4. Identification of System RC, ASME Section III Class 1

5. (a) Applicable Construction Code Section III Class 1 19 74 Edition, W'75 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
3rd Stage Retainer	Sulzer	Q96-574 SN-26	N/A	~~1MRCEP02A~~	1985	Replacement	Yes
				1MRCEP01C Dwg 5 10-29-92			

7. Description of Work Replacement of 3rd stage seal retainer on RCP 2A

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ Exempt ☐ N-416-1 ☐

Other ☐ Pressure ~~2250~~ 2250 psi Test Temp. ~~565~~ 565 °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks WO# 2456236 to replace mechanical seals in RCP ~~1MRCEP02A~~ as part of normal maintenance.
1MRCEP02C
10-29-02

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed R.P. Modaff, Consulting Metallurgical Engineer (Owner or Owner's Designee, Title) Date 10-29-2002

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-4-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB 9685 "ANIC" Az 264
National Board, State, Province, and Endorsements

Date 10-29-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID ~~1MRCEP02B~~ 1MRCEP01D DMG 11-27-02 2. Code Class ASME Section III Class 1

3. Item Description Reactor Coolant Pump

4. N-5 Package Number 1RC02-7 5. W.O. Number 2456237

6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition, ~~Winter 1975 Addenda~~ RPR 9/4/02

7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda

8. Work Description Mechanical Seal Replacement as a part of normal maintenance.

9. ☐ ISI Flaw NDE Method of Flaw Detection

Report Number

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME pressure boundry. Mechanical seals are replaced with rebuilt units as a part of normal maintenance.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition ASME Section III, Class 1, 1974 Ed, ~~Winter 1975 Add.~~ RPR 9/4/02

13. Repair/Replacement Activity Construction Code/Edition ASME Section III, Class 1, 1974 Ed, Winter 1975 Add.

14. ASME Section XI Code/Edition 1992 Edition, 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☑ NO

BV (Initial) 08/06/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO

BV (Initial) 08/06/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

BV (Initial) 08/06/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

BV (Initial) 08/06/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
3rd Stage Seal Retainer	1663509	096-579 SN 18		N/A

19. Planner Barbara Vidal (Signature) 8/6/02 (Date) Print Name Barbara Vidal

20. ISI Engineer (Signature) 8/28/02 (Date) Print Name R. P. INDAP

21. ANII (Signature) 9-1-02 (Date) Print Name R.G. HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 08/06/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2456237 (Work Order Number)

3. Work Performed by Arizona Public Service (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S Wintersburg Rd Tonopah, AZ 85354 (Address) Expiration Date N/A

4. Identification of System RC, ASME Section III Class 1

5. (a) Applicable Construction Code Section III Class 1 19 74 Edition, W'75 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
3rd Stage Retainer	Sulzer	Φ96-574 SN 18	N/A	~~1MRCEP02B~~	1985	Replacement	Yes
				1MRCEP02D DMS 10-29-02			

7. Description of Work Replacement of 3rd stage seal retainer on RCP 2B

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ Exempt ☐ N-416-1 ☐

Other ☐ Pressure ~~2250~~ psi DMS 10-29-02 Test Temp. ~~565~~ °F DMS 10-29-02

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks WO#2456237 to replace mechanical seals in RCP ~~1MRCEP02B~~ as part of normal maintenance.
1MRCEP01D
RMG 10-29-02

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed R P Mulay, Consulting Metallurgical Engineer (Owner or Owner's Designee, Title) Date 10-29-2002

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-4-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB 9685 "ANIC" Az 264
National Board, State, Province, and Endorsements

Date 10-29-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JSGEPSV0555 2. Code Class ASME III, CLASS 2

3. Item Description MAIN STEAM SAFETY VALVE; DRESSER 3707RA-RT25; 1290 PSIG

4. N-5 Package Number 1SG02-6 5. W.O. Number 2456294

6. Original Construction Code Edition ASME III CLASS 2, 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition ASME III CLASS 2, 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Replacement of main steam safety valve, with reconditioned spare, per Engineering direction following on-line pressure testing.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon pressure testing.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 2, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1JSGEPSV0555	N/A	BS-08622	N/A	MR# 689668

19. Planner [signature] (Signature) 6-4-02 (Date) Print Name DAVID GOODLET

20. ISI Engineer [signature] (Signature) 6-4-02 (Date) Print Name RAMAKANT INDAP

21. ANII [signature] (Signature) 6-4-02 (Date) Print Name ROBERT HOGSTROM

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JSGEPSV0556 2. Code Class ASME III, CLASS 2

3. Item Description MAIN STEAM SAFETY VALVE; DRESSER 3707RA-RT25; 1315 PSIG

4. N-5 Package Number 1SG02-6 5. W.O. Number 2456294

6. Original Construction Code Edition ASME III CLASS 2, 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition ASME III CLASS 2, 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Replacement of main steam safety valve, with reconditioned spare, per Engineering direction following on-line pressure testing..

9. ☐ ISI Flaw NDE Method of Flaw Detection

Report Number

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon pressure testing.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 2, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1JSGEPSV0556	N/A	BT-01672	N/A	MR# 689663

19. Planner [signature] (Signature) 6-4-02 (Date) Print Name DAVID GOODLET

20. ISI Engineer [signature] (Signature) 6-4-02 (Date) Print Name RAMAKANT INDAP

21. ANII [signature] (Signature) 6-4-02 (Date) Print Name ROBERT HOGSTROM

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JSGEPSV0560 2. Code Class ASME III, CLASS 2
3. Item Description MAIN STEAM SAFETY VALVE; DRESSER 3707RA-RT25; 1290 PSIG
4. N-5 Package Number 1SG02-6 5. W.O. Number 2456294
6. Original Construction Code Edition ASME III CLASS 2, 1974 EDITION, SUMMER 1975 ADDENDA
7. Original Installation Code Edition ASME III CLASS 2, 1974 EDITION, WINTER 1975 ADDENDA
8. Work Description Replacement of main steam safety valve, with reconditioned spare, per Engineering direction following on-line pressure testing.

9. ☐ ISI Flaw NDE Method of Flaw Detection
Report Number

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon pressure testing.

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 2, 1974 ED., S'75 ADD.
13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.
14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA
15. Preservice Inspection Required. ☐ YES ☑ NO
DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.
16. ASME Section XI Pressure Test Required ☑ YES ☐ NO
DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.
DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1JSGEPSV0560	N/A	BT-01670	N/A	MR# 689669

19. Planner [signature] (Signature) 6-4-02 (Date) Print Name DAVID GOODLET
20. ISI Engineer [signature] (Signature) 6-4-02 (Date) Print Name RAMAKANT INDAP
21. ANII [signature] (Signature) 6-4-02 (Date) Print Name ROBERT HOGSTROM

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JSGEPSV0561 2. Code Class ASME III, CLASS 2
3. Item Description MAIN STEAM SAFETY VALVE; DRESSER 3707RA-RT25; 1250 PSIG
4. N-5 Package Number 1SG02-6 5. W.O. Number 2456294
6. Original Construction Code Edition ASME III CLASS 2, 1974 EDITION, SUMMER 1975 ADDENDA
7. Original Installation Code Edition ASME III CLASS 2, 1974 EDITION, WINTER 1975 ADDENDA
8. Work Description Replacement of main steam safety valve, with reconditioned spare, per Engineering direction following on-line pressure testing.

9. ☐ ISI Flaw NDE Method of Flaw Detection
Report Number

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon pressure testing.

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 2, 1974 ED., S'75 ADD.
13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.
14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA
15. Preservice Inspection Required. ☐ YES ☑ NO
DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.
16. ASME Section XI Pressure Test Required ☑ YES ☐ NO
DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.
DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1JSGEPSV0561	N/A	BS-08618	N/A	MR# 689672

19. Planner [signature] (Signature) 6-4-02 (Date) Print Name DAVID GOODLET
20. ISI Engineer [signature] (Signature) 6-4-02 (Date) Print Name RAMAKANT INDAP
21. ANII [signature] (Signature) 6-4-02 (Date) Print Name ROBERT HOGSTROM

ASME SECTION XI - REPAIR/REPLACEMENT

page 5 of 8

1. Component ID 1JSGEPSV0576 2. Code Class ASME III, CLASS 2

3. Item Description MAIN STEAM SAFETY VALVE; DRESSER 3707RA-RT25; 1315 PSIG

4. N-5 Package Number 1SG01-6 5. W.O. Number 2456294

6. Original Construction Code Edition ASME III CLASS 2, 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition ASME III CLASS 2, 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Replacement of main steam safety valve, with reconditioned spare, per Engineering direction following on-line pressure testing.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150:
No failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon pressure testing.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 2, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1JSGEPSV0576	N/A	BS-08634	N/A	MR# 689654

19. Planner [signature] (Signature) 6-4-02 (Date) Print Name DAVID GOODLET

20. ISI Engineer [signature] (Signature) 6-4-02 (Date) Print Name RAMAKANT INDAP

21. ANII [signature] (Signature) 6-4-02 (Date) Print Name ROBERT HOGSTROM

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JSGEPSV0577 2. Code Class ASME III, CLASS 2

3. Item Description MAIN STEAM SAFETY VALVE; DRESSER 3707RA-RT25; 1315 PSIG

4. N-5 Package Number 1SG01-6 5. W.O. Number 2456294

6. Original Construction Code Edition ASME III CLASS 2, 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition ASME III CLASS 2, 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Replacement of main steam safety valve, with reconditioned spare, per Engineering direction following on-line pressure testing.

9. ☐ ISI Flaw NDE Method of Flaw Detection

Report Number

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon pressure testing.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 2, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1JSGEPSV0577	N/A	BS-08608	N/A	MR# 689657

19. Planner [signature] (Signature) 6-4-02 (Date) Print Name DAVID GOODLET

20. ISI Engineer [signature] (Signature) 6-4-02 (Date) Print Name RAMAKANT INDAP

21. ANII [signature] (Signature) 6-4-02 (Date) Print Name ROBERT HOGSTROM

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JSGEPSV0578 2. Code Class ASME III, CLASS 2

3. Item Description MAIN STEAM SAFETY VALVE; DRESSER 3707RA-RT25; 1290 PSIG

4. N-5 Package Number 1SG01-6 5. W.O. Number 2456294

6. Original Construction Code Edition ASME III CLASS 2, 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition ASME III CLASS 2, 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Replacement of main steam safety valve, with reconditioned spare, per Engineering direction following on-line pressure testing.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon pressure testing.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 2, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1JSGEPSV0578	N/A	BS-08573	N/A	MR# 689666

19. Planner [signature] (Signature) 6-4-02 (Date) Print Name DAVID GOODLET

20. ISI Engineer [signature] (Signature) 6-4-02 (Date) Print Name RAMAKANT INDAP

21. ANII [signature] (Signature) 6-4-02 (Date) Print Name ROBERT HOGSTROM

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JSGEPSV0691 2. Code Class ASME III, CLASS 2
3. Item Description MAIN STEAM SAFETY VALVE; DRESSER 3707RA-RT25; 1315 PSIG
4. N-5 Package Number 1SG01-6 5. W.O. Number 2456294
6. Original Construction Code Edition ASME III CLASS 2, 1974 EDITION, SUMMER 1975 ADDENDA
7. Original Installation Code Edition ASME III CLASS 2, 1974 EDITION, WINTER 1975 ADDENDA
8. Work Description Replacement of main steam safety valve, with reconditioned spare, per Engineering direction following on-line pressure testing.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____
Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon pressure testing.

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 2, 1974 ED., S'75 ADD.
13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.
14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA
15. Preservice Inspection Required. ☐ YES ☑ NO
DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.
16. ASME Section XI Pressure Test Required ☑ YES ☐ NO
DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.
DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1JSGEPSV0691	N/A	BS-08587	N/A	MR # 689665

19. Planner [signature] (Signature) 6-4-02 (Date) Print Name DAVID GOODLET
20. ISI Engineer [signature] (Signature) 6-4-02 (Date) Print Name RAMAKANT INDAP
21. ANII [signature] (Signature) 6-4-02 (Date) Print Name ROBERT HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) — Date 07/10/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) — Sheet 1 of 3

2. Plant Palo Verde Nuclear Generating Station (Name) — Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) — WO# 2456294 (Work Order Number)

3. Work Performed by PVNGS Maintenance Dept. (Name) — Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd., Tonopah, Az. 85354-7529 (Address) — Expiration Date N/A

4. Identification of System SG - Main Steam

5. (a) Applicable Construction Code ASME III Class 2 19 74 Edition, S'75 Addenda, 1711 Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BS-08622	N/A	SGEPSV0555	1981	Replacement	Yes
Safety Valve	Dresser	BT-01672	N/A	SGEPSV0556	1979	Replacement	Yes
Safety Valve	Dresser	BT-01670	N/A	SGEPSV0560	1979	Replacement	Yes
Safety Valve	Dresser	BS-08618	N/A	SGEPSV0561	1981	Replacement	Yes
Safety Valve	Dresser	BS-08634	N/A	SGEPSV0576	1981	Replacement	Yes
Safety Valve	Dresser	BS-08608	N/A	SGEPSV0577	1980	Replacement	Yes
Safety Valve	Dresser	BS-08573	N/A	SGEPSV0578	1978	Replacement	Yes

7. Description of Work Replace main steam safety valves with reconditioned and tested spares.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ Exempt ☐ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) — Date 07/10/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) — Sheet 2 of 3

2. Plant Palo Verde Nuclear Generating Station (Name) — Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) — WO# 2456294 (Work Order Number)

3. Work Performed by PVNGS Maintenance Dept. (Name) — Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd., Tonopah, Az. 85354-7529 (Address) — Expiration Date N/A

4. Identification of System SG - Main Steam

5. (a) Applicable Construction Code ASME III Class 2 19 74 Edition, S'75 Addenda, 1711 Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Safety Valve	Dresser	BS-08587	N/A	SGEPSV0691	1978	Replacement	Yes

7. Description of Work Replace main steam safety valves with reconditioned and tested spares.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ Exempt ☐ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work order # 2456294 for the replacement of main steam safety valves 1JSGEPSV0555, 556, 560, 561, 576, 577, 578 & 691. These 8 valves were selected by maintenance engineering.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed R R Mulap, Consulting Metallurgical Engineer (Owner or Owner's Designee, Title) Date 10-29-2002

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-4-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB 9685 "ANIC" Az. 264
National Board, State, Province, and Endorsements

Date 10-29-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1MRCEE01A 2. Code Class ASME SECTION III, 1

3. Item Description STEAM GENERATOR #1

4. N-5 Package Number 1RC01-4 5. W.O. Number 2458019

6. Original Construction Code Edition 1971 EDITION & 1973 WINTER ADDENDA

7. Original Installation Code Edition 1974 EDITION & 1975 WINTER ADDENDA

8. Work Description INSTALL WESTINGHOUSE ROLL PLUGS IN 1MRCEE01A HOT LEG TUBES ENG-DFWO 2457999 EVALUATION AND DISPOSITION.

9. ☑ ISI Flaw NDE Method of Flaw Detection EDDY CURRENT

Report Number 1R10 EDDY CURRENT EXAM REPORT

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
EVALUATION PER ENG-DFWO 2457999.

11. Repair/Replacement Work Organization WESTINGHOUSE

12. Replacement Item Construction or reconciled Code/Edition 1971 EDITION & 1973 WINTER ADDENDA

13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION & 1975 WINTER ADDENDA

14. ASME Section XI Code/Edition 1992 EDITION & 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

MBN (Initial) 06/24/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

MBN (Initial) 06/24/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

MBN (Initial) 06/24/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

MBN (Initial) 06/24/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
TUBE PLUGS	SEE ATTACHED LIST	SEE ATTACHED LIST	SEE ATTACHED LIST	SEE ATTACHED LIST

19. Planner [signature] (Signature) 06/24/02 (Date) Print Name MICHAEL B. NEWELL

20. ISI Engineer [signature] (Signature) 8/20/02 (Date) Print Name Alan Morrow

21. ANII [signature] (Signature) 8-20-02 (Date) Print Name ROBERT HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 08/20/22

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) W.O.2458019 (Work Order Number)

3. Work Performed by WESTINGHOUSE (Name) Type Code Symbol Stamp None

Authorization No. N/A

911 W MAIN ST CHATTANOOGA TN 37402 (Address) Expiration Date N/A

4. Identification of System REACTOR COOLANT

5. (a) Applicable Construction Code ASME SEC III CL.1 19 71 Edition, W;73 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
S/G	CE	78273-1	22499	1MRCEE01A	1978	Replacement	Yes

7. Description of Work PLUG STEAM GENERATOR 11 HOT LEG TUBES PER DFWO 2457999

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks SEE DFWO 2457999 FOR TUBES PLUGGED (PLUGGING LIST ATTACHED).

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed DBH Sr Consulting Eng R (Owner or Owner's Designee, Title) Date 10-22-02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-20-02 to 10-25-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB 9685 "ANIC" Az. 264
National Board, State, Province, and Endorsements

Date 10-26-02

DFWO 2457999

STEAM GENERATOR 1MRCEE01A
"HOT LEG"

DIWO 2458019

ASME SECTION XI-REPAIR/REPLACEMENT						
COMP. ID	ROW	COLUMN	PART NO.	SERIAL NO.	HEAT NO.	MR NO.
1MRCEE01A	8	1	0307-1601	40010925-2	JG92	691280
1MRCEE01A	6	9	0307-1601	40010925-18	JG92	691280
1MRCEE01A	65	12	0307-1601	40010925-25	JG92	691280
1MRCEE01A	67	12	0307-1601	40010925-29	JG92	691280
1MRCEE01A	28	13	0307-1601	40010925-13	JG92	691280
1MRCEE01A	64	13	0307-1601	40010925-33	JG92	691280
1MRCEE01A	66	13	0307-1601	40010925-24	JG92	691280
1MRCEE01A	65	14	0307-1601	40010925-37	JG92	691280
1MRCEE01A	82	15	0307-1601	40010925-47	JG92	691280
1MRCEE01A	81	16	0307-1601	40010925-45	JG92	691280
1MRCEE01A	83	16	0307-1601	40010925-42	JG92	691280
1MRCEE01A	80	17	0307-1601	40010925-40	JG92	691280
1MRCEE01A	82	17	0307-1601	40010925-43	JG92	691280
1MRCEE01A	84	17	0307-1601	40010925-46	JG92	691280
1MRCEE01A	79	18	0307-1601	40010925-48	JG92	691280
1MRCEE01A	81	18	0307-1601	40010925-32	JG92	691280
1MRCEE01A	83	18	0307-1601	40010925-27	JG92	691280
1MRCEE01A	80	19	0307-1601	40010925-38	JG92	691280
1MRCEE01A	75	20	0307-1601	40010925-14	JG92	691280
1MRCEE01A	66	23	0307-1601	40010925-23	JG92	691280
1MRCEE01A	90	23	0307-1601	40010925-28	JG92	691280
1MRCEE01A	53	24	0307-1601	40010925-6	JG92	691280
1MRCEE01A	82	25	0307-1601	40010925-49	JG92	691280
1MRCEE01A	59	26	0307-1601	40010925-8	JG92	691280
1MRCEE01A	69	26	0307-1601	40010925-17	JG92	691280
1MRCEE01A	81	26	0307-1601	40010925-44	JG92	691280
1MRCEE01A	72	27	0307-1601	40010925-19	JG92	691280
1MRCEE01A	37	28	0307-1601	40010925-39	JG92	691280
1MRCEE01A	65	28	0307-1601	40010925-1	JG92	691280
1MRCEE01A	93	28	0307-1601	40010925-54	JG92	691280
1MRCEE01A	90	29	0307-1601	40010925-26	JG92	691280
1MRCEE01A	58	31	0307-1601	40010925-16	JG92	691280
1MRCEE01A	62	31	0307-1601	40010925-12	JG92	691280
1MRCEE01A	59	32	0307-1601	40010925-3	JG92	691280
1MRCEE01A	76	33	0307-1601	40010925-20	JG92	691280
1MRCEE01A	67	34	0307-1601	40010925-5	JG92	691280
1MRCEE01A	60	37	0307-1601	40010925-11	JG92	691280
1MRCEE01A	67	38	0307-1601	40010925-36	JG92	691280
1MRCEE01A	63	42	0307-1601	40010925-34	JG92	691280
1MRCEE01A	91	42	0307-1601	40010925-56	JG92	691280
1MRCEE01A	66	43	0307-1601	40010925-22	JG92	691280
1MRCEE01A	67	44	0307-1601	40010925-35	JG92	691280
1MRCEE01A	71	44	0307-1601	40010925-31	JG92	691280
1MRCEE01A	129	44	0307-1601	40010925-55	JG92	691280
1MRCEE01A	55	46	0307-1601	40010925-41	JG92	691280
1MRCEE01A	37	48	0307-1601	40011047-107	NX2227HK	691280
1MRCEE01A	83	48	0307-1601	40010925-57	JG92	691280
1MRCEE01A	119	48	0307-1601	40010925-64	JG92	691280
1MRCEE01A	17	50	0307-1601	40011047-100	NX2227HK	691280

DFWO 2457999

STEAM GENERATOR 1MRCEE01A
"HOT LEG"

DIWO 2458019

1MRCEE01A	109	50	0307-1601	40010925-62	JG92	691280
1MRCEE01A	40	53	0307-1601	40011047-102	NX2227HK	691280
1MRCEE01A	54	53	0307-1601	40011047-101	NX2227HK	691280
1MRCEE01A	84	53	0307-1601	40010925-30	JG92	691280
1MRCEE01A	88	53	0307-1601	40010925-59	JG92	691280
1MRCEE01A	90	53	0307-1601	40010925-60	JG92	691280
1MRCEE01A	58	55	0307-1601	40011047-104	NX2227HK	691280
1MRCEE01A	82	55	0307-1601	40010925-58	JG92	691280
1MRCEE01A	90	55	0307-1601	40010925-52	JG92	691280
1MRCEE01A	119	56	0307-1601	40010925-51	JG92	691280
1MRCEE01A	118	57	0307-1601	40010925-169	JG92	691280
1MRCEE01A	111	58	0307-1601	40010925-178	JG92	691280
1MRCEE01A	10	59	0307-1601	40010925-10	JG92	691280
1MRCEE01A	42	59	0307-1601	40011047-144	NX2227HK	691280
1MRCEE01A	67	60	0307-1601	40011047-91	NX2227HK	691280
1MRCEE01A	24	61	0307-1601	40011047-97	NX2227HK	691280
1MRCEE01A	40	61	0307-1601	40011047-200	NX2227HK	691280
1MRCEE01A	35	62	0307-1601	40011047-197	NX2227HK	691280
1MRCEE01A	39	62	0307-1601	40011047-106	NX2227HK	691280
1MRCEE01A	103	62	0307-1601	40010925-66	JG92	691280
1MRCEE01A	111	62	0307-1601	40010925-67	JG92	691280
1MRCEE01A	125	62	0307-1601	40010925-186	JG92	691280
1MRCEE01A	4	63	0307-1601	40010925-7	JG92	691280
1MRCEE01A	98	63	0307-1601	40010925-61	JG92	691280
1MRCEE01A	35	64	0307-1601	40011047-95	NX2227HK	691280
1MRCEE01A	89	64	0307-1601	40010925-72	JG92	691280
1MRCEE01A	40	65	0307-1601	40011047-98	NX2227HK	691280
1MRCEE01A	48	65	0307-1601	40011047-93	NX2227HK	691280
1MRCEE01A	140	65	0307-1601	40010925-177	JG92	691280
1MRCEE01A	37	66	0307-1601	40011047-198	NX2227HK	691280
1MRCEE01A	49	66	0307-1601	40011047-92	NX2227HK	691280
1MRCEE01A	65	66	0307-1601	40011047-105	NX2227HK	691280
1MRCEE01A	68	67	0307-1601	40010925-184	JG92	691280
1MRCEE01A	118	67	0307-1601	40010925-179	JG92	691280
1MRCEE01A	128	67	0307-1601	40010925-69	JG92	691280
1MRCEE01A	35	68	0307-1601	40011047-94	NX2227HK	691280
1MRCEE01A	41	68	0307-1601	40011047-89	NX2227HK	691280
1MRCEE01A	135	68	0307-1601	40010925-63	JG92	691280
1MRCEE01A	137	68	0307-1601	40010925-176	JG92	691280
1MRCEE01A	56	69	0307-1601	40010925-182	JG92	691280
1MRCEE01A	108	69	0307-1601	40010925-68	JG92	691280
1MRCEE01A	49	70	0307-1601	40010925-192	JG92	691280
1MRCEE01A	63	70	0307-1601	40010925-170	JG92	691280
1MRCEE01A	113	70	0307-1601	40010925-65	JG92	691280
1MRCEE01A	82	71	0307-1601	40010925-71	JG92	691280
1MRCEE01A	35	72	0307-1601	40011047-103	NX2227HK	691280
1MRCEE01A	51	72	0307-1601	40011047-96	NX2227HK	691280
1MRCEE01A	81	72	0307-1601	40010925-70	JG92	691280
1MRCEE01A	52	73	0307-1601	40011047-199	NX2227HK	691280
1MRCEE01A	128	73	0307-1601	40010925-189	JG92	691280
1MRCEE01A	105	74	0307-1601	40010925-50	JG92	691280

STEAM GENERATOR 1MRCEE01A
"HOT LEG"

1MRCEE01A	125	74	0307-1601	40010925-172	JG92	691280
1MRCEE01A	153	74	0307-1601	40010925-197	JG92	691280
1MRCEE01A	46	75	0307-1601	40011047-90	NX2227HK	691280
1MRCEE01A	52	75	0307-1601	40011047-196	NX2227HK	691280
1MRCEE01A	74	75	0307-1601	40011047-109	NX2227HK	691280
1MRCEE01A	96	75	0307-1601	40010925-53	JG92	691280
1MRCEE01A	146	75	0307-1601	40010925-175	JG92	691280
1MRCEE01A	51	76	0307-1601	40010925-82	JG92	691280
1MRCEE01A	59	76	0307-1601	40010925-93	JG92	691280
1MRCEE01A	61	76	0307-1601	40010925-79	JG92	691280
1MRCEE01A	38	77	0307-1601	40010925-86	JG92	691280
1MRCEE01A	58	77	0307-1601	40010925-90	JG92	691280
1MRCEE01A	68	77	0307-1601	40010925-89	JG92	691280
1MRCEE01A	132	77	0307-1601	40011047-145	NX2227HK	691280
1MRCEE01A	39	78	0307-1601	40010925-81	JG92	691280
1MRCEE01A	61	78	0307-1601	40010925-80	JG92	691280
1MRCEE01A	63	78	0307-1601	40010925-94	JG92	691280
1MRCEE01A	117	78	0307-1601	40010925-173	JG92	691280
1MRCEE01A	36	79	0307-1601	40010925-15	JG92	691280
1MRCEE01A	78	79	0307-1601	40010925-74	JG92	691280
1MRCEE01A	130	79	0307-1601	40010925-188	JG92	691280
1MRCEE01A	39	80	0307-1601	40010925-9	JG92	691280
1MRCEE01A	65	80	0307-1601	40010925-95	JG92	691280
1MRCEE01A	117	80	0307-1601	40010925-171	JG92	691280
1MRCEE01A	133	80	0307-1601	40010925-185	JG92	691280
1MRCEE01A	56	81	0307-1601	40010925-91	JG92	691280
1MRCEE01A	62	81	0307-1601	40010925-96	JG92	691280
1MRCEE01A	122	81	0307-1601	40010925-174	JG92	691280
1MRCEE01A	154	81	0307-1601	40010925-200	JG92	691280
1MRCEE01A	59	82	0307-1601	40010925-121	JG92	691280
1MRCEE01A	63	82	0307-1601	40010925-122	JG92	691280
1MRCEE01A	40	83	0307-1601	40010925-4	JG92	691280
1MRCEE01A	60	83	0307-1601	40010925-123	JG92	691280
1MRCEE01A	112	83	0307-1601	40010925-181	JG92	691280
1MRCEE01A	128	83	0307-1601	40010925-168	JG92	691280
1MRCEE01A	136	83	0307-1601	40010925-187	JG92	691280
1MRCEE01A	150	83	0307-1601	40010925-194	JG92	691280
1MRCEE01A	63	84	0307-1601	40010925-124	JG92	691280
1MRCEE01A	67	84	0307-1601	40010925-125	JG92	691280
1MRCEE01A	97	84	0307-1601	40010925-144	JG92	691280
1MRCEE01A	135	84	0307-1601	40010925-190	JG92	691280
1MRCEE01A	34	85	0307-1601	40010925-191	JG92	691280
1MRCEE01A	36	85	0307-1601	40010925-77	JG92	691280
1MRCEE01A	62	85	0307-1601	40010925-126	JG92	691280
1MRCEE01A	68	85	0307-1601	40010925-84	JG92	691280
1MRCEE01A	118	85	0307-1601	40011056-58	NX2227HK	691280
1MRCEE01A	140	85	0307-1601	40011056-59	NX2227HK	691280
1MRCEE01A	148	85	0307-1601	40010925-195	JG92	691280
1MRCEE01A	35	86	0307-1601	40010925-180	JG92	691280
1MRCEE01A	37	86	0307-1601	40010925-87	JG92	691280
1MRCEE01A	47	86	0307-1601	40010925-75	JG92	691280

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STEAM GENERATOR 1MRCEE01A
"HOT LEG"

DIWO 2458019

1MRCEE01A	59	86	0307-1601	40010925-127	JG92	691280
1MRCEE01A	61	86	0307-1601	40010925-128	JG92	691280
1MRCEE01A	65	86	0307-1601	40010925-129	JG92	691280
1MRCEE01A	107	86	0307-1601	40010925-145	JG92	691280
1MRCEE01A	139	86	0307-1601	40010925-157	JG92	691280
1MRCEE01A	44	87	0307-1601	40010925-92	JG92	691280
1MRCEE01A	62	87	0307-1601	40010925-130	JG92	691280
1MRCEE01A	64	87	0307-1601	40010925-131	JG92	691280
1MRCEE01A	150	87	0307-1601	40010925-198	JG92	691280
1MRCEE01A	44	89	0307-1601	40010925-73	JG92	691280
1MRCEE01A	56	89	0307-1601	40010925-132	JG92	691280
1MRCEE01A	118	89	0307-1601	40010925-156	JG92	691280
1MRCEE01A	142	89	0307-1601	40010925-167	JG92	691280
1MRCEE01A	43	90	0307-1601	40010925-78	JG92	691280
1MRCEE01A	54	91	0307-1601	40010925-83	JG92	691280
1MRCEE01A	56	91	0307-1601	40010925-133	JG92	691280
1MRCEE01A	53	92	0307-1601	40010925-21	JG92	691280
1MRCEE01A	59	92	0307-1601	40010925-134	JG92	691280
1MRCEE01A	133	92	0307-1601	40010925-155	JG92	691280
1MRCEE01A	141	92	0307-1601	40010925-166	JG92	691280
1MRCEE01A	104	93	0307-1601	40010925-147	JG92	691280
1MRCEE01A	59	94	0307-1601	40010925-135	JG92	691280
1MRCEE01A	52	95	0307-1601	40010925-88	JG92	691280
1MRCEE01A	66	97	0307-1601	40011047-147	NX2227HK	691280
1MRCEE01A	68	97	0307-1601	40010925-137	JG92	691280
1MRCEE01A	125	98	0307-1601	40010925-154	JG92	691280
1MRCEE01A	145	98	0307-1601	40010925-153	JG92	691280
1MRCEE01A	91	100	0307-1601	40010925-146	JG92	691280
1MRCEE01A	66	101	0307-1601	40010925-138	JG92	691280
1MRCEE01A	65	102	0307-1601	40010925-139	JG92	691280
1MRCEE01A	137	102	0307-1601	40010925-152	JG92	691280
1MRCEE01A	144	103	0307-1601	40010925-165	JG92	691280
1MRCEE01A	67	104	0307-1601	40010925-140	JG92	691280
1MRCEE01A	119	104	0307-1601	40010925-164	JG92	691280
1MRCEE01A	124	105	0307-1601	40010925-163	JG92	691280
1MRCEE01A	63	106	0307-1601	40010925-141	JG92	691280
1MRCEE01A	137	106	0307-1601	40010925-162	JG92	691280
1MRCEE01A	112	107	0307-1601	40010925-151	JG92	691280
1MRCEE01A	132	107	0307-1601	40010925-150	JG92	691280
1MRCEE01A	41	108	0307-1601	40010925-76	JG92	691280
1MRCEE01A	49	108	0307-1601	40010925-85	JG92	691280
1MRCEE01A	121	108	0307-1601	40010925-161	JG92	691280
1MRCEE01A	129	108	0307-1601	40010925-160	JG92	691280
1MRCEE01A	149	108	0307-1601	40010925-149	JG92	691280
1MRCEE01A	147	110	0307-1601	40010925-148	JG92	691280
1MRCEE01A	64	111	0307-1601	40010925-142	JG92	691280
1MRCEE01A	132	113	0307-1601	40010925-159	JG92	691280
1MRCEE01A	140	113	0307-1601	40010925-158	JG92	691280
1MRCEE01A	71	114	0307-1601	40010925-143	JG92	691280
1MRCEE01A	148	115	0307-1601	40011056-53	NX2227HK	691280
1MRCEE01A	125	116	0307-1601	40011056-57	NX2227HK	691280

DFWO 2457999

STEAM GENERATOR 1MRCEE01A
"HOT LEG"

DIWO 2458019

1MRCEE01A	122	117	0307-1601	40011047-110	NX2227HK	691280
1MRCEE01A	28	121	0307-1601	40011047-126	NX2227HK	691280
1MRCEE01A	140	121	0307-1601	40011056-52	NX2227HK	691280
1MRCEE01A	135	122	0307-1601	40010925-193	JG92	691280
1MRCEE01A	130	123	0307-1601	40011047-122	NX2227HK	691280
1MRCEE01A	103	124	0307-1601	40011047-133	NX2227HK	691280
1MRCEE01A	118	127	0307-1601	40011047-114	NX2227HK	691280
1MRCEE01A	29	128	0307-1601	40011047-137	NX2227HK	691280
1MRCEE01A	115	132	0307-1601	40011047-113	NX2227HK	691280
1MRCEE01A	94	133	0307-1601	40010925-199	JG92	691280
1MRCEE01A	125	134	0307-1601	40011056-56	NX2227HK	691280
1MRCEE01A	4	135	0307-1601	40011047-140	NX2227HK	691280
1MRCEE01A	13	136	0307-1601	40011047-116	NX2227HK	691280
1MRCEE01A	52	137	0307-1601	40011047-115	NX2227HK	691280
1MRCEE01A	17	138	0307-1601	40011047-139	NX2227HK	691280
1MRCEE01A	109	138	0307-1601	40011047-125	NX2227HK	691280
1MRCEE01A	14	139	0307-1601	40011047-111	NX2227HK	691280
1MRCEE01A	66	139	0307-1601	40011047-135	NX2227HK	691280
1MRCEE01A	17	140	0307-1601	40011047-138	NX2227HK	691280
1MRCEE01A	137	140	0307-1601	40011056-55	NX2227HK	691280
1MRCEE01A	16	141	0307-1601	40011047-118	NX2227HK	691280
1MRCEE01A	78	141	0307-1601	40011056-51	NX2227HK	691280
1MRCEE01A	128	145	0307-1601	40011056-54	NX2227HK	691280
1MRCEE01A	122	149	0307-1601	40011047-108	NX2227HK	691280
1MRCEE01A	121	156	0307-1601	40010925-196	JG92	691280
1MRCEE01A	63	160	0307-1601	40011047-124	NX2227HK	691280
1MRCEE01A	32	171	0307-1601	40011047-117	NX2227HK	691280
1MRCEE01A	1	172	0307-1601	40011047-121	NX2227HK	691280
1MRCEE01A	46	173	0307-1601	40011047-132	NX2227HK	691280
1MRCEE01A	50	173	0307-1601	40011047-119	NX2227HK	691280
1MRCEE01A	46	175	0307-1601	40011047-136	NX2227HK	691280
1MRCEE01A	46	177	0307-1601	40011047-123	NX2227HK	691280
1MRCEE01A	42	179	0307-1601	40011047-134	NX2227HK	691280
1MRCEE01A	30	185	0307-1601	40011047-112	NX2227HK	691280

ASME SECTION XI - REPAIR/REPLACEMENT

Page ___ of ___

1. Component ID 1MRCEE01A 2. Code Class ASME SECTION III, CLASS 1

3. Item Description STEAM GENERATOR #1

4. N-5 Package Number 1RC01-4 8-20-02 8-20-02 5. W.O. Number 2458020

6. Original Construction Code Edition 1971 EDITION & 1973 WINTER ADDENDA

7. Original Installation Code Edition 1974 EDITION & 1975 WINTER ADDENDA

8. Work Description INSTALL WESTINGHOUSE ROLL PLUGS IN 1MRCEE01A COLD LEG TUBES
ENG-DFWO 2458001 EVALUATION AND DISPOSITION

9. ☑ ISI Flaw NDE Method of Flaw Detection EDDY CURRENT
Report Number 1R10 EDDY CURRENT EXAM REPORT

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
EVALUATION PER ENG-DFWO 2458001.

11. Repair/Replacement Work Organization WESTINGHOUSE

12. Replacement Item Construction or reconciled Code/Edition 1971 EDITION & 1973 WINTER ADDENDA

13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION & 1975 WINTER ADDENDA

14. ASME Section XI Code/Edition 1992 EDITION & 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

Initial 08/19/02 Date If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

Initial 08/19/02 Date If required, include a step in the W.O. for ISI & ANII Inspection.

Initial 08/19/02 Date 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial 08/19/02 Date 18. Include a step in the W.O. to record below all applicable numbers for replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
TUBE PLUGS	SEE ATTACH LIST	SEE ATTACH LIST	SEE ATTACH LIST	SEE ATTACH LIST

19. Planner Signature 08/19/02 Date Print Name MICHAEL B. NEWELL

20. ISI Engineer Alan Morrow Signature 8/20/02 Date Print Name Alan Morrow

21. ANII Signature 8-20-02 Date Print Name ROBERT HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) — Date 08/20/22

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) — Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) — Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) — W.O.2458020 (Work Order Number)

3. Work Performed by WESTINGHOUSE (Name) — Type Code Symbol Stamp None

Authorization No. N/A

911 W MAIN ST CHATTANOOGA TN 37402 (Address) — Expiration Date N/A

4. Identification of System REACTOR COOLANT

5. (a) Applicable Construction Code ASME SEC III CL.1 19 71 Edition, W;73 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
S/G	CE	78273-1	22499	1MRCEE01A	1978	Replacement	Yes

7. Description of Work PLUG STEAM GENERATOR 11 COLD LEG TUBES PER DFWO 2458001.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks SEE DFWO 2458001 FOR TUBES PLUGGED (PLUGGING LIST ATTACHED).

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [illegible] SR CONSULTING ENGR (Owner or Owner's Designee, Title) Date 10-21-02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-20-02 to 10-25-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] (Inspector's Signature) Commissions NB 9685 "ANIC" Az 264 (National Board, State, Province, and Endorsements)

Date 10-25-02

DFWO 2458001

STEAM GENERATOR 1MRCEE01A
"COLD LEG"

DIWO 2458020

ASME SECTION XI-REPAIR/REPLACEMENT						
COMP. ID	ROW	COLUMN	PART NO.	SERIAL NO.	HEAT NO.	MR NO.
1MRCEE01A	8	1	0307-1601	40010592-35	HB39	683821
1MRCEE01A	6	9	0307-1601	40010592-33	HB39	683821
1MRCEE01A	65	12	0307-1601	40010592-40	HB39	683821
1MRCEE01A	67	12	0307-1601	40010592-39	HB39	683821
1MRCEE01A	28	13	0307-1601	40010592-13	HB39	683821
1MRCEE01A	64	13	0307-1601	40010592-37	HB39	683821
1MRCEE01A	66	13	0307-1601	40010592-49	HB39	683821
1MRCEE01A	65	14	0307-1601	40010592-36	HB39	683821
1MRCEE01A	82	15	0307-1601	40010592-53	HB39	683821
1MRCEE01A	81	16	0307-1601	40010592-41	HB39	683821
1MRCEE01A	83	16	0307-1601	40010592-42	HB39	683821
1MRCEE01A	80	17	0307-1601	40010592-45	HB39	683821
1MRCEE01A	82	17	0307-1601	40010592-48	HB39	683821
1MRCEE01A	84	17	0307-1601	40010592-43	HB39	683821
1MRCEE01A	79	18	0307-1601	40010592-38	HB39	683821
1MRCEE01A	81	18	0307-1601	40010592-44	HB39	683821
1MRCEE01A	83	18	0307-1601	40010592-46	HB39	683821
1MRCEE01A	80	19	0307-1601	40010592-54	HB39	683821
1MRCEE01A	75	20	0307-1601	40010592-26	HB39	683821
1MRCEE01A	66	23	0307-1601	40010592-50	HB39	683821
1MRCEE01A	90	23	0307-1601	40010592-47	HB39	683821
1MRCEE01A	53	24	0307-1601	40010592-1	HB39	683821
1MRCEE01A	82	25	0307-1601	40010592-25	HB39	683821
1MRCEE01A	59	26	0307-1601	40010592-52	HB39	683821
1MRCEE01A	69	26	0307-1601	40010592-51	HB39	683821
1MRCEE01A	81	26	0307-1601	40010592-12	HB39	683821
1MRCEE01A	72	27	0307-1601	40010592-14	HB39	683821
1MRCEE01A	37	28	0307-1601	40010592-3	HB39	683821
1MRCEE01A	65	28	0307-1601	40010592-34	HB39	683821
1MRCEE01A	93	28	0307-1601	40010592-23	HB39	683821
1MRCEE01A	90	29	0307-1601	40010592-24	HB39	683821
1MRCEE01A	58	31	0307-1601	40010592-31	HB39	683821
1MRCEE01A	62	31	0307-1601	40010592-15	HB39	683821
1MRCEE01A	59	32	0307-1601	40010592-32	HB39	683821
1MRCEE01A	76	33	0307-1601	40010592-27	HB39	683821
1MRCEE01A	67	34	0307-1601	40010592-16	HB39	683821
1MRCEE01A	60	37	0307-1601	40010592-5	HB39	683821
1MRCEE01A	67	38	0307-1601	40010592-6	HB39	683821
1MRCEE01A	63	42	0307-1601	40010592-17	HB39	683821
1MRCEE01A	91	42	0307-1601	40010592-30	HB39	683821
1MRCEE01A	66	43	0307-1601	40010592-28	HB39	683821
1MRCEE01A	67	44	0307-1601	40010592-10	HB39	683821
1MRCEE01A	71	44	0307-1601	40010592-11	HB39	683821
1MRCEE01A	129	44	0307-1601	40010592-29	HB39	683821
1MRCEE01A	55	46	0307-1601	40010592-2	HB39	683821
1MRCEE01A	37	48	0307-1601	40010592-63	HB39	683821
1MRCEE01A	83	48	0307-1601	40010592-93	HB39	683821
1MRCEE01A	119	48	0307-1601	40010592-78	HB39	683821
1MRCEE01A	17	50	0307-1601	40010592-61	HB39	683821

STEAM GENERATOR 1MRCEE01A
"COLD LEG"

1MRCEE01A	109	50	0307-1601	40010592-85	HB39	683821
1MRCEE01A	40	53	0307-1601	40010592-71	HB39	683821
1MRCEE01A	54	53	0307-1601	40010592-72	HB39	683821
1MRCEE01A	84	53	0307-1601	40010592-22	HB39	683821
1MRCEE01A	88	53	0307-1601	40010592-95	HB39	683821
1MRCEE01A	90	53	0307-1601	40010592-99	HB39	683821
1MRCEE01A	58	55	0307-1601	40010592-73	HB39	683821
1MRCEE01A	82	55	0307-1601	40010592-102	HB39	683821
1MRCEE01A	90	55	0307-1601	40010592-98	HB39	683821
1MRCEE01A	119	56	0307-1601	40010592-86	HB39	683821
1MRCEE01A	118	57	0307-1601	40010592-90	HB39	683821
1MRCEE01A	111	58	0307-1601	40010592-94	HB39	683821
1MRCEE01A	10	59	0307-1601	40010592-4	HB39	683821
1MRCEE01A	42	59	0307-1601	40010592-74	HB39	683821
1MRCEE01A	67	60	0307-1601	40010592-76	HB39	683821
1MRCEE01A	24	61	0307-1601	40010592-75	HB39	683821
1MRCEE01A	40	61	0307-1601	40010592-62	HB39	683821
1MRCEE01A	35	62	0307-1601	40010592-64	HB39	683821
1MRCEE01A	39	62	0307-1601	40010592-77	HB39	683821
1MRCEE01A	103	62	0307-1601	40010592-82	HB39	683821
1MRCEE01A	111	62	0307-1601	40010592-55	HB39	683821
1MRCEE01A	125	62	0307-1601	40010592-87	HB39	683821
1MRCEE01A	4	63	0307-1601	40010592-8	HB39	683821
1MRCEE01A	98	63	0307-1601	40010592-100	HB39	683821
1MRCEE01A	35	64	0307-1601	40010592-65	HB39	683821
1MRCEE01A	89	64	0307-1601	40010592-84	HB39	683821
1MRCEE01A	40	65	0307-1601	40010592-66	HB39	683821
1MRCEE01A	48	65	0307-1601	40010592-67	HB39	683821
1MRCEE01A	140	65	0307-1601	40010592-88	HB39	683821
1MRCEE01A	37	66	0307-1601	40010592-68	HB39	683821
1MRCEE01A	49	66	0307-1601	40010592-60	HB39	683821
1MRCEE01A	65	66	0307-1601	40010592-59	HB39	683821
1MRCEE01A	68	67	0307-1601	40010592-58	HB39	683821
1MRCEE01A	118	67	0307-1601	40010592-91	HB39	683821
1MRCEE01A	128	67	0307-1601	40010592-81	HB39	683821
1MRCEE01A	35	68	0307-1601	40010592-69	HB39	683821
1MRCEE01A	41	68	0307-1601	40010592-57	HB39	683821
1MRCEE01A	135	68	0307-1601	40010592-96	HB39	683821
1MRCEE01A	137	68	0307-1601	40010592-92	HB39	683821
1MRCEE01A	56	69	0307-1601	40010592-70	HB39	683821
1MRCEE01A	108	69	0307-1601	40010592-101	HB39	683821
1MRCEE01A	49	70	0307-1601	40010592-56	HB39	683821
1MRCEE01A	63	70	0307-1601	40010592-126	HB39	683821
1MRCEE01A	113	70	0307-1601	40010592-80	HB39	683821
1MRCEE01A	82	71	0307-1601	40010592-109	HB39	683821
1MRCEE01A	35	72	0307-1601	40010592-194	HB39	683821
1MRCEE01A	51	72	0307-1601	40010592-125	HB39	683821
1MRCEE01A	81	72	0307-1601	40010592-106	HB39	683821
1MRCEE01A	52	73	0307-1601	40010592-114	HB39	683821
1MRCEE01A	128	73	0307-1601	40010592-79	HB39	683821
1MRCEE01A	105	74	0307-1601	40010592-105	HB39	683821

STEAM GENERATOR 1MRCEE01A
"COLD LEG"

1MRCEE01A	125	74	0307-1601	40010592-83	HB39	683821
1MRCEE01A	153	74	0307-1601	40010592-97	HB39	683821
1MRCEE01A	46	75	0307-1601	40010592-103	HB39	683821
1MRCEE01A	52	75	0307-1601	40010592-123	HB39	683821
1MRCEE01A	74	75	0307-1601	40010592-120	HB39	683821
1MRCEE01A	96	75	0307-1601	40010592-107	HB39	683821
1MRCEE01A	146	75	0307-1601	40010592-89	HB39	683821
1MRCEE01A	51	76	0307-1601	40010592-108	HB39	683821
1MRCEE01A	59	76	0307-1601	40010592-131	HB39	683821
1MRCEE01A	61	76	0307-1601	40010592-136	HB39	683821
1MRCEE01A	38	77	0307-1601	40010592-197	HB39	683821
1MRCEE01A	58	77	0307-1601	40010592-137	HB39	683821
1MRCEE01A	68	77	0307-1601	40010592-138	HB39	683821
1MRCEE01A	132	77	0307-1601	40010592-170	HB39	683821
1MRCEE01A	39	78	0307-1601	40010592-195	HB39	683821
1MRCEE01A	61	78	0307-1601	40010592-149	HB39	683821
1MRCEE01A	63	78	0307-1601	40010592-139	HB39	683821
1MRCEE01A	117	78	0307-1601	40010592-166	HB39	683821
1MRCEE01A	36	79	0307-1601	40010592-104	HB39	683821
1MRCEE01A	78	79	0307-1601	40010592-134	HB39	683821
1MRCEE01A	130	79	0307-1601	40010592-164	HB39	683821
1MRCEE01A	39	80	0307-1601	40010592-117	HB39	683821
1MRCEE01A	65	80	0307-1601	40010592-151	HB39	683821
1MRCEE01A	117	80	0307-1601	40010592-163	HB39	683821
1MRCEE01A	133	80	0307-1601	40010592-176	HB39	683821
1MRCEE01A	56	81	0307-1601	40010592-142	HB39	683821
1MRCEE01A	62	81	0307-1601	40010592-147	HB39	683821
1MRCEE01A	122	81	0307-1601	40011056-9	NX2227HK	691280
1MRCEE01A	154	81	0307-1601	40011056-10	NX2227HK	691280
1MRCEE01A	59	82	0307-1601	40010592-148	HB39	683821
1MRCEE01A	63	82	0307-1601	40010592-146	HB39	683821
1MRCEE01A	40	83	0307-1601	40011056-36	NX2227HK	691280
1MRCEE01A	60	83	0307-1601	40010592-145	HB39	683821
1MRCEE01A	112	83	0307-1601	40011056-11	NX2227HK	691280
1MRCEE01A	128	83	0307-1601	40010592-162	HB39	683821
1MRCEE01A	136	83	0307-1601	40011056-5	NX2227HK	691280
1MRCEE01A	150	83	0307-1601	40011056-7	NX2227HK	691280
1MRCEE01A	63	84	0307-1601	40010592-130	HB39	683821
1MRCEE01A	67	84	0307-1601	40010592-141	HB39	683821
1MRCEE01A	97	84	0307-1601	40010592-168	HB39	683821
1MRCEE01A	135	84	0307-1601	40011056-24	NX2227HK	691280
1MRCEE01A	34	85	0307-1601	40010592-124	HB39	683821
1MRCEE01A	36	85	0307-1601	40010592-115	HB39	683821
1MRCEE01A	62	85	0307-1601	40010592-150	HB39	683821
1MRCEE01A	68	85	0307-1601	40010592-133	HB39	683821
1MRCEE01A	118	85	0307-1601	40011056-28	NX2227HK	691280
1MRCEE01A	140	85	0307-1601	40011056-16	NX2227HK	691280
1MRCEE01A	148	85	0307-1601	40011056-13	NX2227HK	691280
1MRCEE01A	35	86	0307-1601	40010592-113	HB39	683821
1MRCEE01A	37	86	0307-1601	40010592-110	HB39	683821
1MRCEE01A	47	86	0307-1601	40010592-118	HB39	683821

1MRCEE01A	59	86	0307-1601	40010592-127	HB39	683821
1MRCEE01A	61	86	0307-1601	40010592-143	HB39	683821
1MRCEE01A	65	86	0307-1601	40010592-128	HB39	683821
1MRCEE01A	107	86	0307-1601	40010592-153	HB39	683821
1MRCEE01A	139	86	0307-1601	40011056-25	NX2227HK	691280
1MRCEE01A	44	87	0307-1601	40010592-119	HB39	683821
1MRCEE01A	62	87	0307-1601	40010592-144	HB39	683821
1MRCEE01A	64	87	0307-1601	40010592-129	HB39	683821
1MRCEE01A	150	87	0307-1601	40011056-14	NX2227HK	691280
1MRCEE01A	44	89	0307-1601	40010592-132	HB39	683821
1MRCEE01A	56	89	0307-1601	40010592-173	HB39	683821
1MRCEE01A	118	89	0307-1601	40011056-6	NX2227HK	691280
1MRCEE01A	142	89	0307-1601	40010592-165	HB39	683821
1MRCEE01A	43	90	0307-1601	40010592-112	HB39	683821
1MRCEE01A	54	91	0307-1601	40010592-122	HB39	683821
1MRCEE01A	56	91	0307-1601	40010592-171	HB39	683821
1MRCEE01A	53	92	0307-1601	40010592-111	HB39	683821
1MRCEE01A	59	92	0307-1601	40010592-172	HB39	683821
1MRCEE01A	133	92	0307-1601	40011056-4	NX2227HK	691280
1MRCEE01A	141	92	0307-1601	40010592-178	HB39	683821
1MRCEE01A	104	93	0307-1601	40010592-156	HB39	683821
1MRCEE01A	59	94	0307-1601	40010592-152	HB39	683821
1MRCEE01A	52	95	0307-1601	40010592-116	HB39	683821
1MRCEE01A	66	97	0307-1601	40010592-169	HB39	683821
1MRCEE01A	68	97	0307-1601	40010592-174	HB39	683821
1MRCEE01A	125	98	0307-1601	40011056-12	NX2227HK	691280
1MRCEE01A	145	98	0307-1601	40011056-29	NX2227HK	691280
1MRCEE01A	91	100	0307-1601	40010592-161	HB39	683821
1MRCEE01A	66	101	0307-1601	40010592-159	HB39	683821
1MRCEE01A	65	102	0307-1601	40010592-154	HB39	683821
1MRCEE01A	137	102	0307-1601	40011056-30	NX2227HK	691280
1MRCEE01A	144	103	0307-1601	40010592-199	HB39	683821
1MRCEE01A	67	104	0307-1601	40010592-158	HB39	683821
1MRCEE01A	119	104	0307-1601	40010592-198	HB39	683821
1MRCEE01A	124	105	0307-1601	40010592-179	HB39	683821
1MRCEE01A	63	106	0307-1601	40010592-160	HB39	683821
1MRCEE01A	137	106	0307-1601	40010592-177	HB39	683821
1MRCEE01A	112	107	0307-1601	40011056-15	NX2227HK	691280
1MRCEE01A	132	107	0307-1601	40011056-1	NX2227HK	691280
1MRCEE01A	41	108	0307-1601	40010592-121	HB39	683821
1MRCEE01A	49	108	0307-1601	40010592-140	HB39	683821
1MRCEE01A	121	108	0307-1601	40010592-196	HB39	683821
1MRCEE01A	129	108	0307-1601	40010592-192	HB39	683821
1MRCEE01A	149	108	0307-1601	40011056-17	NX2227HK	691280
1MRCEE01A	147	110	0307-1601	40011056-8	NX2227HK	691280
1MRCEE01A	64	111	0307-1601	40010592-155	HB39	683821
1MRCEE01A	132	113	0307-1601	40010592-191	HB39	683821
1MRCEE01A	140	113	0307-1601	40010592-193	HB39	683821
1MRCEE01A	71	114	0307-1601	40010592-157	HB39	683821
1MRCEE01A	148	115	0307-1601	40010592-180	HB39	683821
1MRCEE01A	125	116	0307-1601	40010592-181	HB39	683821

DFWO 2458001

STEAM GENERATOR 1MRCEE01A
"COLD LEG"

DIWO 2458020

1MRCEE01A	122	117	0307-1601	40010592-182	HB39	683821
1MRCEE01A	28	121	0307-1601	40010592-175	HB39	683821
1MRCEE01A	140	121	0307-1601	40010592-189	HB39	683821
1MRCEE01A	135	122	0307-1601	40010592-183	HB39	683821
1MRCEE01A	130	123	0307-1601	40010592-184	HB39	683821
1MRCEE01A	103	124	0307-1601	40010592-187	HB39	683821
1MRCEE01A	118	127	0307-1601	40010592-188	HB39	683821
1MRCEE01A	29	128	0307-1601	40010592-167	HB39	683821
1MRCEE01A	115	132	0307-1601	40010592-200	HB39	683821
1MRCEE01A	94	133	0307-1601	40011056-46	NX2227HK	691280
1MRCEE01A	125	134	0307-1601	40010592-185	HB39	683821
1MRCEE01A	4	135	0307-1601	40011056-31	NX2227HK	691280
1MRCEE01A	13	136	0307-1601	40011056-40	NX2227HK	691280
1MRCEE01A	52	137	0307-1601	40010592-190	HB39	683821
1MRCEE01A	17	138	0307-1601	40011056-38	NX2227HK	691280
1MRCEE01A	109	138	0307-1601	40010592-186	HB39	683821
1MRCEE01A	14	139	0307-1601	40011056-41	NX2227HK	691280
1MRCEE01A	66	139	0307-1601	40011056-2	NX2227HK	691280
1MRCEE01A	17	140	0307-1601	40011056-27	NX2227HK	691280
1MRCEE01A	137	140	0307-1601	40011056-49	NX2227HK	691280
1MRCEE01A	16	141	0307-1601	40011056-43	NX2227HK	691280
1MRCEE01A	78	141	0307-1601	40011056-3	NX2227HK	691280
1MRCEE01A	128	145	0307-1601	40011056-44	NX2227HK	691280
1MRCEE01A	122	149	0307-1601	40011056-37	NX2227HK	691280
1MRCEE01A	121	156	0307-1601	40011056-50	NX2227HK	691280
1MRCEE01A	63	160	0307-1601	40011056-42	NX2227HK	691280
1MRCEE01A	32	171	0307-1601	40011056-45	NX2227HK	691280
1MRCEE01A	1	172	0307-1601	40011056-35	NX2227HK	691280
1MRCEE01A	46	173	0307-1601	40011056-47	NX2227HK	691280
1MRCEE01A	50	173	0307-1601	40011056-34	NX2227HK	691280
1MRCEE01A	46	175	0307-1601	40011056-32	NX2227HK	691280
1MRCEE01A	46	177	0307-1601	40011056-48	NX2227HK	691280
1MRCEE01A	42	179	0307-1601	40011056-39	NX2227HK	691280
1MRCEE01A	30	185	0307-1601	40011056-33	NX2227HK	691280

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1MRCEE01A/B 8-20-2002 8-20-02 2. Code Class ASME SECTION III, CLASS 1

3. Item Description STEAM GENERATOR #2

4. N-5 Package Number 1RC01-4 5. W.O. Number 2458021

6. Original Construction Code Edition 1971 EDITION & 1973 WINTER ADDENDA

7. Original Installation Code Edition 1974 EDITION & 1975 WINTER ADDENDA

8. Work Description INSTALL WESTINGHOUSE ROLL PLUGS IN 1MRCEE01B HOT LEG TUBES ENG-DFWO 2458003 EVALUATION AND DISPOSITION.

9. ☑ ISI Flaw NDE Method of Flaw Detection EDDY CURRENT

Report Number 1R10 EDDY CURRENT EXAM REPORT

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
EVALUATION PER ENG-DFWO 2458003.

11. Repair/Replacement Work Organization WESTINGHOUSE

12. Replacement Item Construction or reconciled Code/Edition 1971 EDITION & 1973 WINTER ADDENDA

13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION & 1975 WINTER ADDENDA

14. ASME Section XI Code/Edition 1992 EDITION & 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

Initial 06/24/02 Date If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

Initial 06/24/02 Date If required, include a step in the W.O. for ISI & ANII Inspection.

Initial 06/24/02 Date 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial 06/24/02 Date 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
TUBE PLUGS	SEE ATTACHED LIST	SEE ATTACHED LIST	SEE ATTACHED LIST	SEE ATTACHED LIST

19. Planner Michael B. Newell (Signature) 06/24/02 (Date) Print Name MICHAEL B. NEWELL

20. ISI Engineer Alan Morrow (Signature) 8/20/02 (Date) Print Name Alan Morrow

21. ANII Robert B. Hogstrom (Signature) 8-20-02 (Date) Print Name ROBERT HOGSTROM

PV-E0093 Ver. 6 73OP-9ZZ17

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 08/20/22

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) W.O.2458021 (Work Order Number)

3. Work Performed by WESTINGHOUSE (Name) Type Code Symbol Stamp None

Authorization No. N/A

911 W MAIN ST CHATTANOOGA TN 37402 (Address) Expiration Date N/A

4. Identification of System REACTOR COOLANT

5. (a) Applicable Construction Code ASME SEC III CL.1 19 71 Edition, W;73 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
S/G	CE	78273-2	22500	1MRCEE01B	1978	Replacement	Yes

7. Description of Work PLUG STEAM GENERATOR 12 HOT LEG TUBES PER DFWO 2458003.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks SEE DFWO 2458003 FOR TUBES PLUGGED (PLUGGING LIST ATTACHED).

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [illegible] Sr Engineering Engr (Owner or Owner's Designee, Title) Date 10-22-02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-20-02 to 10-25-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] (Inspector's Signature) Commissions NB 9685 "ANIC" Az. 264 (National Board, State, Province, and Endorsements)

Date 10-25-02

DFWO 2458003

STEAM GENERATOR 1MRCEE01B
"HOT LEG"

DIWO 2458021

ASME SECTION XI-REPAIR/REPLACEMENT						
COMP. ID	ROW	COLUMN	PART NO.	SERIAL NO.	HEAT NO.	MR NO.
1MRCEE01B	30	7	0307-1601	40011041-106	NX2227HK	683821
1MRCEE01B	25	8	0307-1601	40011041-105	NX2227HK	683821
1MRCEE01B	1	10	0307-1601	40011041-150	NX2227HK	683821
1MRCEE01B	3	10	0307-1601	40011041-151	NX2227HK	683821
1MRCEE01B	2	11	0307-1601	40011041-152	NX2227HK	683821
1MRCEE01B	4	11	0307-1601	40011041-153	NX2227HK	683821
1MRCEE01B	1	12	0307-1601	40011041-154	NX2227HK	683821
1MRCEE01B	3	12	0307-1601	40011041-155	NX2227HK	683821
1MRCEE01B	5	12	0307-1601	40011041-156	NX2227HK	683821
1MRCEE01B	2	13	0307-1601	40011041-157	NX2227HK	683821
1MRCEE01B	4	13	0307-1601	40011041-158	NX2227HK	683821
1MRCEE01B	17	14	0307-1601	40011041-116	NX2227HK	683821
1MRCEE01B	42	15	0307-1601	40011041-112	NX2227HK	683821
1MRCEE01B	60	15	0307-1601	40011041-111	NX2227HK	683821
1MRCEE01B	71	18	0307-1601	40011041-173	NX2227HK	683821
1MRCEE01B	90	19	0307-1601	40011041-168	NX2227HK	683821
1MRCEE01B	25	20	0307-1601	40011041-124	NX2227HK	683821
1MRCEE01B	30	21	0307-1601	40011041-115	NX2227HK	683821
1MRCEE01B	41	24	0307-1601	40011041-108	NX2227HK	683821
1MRCEE01B	53	24	0307-1601	40011041-114	NX2227HK	683821
1MRCEE01B	101	24	0307-1601	40011041-167	NX2227HK	683821
1MRCEE01B	58	29	0307-1601	40011041-104	NX2227HK	683821
1MRCEE01B	51	30	0307-1601	40011041-121	NX2227HK	683821
1MRCEE01B	60	31	0307-1601	40011041-113	NX2227HK	683821
1MRCEE01B	117	32	0307-1601	40011041-162	NX2227HK	683821
1MRCEE01B	96	33	0307-1601	40011041-195	NX2227HK	683821
1MRCEE01B	118	35	0307-1601	40011041-196	NX2227HK	683821
1MRCEE01B	120	35	0307-1601	40011041-161	NX2227HK	683821
1MRCEE01B	17	36	0307-1601	40011041-102	NX2227HK	683821
1MRCEE01B	49	36	0307-1601	40011041-122	NX2227HK	683821
1MRCEE01B	115	36	0307-1601	40011041-160	NX2227HK	683821
1MRCEE01B	110	37	0307-1601	40011041-166	NX2227HK	683821
1MRCEE01B	43	38	0307-1601	40011041-107	NX2227HK	683821
1MRCEE01B	113	38	0307-1601	40011041-165	NX2227HK	683821
1MRCEE01B	49	40	0307-1601	40011041-123	NX2227HK	683821
1MRCEE01B	129	40	0307-1601	40011041-159	NX2227HK	683821
1MRCEE01B	130	41	0307-1601	40011041-182	NX2227HK	683821
1MRCEE01B	77	42	0307-1601	40011041-172	NX2227HK	683821
1MRCEE01B	104	43	0307-1601	40011041-187	NX2227HK	683821
1MRCEE01B	120	43	0307-1601	40011041-181	NX2227HK	683821
1MRCEE01B	69	44	0307-1601	40011041-171	NX2227HK	683821
1MRCEE01B	104	45	0307-1601	40011041-192	NX2227HK	683821
1MRCEE01B	60	47	0307-1601	40011041-170	NX2227HK	683821
1MRCEE01B	114	47	0307-1601	40011041-164	NX2227HK	683821
1MRCEE01B	116	47	0307-1601	40011041-185	NX2227HK	683821
1MRCEE01B	120	47	0307-1601	40011041-191	NX2227HK	683821
1MRCEE01B	122	47	0307-1601	40011041-190	NX2227HK	683821
1MRCEE01B	113	48	0307-1601	40011041-188	NX2227HK	683821
1MRCEE01B	104	49	0307-1601	40011041-175	NX2227HK	683821

STEAM GENERATOR 1MRCEE01B
"HOT LEG"

1MRCEE01B	120	49	0307-1601	40011041-174	NX2227HK	683821
1MRCEE01B	27	50	0307-1601	40011041-117	NX2227HK	683821
1MRCEE01B	132	51	0307-1601	40011041-189	NX2227HK	683821
1MRCEE01B	95	52	0307-1601	40011041-194	NX2227HK	683821
1MRCEE01B	139	52	0307-1601	40011041-198	NX2227HK	683821
1MRCEE01B	141	52	0307-1601	40011041-7	NX2227HK	683821
1MRCEE01B	53	54	0307-1601	40011041-169	NX2227HK	683821
1MRCEE01B	129	54	0307-1601	40011041-5	NX2227HK	683821
1MRCEE01B	141	54	0307-1601	40011041-6	NX2227HK	683821
1MRCEE01B	32	55	0307-1601	40011041-118	NX2227HK	683821
1MRCEE01B	103	56	0307-1601	40011041-176	NX2227HK	683821
1MRCEE01B	141	56	0307-1601	40011041-1	NX2227HK	683821
1MRCEE01B	128	57	0307-1601	40011041-199	NX2227HK	683821
1MRCEE01B	144	57	0307-1601	40011041-8	NX2227HK	683821
1MRCEE01B	137	58	0307-1601	40011041-10	NX2227HK	683821
1MRCEE01B	130	59	0307-1601	40011041-2	NX2227HK	683821
1MRCEE01B	138	59	0307-1601	40011041-200	NX2227HK	683821
1MRCEE01B	144	59	0307-1601	40011041-14	NX2227HK	683821
1MRCEE01B	103	60	0307-1601	40011041-177	NX2227HK	683821
1MRCEE01B	113	60	0307-1601	40011047-13	NX2227HK	691280
1MRCEE01B	131	60	0307-1601	40011041-12	NX2227HK	683821
1MRCEE01B	110	61	0307-1601	40011041-128	NX2227HK	683821
1MRCEE01B	132	61	0307-1601	40011041-13	NX2227HK	683821
1MRCEE01B	131	62	0307-1601	40011041-4	NX2227HK	683821
1MRCEE01B	139	62	0307-1601	40011041-19	NX2227HK	683821
1MRCEE01B	110	63	0307-1601	40011041-100	NX2227HK	683821
1MRCEE01B	144	63	0307-1601	40011041-9	NX2227HK	683821
1MRCEE01B	117	64	0307-1601	40011041-21	NX2227HK	683821
1MRCEE01B	129	64	0307-1601	40011041-3	NX2227HK	683821
1MRCEE01B	137	64	0307-1601	40011041-20	NX2227HK	683821
1MRCEE01B	139	64	0307-1601	40011041-18	NX2227HK	683821
1MRCEE01B	143	64	0307-1601	40011041-17	NX2227HK	683821
1MRCEE01B	96	65	0307-1601	40011041-197	NX2227HK	683821
1MRCEE01B	130	65	0307-1601	40011041-11	NX2227HK	683821
1MRCEE01B	132	65	0307-1601	40011041-16	NX2227HK	683821
1MRCEE01B	144	65	0307-1601	40011041-15	NX2227HK	683821
1MRCEE01B	146	65	0307-1601	40011041-39	NX2227HK	683821
1MRCEE01B	131	66	0307-1601	40011041-40	NX2227HK	683821
1MRCEE01B	137	66	0307-1601	40011041-37	NX2227HK	683821
1MRCEE01B	143	66	0307-1601	40011041-31	NX2227HK	683821
1MRCEE01B	130	67	0307-1601	40011041-43	NX2227HK	683821
1MRCEE01B	21	68	0307-1601	40011041-98	NX2227HK	683821
1MRCEE01B	111	68	0307-1601	40011041-42	NX2227HK	683821
1MRCEE01B	115	68	0307-1601	40011041-183	NX2227HK	683821
1MRCEE01B	141	68	0307-1601	40011041-22	NX2227HK	683821
1MRCEE01B	74	69	0307-1601	40011041-129	NX2227HK	683821
1MRCEE01B	102	69	0307-1601	40011041-184	NX2227HK	683821
1MRCEE01B	128	69	0307-1601	40011041-36	NX2227HK	683821
1MRCEE01B	134	69	0307-1601	40011041-35	NX2227HK	683821
1MRCEE01B	140	69	0307-1601	40011041-26	NX2227HK	683821
1MRCEE01B	144	69	0307-1601	40011041-34	NX2227HK	683821

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1MRCEE01B	87	70	0307-1601	40011041-180	NX2227HK	683821
1MRCEE01B	125	70	0307-1601	40011041-25	NX2227HK	683821
1MRCEE01B	137	70	0307-1601	40011041-45	NX2227HK	683821
1MRCEE01B	108	71	0307-1601	40011047-12	NX2227HK	691280
1MRCEE01B	120	71	0307-1601	40011041-193	NX2227HK	683821
1MRCEE01B	122	71	0307-1601	40011041-41	NX2227HK	683821
1MRCEE01B	130	71	0307-1601	40011041-29	NX2227HK	683821
1MRCEE01B	67	72	0307-1601	40011041-64	NX2227HK	683821
1MRCEE01B	121	72	0307-1601	40011041-178	NX2227HK	683821
1MRCEE01B	129	72	0307-1601	40011041-30	NX2227HK	683821
1MRCEE01B	131	72	0307-1601	40011041-28	NX2227HK	683821
1MRCEE01B	110	73	0307-1601	40011041-38	NX2227HK	683821
1MRCEE01B	66	75	0307-1601	40011041-145	NX2227HK	683821
1MRCEE01B	146	75	0307-1601	40011041-27	NX2227HK	683821
1MRCEE01B	148	75	0307-1601	40011041-23	NX2227HK	683821
1MRCEE01B	104	77	0307-1601	40011041-186	NX2227HK	683821
1MRCEE01B	130	77	0307-1601	40011041-33	NX2227HK	683821
1MRCEE01B	144	77	0307-1601	40011041-24	NX2227HK	683821
1MRCEE01B	98	79	0307-1601	40011041-70	NX2227HK	683821
1MRCEE01B	104	79	0307-1601	40011041-75	NX2227HK	683821
1MRCEE01B	122	79	0307-1601	40011041-32	NX2227HK	683821
1MRCEE01B	134	79	0307-1601	40011041-44	NX2227HK	683821
1MRCEE01B	144	79	0307-1601	40011041-67	NX2227HK	683821
1MRCEE01B	148	79	0307-1601	40011041-66	NX2227HK	683821
1MRCEE01B	69	80	0307-1601	40011041-139	NX2227HK	683821
1MRCEE01B	101	80	0307-1601	40011041-76	NX2227HK	683821
1MRCEE01B	139	80	0307-1601	40011041-49	NX2227HK	683821
1MRCEE01B	64	81	0307-1601	40011041-130	NX2227HK	683821
1MRCEE01B	134	81	0307-1601	40011041-63	NX2227HK	683821
1MRCEE01B	137	82	0307-1601	40011041-60	NX2227HK	683821
1MRCEE01B	143	82	0307-1601	40011041-59	NX2227HK	683821
1MRCEE01B	122	83	0307-1601	40011041-46	NX2227HK	683821
1MRCEE01B	128	83	0307-1601	40011041-69	NX2227HK	683821
1MRCEE01B	138	83	0307-1601	40011041-68	NX2227HK	683821
1MRCEE01B	133	84	0307-1601	40011041-61	NX2227HK	683821
1MRCEE01B	144	85	0307-1601	40011041-58	NX2227HK	683821
1MRCEE01B	148	85	0307-1601	40011041-87	NX2227HK	683821
1MRCEE01B	117	86	0307-1601	40011041-56	NX2227HK	683821
1MRCEE01B	44	87	0307-1601	40011041-138	NX2227HK	683821
1MRCEE01B	122	87	0307-1601	40011041-65	NX2227HK	683821
1MRCEE01B	144	87	0307-1601	40011041-82	NX2227HK	683821
1MRCEE01B	148	87	0307-1601	40011041-88	NX2227HK	683821
1MRCEE01B	141	88	0307-1601	40011041-57	NX2227HK	683821
1MRCEE01B	46	89	0307-1601	40011041-144	NX2227HK	683821
1MRCEE01B	144	89	0307-1601	40011041-53	NX2227HK	683821
1MRCEE01B	81	90	0307-1601	40011041-71	NX2227HK	683821
1MRCEE01B	137	90	0307-1601	40011041-55	NX2227HK	683821
1MRCEE01B	120	91	0307-1601	40011041-52	NX2227HK	683821
1MRCEE01B	148	91	0307-1601	40011041-73	NX2227HK	683821
1MRCEE01B	147	92	0307-1601	40011041-83	NX2227HK	683821
1MRCEE01B	96	95	0307-1601	40011041-179	NX2227HK	683821

STEAM GENERATOR 1MRCEE01B
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1MRCEE01B	122	95	0307-1601	40011041-48	NX2227HK	683821
1MRCEE01B	138	95	0307-1601	40011041-47	NX2227HK	683821
1MRCEE01B	96	97	0307-1601	40011041-51	NX2227HK	683821
1MRCEE01B	132	97	0307-1601	40011041-54	NX2227HK	683821
1MRCEE01B	138	97	0307-1601	40011041-79	NX2227HK	683821
1MRCEE01B	141	98	0307-1601	40011041-80	NX2227HK	683821
1MRCEE01B	130	99	0307-1601	40011041-85	NX2227HK	683821
1MRCEE01B	138	99	0307-1601	40011041-92	NX2227HK	683821
1MRCEE01B	148	99	0307-1601	40011041-86	NX2227HK	683821
1MRCEE01B	109	100	0307-1601	40011041-81	NX2227HK	683821
1MRCEE01B	135	102	0307-1601	40011041-84	NX2227HK	683821
1MRCEE01B	132	103	0307-1601	40011041-77	NX2227HK	683821
1MRCEE01B	132	105	0307-1601	40011041-93	NX2227HK	683821
1MRCEE01B	140	105	0307-1601	40011041-89	NX2227HK	683821
1MRCEE01B	144	105	0307-1601	40011041-74	NX2227HK	683821
1MRCEE01B	51	106	0307-1601	40011041-62	NX2227HK	683821
1MRCEE01B	64	107	0307-1601	40011041-140	NX2227HK	683821
1MRCEE01B	70	109	0307-1601	40011041-148	NX2227HK	683821
1MRCEE01B	45	110	0307-1601	40011041-133	NX2227HK	683821
1MRCEE01B	51	110	0307-1601	40011041-132	NX2227HK	683821
1MRCEE01B	69	110	0307-1601	40011041-135	NX2227HK	683821
1MRCEE01B	141	110	0307-1601	40011041-91	NX2227HK	683821
1MRCEE01B	40	111	0307-1601	40011041-50	NX2227HK	683821
1MRCEE01B	54	111	0307-1601	40011041-147	NX2227HK	683821
1MRCEE01B	66	111	0307-1601	40011041-134	NX2227HK	683821
1MRCEE01B	70	111	0307-1601	40011041-136	NX2227HK	683821
1MRCEE01B	53	112	0307-1601	40011041-141	NX2227HK	683821
1MRCEE01B	60	113	0307-1601	40011041-131	NX2227HK	683821
1MRCEE01B	64	113	0307-1601	40011041-143	NX2227HK	683821
1MRCEE01B	122	113	0307-1601	40011041-90	NX2227HK	683821
1MRCEE01B	53	114	0307-1601	40011041-146	NX2227HK	683821
1MRCEE01B	97	114	0307-1601	40011041-72	NX2227HK	683821
1MRCEE01B	117	114	0307-1601	40011041-78	NX2227HK	683821
1MRCEE01B	100	115	0307-1601	40011047-32	NX2227HK	691280
1MRCEE01B	144	115	0307-1601	40011047-19	NX2227HK	691280
1MRCEE01B	48	117	0307-1601	40011041-142	NX2227HK	683821
1MRCEE01B	62	119	0307-1601	40011041-126	NX2227HK	683821
1MRCEE01B	33	120	0307-1601	40011041-103	NX2227HK	683821
1MRCEE01B	64	121	0307-1601	40011041-127	NX2227HK	683821
1MRCEE01B	45	124	0307-1601	40011041-137	NX2227HK	683821
1MRCEE01B	129	124	0307-1601	40011047-37	NX2227HK	691280
1MRCEE01B	137	124	0307-1601	40011047-14	NX2227HK	691280
1MRCEE01B	50	125	0307-1601	40011041-125	NX2227HK	683821
1MRCEE01B	60	125	0307-1601	40011041-149	NX2227HK	683821
1MRCEE01B	122	125	0307-1601	40011047-18	NX2227HK	691280
1MRCEE01B	130	127	0307-1601	40011047-20	NX2227HK	691280
1MRCEE01B	91	130	0307-1601	40011047-34	NX2227HK	691280
1MRCEE01B	95	130	0307-1601	40011047-15	NX2227HK	691280
1MRCEE01B	133	130	0307-1601	40011047-17	NX2227HK	691280
1MRCEE01B	135	130	0307-1601	40011047-27	NX2227HK	691280
1MRCEE01B	122	131	0307-1601	40011047-26	NX2227HK	691280

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STEAM GENERATOR 1MRCEE01B
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1MRCEE01B	75	132	0307-1601	40011047-81	NX2227HK	691280
1MRCEE01B	142	133	0307-1601	40011047-28	NX2227HK	691280
1MRCEE01B	27	136	0307-1601	40011047-82	NX2227HK	691280
1MRCEE01B	117	136	0307-1601	40011047-29	NX2227HK	691280
1MRCEE01B	142	137	0307-1601	40011047-36	NX2227HK	691280
1MRCEE01B	95	138	0307-1601	40011047-35	NX2227HK	691280
1MRCEE01B	104	141	0307-1601	40011047-25	NX2227HK	691280
1MRCEE01B	110	141	0307-1601	40011047-16	NX2227HK	691280
1MRCEE01B	133	142	0307-1601	40011047-33	NX2227HK	691280
1MRCEE01B	60	145	0307-1601	40011047-83	NX2227HK	691280
1MRCEE01B	122	145	0307-1601	40011047-21	NX2227HK	691280
1MRCEE01B	121	146	0307-1601	40011047-30	NX2227HK	691280
1MRCEE01B	60	147	0307-1601	40011047-88	NX2227HK	691280
1MRCEE01B	131	148	0307-1601	40011047-31	NX2227HK	691280
1MRCEE01B	61	150	0307-1601	40011047-85	NX2227HK	691280
1MRCEE01B	51	152	0307-1601	40011047-84	NX2227HK	691280
1MRCEE01B	122	153	0307-1601	40011047-23	NX2227HK	691280
1MRCEE01B	121	154	0307-1601	40011047-22	NX2227HK	691280
1MRCEE01B	60	155	0307-1601	40011041-99	NX2227HK	683821
1MRCEE01B	76	155	0307-1601	40011047-87	NX2227HK	691280
1MRCEE01B	87	156	0307-1601	40011041-119	NX2227HK	683821
1MRCEE01B	115	158	0307-1601	40011047-24	NX2227HK	691280
1MRCEE01B	58	159	0307-1601	40011041-95	NX2227HK	683821
1MRCEE01B	60	159	0307-1601	40011047-80	NX2227HK	691280
1MRCEE01B	90	159	0307-1601	40011041-110	NX2227HK	683821
1MRCEE01B	70	161	0307-1601	40011047-11	NX2227HK	691280
1MRCEE01B	54	163	0307-1601	40011041-109	NX2227HK	683821
1MRCEE01B	49	164	0307-1601	40011041-94	NX2227HK	683821
1MRCEE01B	32	177	0307-1601	40011041-101	NX2227HK	683821
1MRCEE01B	25	178	0307-1601	40011041-96	NX2227HK	683821
1MRCEE01B	64	181	0307-1601	40011047-86	NX2227HK	691280
1MRCEE01B	12	189	0307-1601	40011041-97	NX2227HK	683821

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1MRCEE01B 2. Code Class ASME SECTION III, CLASS 1

3. Item Description STEAM GENERATOR #2

4. N-5 Package Number 1RC01-4 5. W.O. Number 2458023

6. Original Construction Code Edition 1971 EDITION & 1973 WINTER ADDENDA

7. Original Installation Code Edition 1974 EDITION & 1975 WINTER ADDENDA

8. Work Description INSTALL WESTINGHOUSE ROLL PLUGS IN 1MRCEE01B COLD LEG TUBES ENG-DFWO 2458004 EVALUATION AND DISPOSITION.

9. ☑ ISI Flaw NDE Method of Flaw Detection EDDY CURRENT

Report Number 1R10 EDDY CURRENT EXAM REPORT

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.

EVALUATION PER ENG-DFWO 2458004.

11. Repair/Replacement Work Organization WESTINGHOUSE

12. Replacement Item Construction or reconciled Code/Edition 1971 EDITION & 1973 WINTER ADDENDA

13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION & 1975 WINTER ADDENDA

14. ASME Section XI Code/Edition 1992 EDITION & 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

Initial 06/24/02 Date If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

Initial 06/24/02 Date If required, include a step in the W.O. for ISI & ANII Inspection.

Initial 06/24/02 Date 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial 06/24/02 Date 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
TUBE PLUGS	SEE ATTACHED LIST	SEE ATTACHED LIST	SEE ATTACHED LIST	SEE ATTACHED LIST

19. Planner Signature 06/24/02 Date Print Name MICHAEL B. NEWELL

20. ISI Engineer Alan Morrow Signature 8/20/02 Date Print Name Alan Morrow

21. ANII Signature 8-20-02 Date Print Name ROBERT HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) — Date 08/20/22

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) — Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) — Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) — W.O.2458023 (Work Order Number)

3. Work Performed by WESTINGHOUSE (Name) — Type Code Symbol Stamp None

Authorization No. N/A

911 W MAIN ST CHATTANOOGA TN 37402 (Address) — Expiration Date N/A

4. Identification of System REACTOR COOLANT

5. (a) Applicable Construction Code ASME SEC III CL.1 19 71 Edition, W;73 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
S/G	CE	78273-2	22500	1MRCEE01B	1978	Replacement	Yes

7. Description of Work PLUG STEAM GENERATOR 12 COLD LEG TUBES PER DFWO 2458004.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks SEE DFWO 2458004 FOR TUBES PLUGGED (PLUGGING LIST ATTACHED).

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [signature] SR CONSULTING ENGR (Owner or Owner's Designee, Title) Date 10-21-02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-20-02 to 10-25-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] (Inspector's Signature) Commissions NB 9685 "ANIC" Az. 264 (National Board, State, Province, and Endorsements)

Date 10-26-02

DFWO 2458004

STEAM GENERATOR 1MRCEE01B "COLD LEG"

DIWO 2458023

ASME SECTION XI-REPAIR/REPLACEMENT						
COMP. ID	ROW	COLUMN	PART NO.	SERIAL NO.	HEAT NO.	MR NO.
1MRCEE01B	30	7	0307-1601	40011045-23	NX2227HK	683821
1MRCEE01B	25	8	0307-1601	40011045-26	NX2227HK	683821
1MRCEE01B	1	10	0307-1601	40011045-20	NX2227HK	683821
1MRCEE01B	3	10	0307-1601	40011045-8	NX2227HK	683821
1MRCEE01B	2	11	0307-1601	40011045-18	NX2227HK	683821
1MRCEE01B	4	11	0307-1601	40011045-45	NX2227HK	683821
1MRCEE01B	1	12	0307-1601	40011045-10	NX2227HK	683821
1MRCEE01B	3	12	0307-1601	40011045-24	NX2227HK	683821
1MRCEE01B	5	12	0307-1601	40011045-19	NX2227HK	683821
1MRCEE01B	2	13	0307-1601	40011045-17	NX2227HK	683821
1MRCEE01B	4	13	0307-1601	40011045-22	NX2227HK	683821
1MRCEE01B	17	14	0307-1601	40011045-38	NX2227HK	683821
1MRCEE01B	42	15	0307-1601	40011045-39	NX2227HK	683821
1MRCEE01B	60	15	0307-1601	40011045-1	NX2227HK	683821
1MRCEE01B	71	18	0307-1601	40011045-35	NX2227HK	683821
1MRCEE01B	90	19	0307-1601	40011045-34	NX2227HK	683821
1MRCEE01B	25	20	0307-1601	40011045-27	NX2227HK	683821
1MRCEE01B	30	21	0307-1601	40011045-6	NX2227HK	683821
1MRCEE01B	41	24	0307-1601	40011045-7	NX2227HK	683821
1MRCEE01B	53	24	0307-1601	40011045-12	NX2227HK	683821
1MRCEE01B	101	24	0307-1601	40011045-165	NX2227HK	683821
1MRCEE01B	58	29	0307-1601	40011045-5	NX2227HK	683821
1MRCEE01B	51	30	0307-1601	40011045-2	NX2227HK	683821
1MRCEE01B	60	31	0307-1601	40011045-3	NX2227HK	683821
1MRCEE01B	117	32	0307-1601	40011045-151	NX2227HK	683821
1MRCEE01B	96	33	0307-1601	40011045-168	NX2227HK	683821
1MRCEE01B	118	35	0307-1601	40011045-137	NX2227HK	683821
1MRCEE01B	120	35	0307-1601	40011045-157	NX2227HK	683821
1MRCEE01B	17	36	0307-1601	40011045-16	NX2227HK	683821
1MRCEE01B	49	36	0307-1601	40011045-21	NX2227HK	683821
1MRCEE01B	115	36	0307-1601	40011045-161	NX2227HK	683821
1MRCEE01B	110	37	0307-1601	40011045-147	NX2227HK	683821
1MRCEE01B	43	38	0307-1601	40011045-13	NX2227HK	683821
1MRCEE01B	113	38	0307-1601	40011045-158	NX2227HK	683821
1MRCEE01B	49	40	0307-1601	40011045-9	NX2227HK	683821
1MRCEE01B	129	40	0307-1601	40011045-166	NX2227HK	683821
1MRCEE01B	130	41	0307-1601	40011045-150	NX2227HK	683821
1MRCEE01B	77	42	0307-1601	40011045-14	NX2227HK	683821
1MRCEE01B	104	43	0307-1601	40011045-164	NX2227HK	683821
1MRCEE01B	120	43	0307-1601	40011045-160	NX2227HK	683821
1MRCEE01B	69	44	0307-1601	40011045-4	NX2227HK	683821
1MRCEE01B	104	45	0307-1601	40011045-167	NX2227HK	683821
1MRCEE01B	60	47	0307-1601	40011045-15	NX2227HK	683821
1MRCEE01B	114	47	0307-1601	40011045-153	NX2227HK	683821
1MRCEE01B	116	47	0307-1601	40011045-162	NX2227HK	683821
1MRCEE01B	120	47	0307-1601	40011045-148	NX2227HK	683821
1MRCEE01B	122	47	0307-1601	40011045-163	NX2227HK	683821
1MRCEE01B	113	48	0307-1601	40011045-91	NX2227HK	683821
1MRCEE01B	104	49	0307-1601	40011045-31	NX2227HK	683821

1MRCEE01B	120	49	0307-1601	40011045-72	NX2227HK	683821
1MRCEE01B	27	50	0307-1601	40011045-36	NX2227HK	683821
1MRCEE01B	132	51	0307-1601	40011045-77	NX2227HK	683821
1MRCEE01B	95	52	0307-1601	40011045-74	NX2227HK	683821
1MRCEE01B	139	52	0307-1601	40011045-96	NX2227HK	683821
1MRCEE01B	141	52	0307-1601	40011045-81	NX2227HK	683821
1MRCEE01B	53	54	0307-1601	40011045-29	NX2227HK	683821
1MRCEE01B	129	54	0307-1601	40011045-78	NX2227HK	683821
1MRCEE01B	141	54	0307-1601	40011045-86	NX2227HK	683821
1MRCEE01B	32	55	0307-1601	40011045-41	NX2227HK	683821
1MRCEE01B	103	56	0307-1601	40011045-75	NX2227HK	683821
1MRCEE01B	141	56	0307-1601	40011045-76	NX2227HK	683821
1MRCEE01B	128	57	0307-1601	40011045-90	NX2227HK	683821
1MRCEE01B	144	57	0307-1601	40011045-89	NX2227HK	683821
1MRCEE01B	137	58	0307-1601	40011045-84	NX2227HK	683821
1MRCEE01B	130	59	0307-1601	40011045-59	NX2227HK	683821
1MRCEE01B	138	59	0307-1601	40011045-60	NX2227HK	683821
1MRCEE01B	144	59	0307-1601	40011045-62	NX2227HK	683821
1MRCEE01B	103	60	0307-1601	40011045-135	NX2227HK	683821
1MRCEE01B	113	60	0307-1601	40011045-88	NX2227HK	683821
1MRCEE01B	131	60	0307-1601	40011045-64	NX2227HK	683821
1MRCEE01B	110	61	0307-1601	40011045-82	NX2227HK	683821
1MRCEE01B	132	61	0307-1601	40011045-69	NX2227HK	683821
1MRCEE01B	131	62	0307-1601	40011045-65	NX2227HK	683821
1MRCEE01B	139	62	0307-1601	40011045-67	NX2227HK	683821
1MRCEE01B	110	63	0307-1601	40011045-93	NX2227HK	683821
1MRCEE01B	144	63	0307-1601	40011045-68	NX2227HK	683821
1MRCEE01B	117	64	0307-1601	40011045-70	NX2227HK	683821
1MRCEE01B	129	64	0307-1601	40011045-71	NX2227HK	683821
1MRCEE01B	137	64	0307-1601	40011045-50	NX2227HK	683821
1MRCEE01B	139	64	0307-1601	40011045-54	NX2227HK	683821
1MRCEE01B	143	64	0307-1601	40011045-66	NX2227HK	683821
1MRCEE01B	96	65	0307-1601	40011045-136	NX2227HK	683821
1MRCEE01B	130	65	0307-1601	40011045-61	NX2227HK	683821
1MRCEE01B	132	65	0307-1601	40011045-52	NX2227HK	683821
1MRCEE01B	144	65	0307-1601	40011045-53	NX2227HK	683821
1MRCEE01B	146	65	0307-1601	40011045-55	NX2227HK	683821
1MRCEE01B	131	66	0307-1601	40011045-56	NX2227HK	683821
1MRCEE01B	137	66	0307-1601	40011045-57	NX2227HK	683821
1MRCEE01B	143	66	0307-1601	40011045-58	NX2227HK	683821
1MRCEE01B	130	67	0307-1601	40011045-49	NX2227HK	683821
1MRCEE01B	21	68	0307-1601	40011047-195	NX2227HK	691280
1MRCEE01B	111	68	0307-1601	40011045-51	NX2227HK	683821
1MRCEE01B	115	68	0307-1601	40011045-80	NX2227HK	683821
1MRCEE01B	141	68	0307-1601	40011045-63	NX2227HK	683821
1MRCEE01B	74	69	0307-1601	40011045-179	NX2227HK	683821
1MRCEE01B	102	69	0307-1601	40011045-92	NX2227HK	683821
1MRCEE01B	128	69	0307-1601	40011045-47	NX2227HK	683821
1MRCEE01B	134	69	0307-1601	40011045-42	NX2227HK	683821
1MRCEE01B	140	69	0307-1601	40011045-25	NX2227HK	683821
1MRCEE01B	144	69	0307-1601	40011045-46	NX2227HK	683821

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STEAM GENERATOR 1MRCEE01B
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1MRCEE01B	87	70	0307-1601	40011045-132	NX2227HK	683821
1MRCEE01B	125	70	0307-1601	40011045-48	NX2227HK	683821
1MRCEE01B	137	70	0307-1601	40011045-40	NX2227HK	683821
1MRCEE01B	108	71	0307-1601	40011045-144	NX2227HK	683821
1MRCEE01B	120	71	0307-1601	40011045-94	NX2227HK	683821
1MRCEE01B	122	71	0307-1601	40011045-30	NX2227HK	683821
1MRCEE01B	130	71	0307-1601	40011045-32	NX2227HK	683821
1MRCEE01B	67	72	0307-1601	40011045-190	NX2227HK	683821
1MRCEE01B	121	72	0307-1601	40011045-79	NX2227HK	683821
1MRCEE01B	129	72	0307-1601	40011045-37	NX2227HK	683821
1MRCEE01B	131	72	0307-1601	40011045-28	NX2227HK	683821
1MRCEE01B	110	73	0307-1601	40011045-44	NX2227HK	683821
1MRCEE01B	66	75	0307-1601	40011045-177	NX2227HK	683821
1MRCEE01B	146	75	0307-1601	40011045-33	NX2227HK	683821
1MRCEE01B	148	75	0307-1601	40011045-43	NX2227HK	683821
1MRCEE01B	104	77	0307-1601	40011045-126	NX2227HK	683821
1MRCEE01B	130	77	0307-1601	40011045-83	NX2227HK	683821
1MRCEE01B	144	77	0307-1601	40011045-85	NX2227HK	683821
1MRCEE01B	98	79	0307-1601	40011045-122	NX2227HK	683821
1MRCEE01B	104	79	0307-1601	40011045-133	NX2227HK	683821
1MRCEE01B	122	79	0307-1601	40011045-73	NX2227HK	683821
1MRCEE01B	134	79	0307-1601	40011045-87	NX2227HK	683821
1MRCEE01B	144	79	0307-1601	40011045-95	NX2227HK	683821
1MRCEE01B	148	79	0307-1601	40011045-104	NX2227HK	683821
1MRCEE01B	69	80	0307-1601	40011045-146	NX2227HK	683821
1MRCEE01B	101	80	0307-1601	40011045-127	NX2227HK	683821
1MRCEE01B	139	80	0307-1601	40011045-101	NX2227HK	683821
1MRCEE01B	64	81	0307-1601	40011045-152	NX2227HK	683821
1MRCEE01B	134	81	0307-1601	40011045-102	NX2227HK	683821
1MRCEE01B	137	82	0307-1601	40011045-103	NX2227HK	683821
1MRCEE01B	143	82	0307-1601	40011045-108	NX2227HK	683821
1MRCEE01B	122	83	0307-1601	40011045-107	NX2227HK	683821
1MRCEE01B	128	83	0307-1601	40011045-105	NX2227HK	683821
1MRCEE01B	138	83	0307-1601	40011045-106	NX2227HK	683821
1MRCEE01B	133	84	0307-1601	40011045-117	NX2227HK	683821
1MRCEE01B	144	85	0307-1601	40011045-99	NX2227HK	683821
1MRCEE01B	148	85	0307-1601	40011045-113	NX2227HK	683821
1MRCEE01B	117	86	0307-1601	40011045-110	NX2227HK	683821
1MRCEE01B	44	87	0307-1601	40011045-191	NX2227HK	683821
1MRCEE01B	122	87	0307-1601	40011045-97	NX2227HK	683821
1MRCEE01B	144	87	0307-1601	40011045-119	NX2227HK	683821
1MRCEE01B	148	87	0307-1601	40011045-120	NX2227HK	683821
1MRCEE01B	141	88	0307-1601	40011045-109	NX2227HK	683821
1MRCEE01B	46	89	0307-1601	40011045-170	NX2227HK	683821
1MRCEE01B	144	89	0307-1601	40011045-115	NX2227HK	683821
1MRCEE01B	81	90	0307-1601	40011045-131	NX2227HK	683821
1MRCEE01B	137	90	0307-1601	40011045-112	NX2227HK	683821
1MRCEE01B	120	91	0307-1601	40011045-111	NX2227HK	683821
1MRCEE01B	148	91	0307-1601	40011045-141	NX2227HK	683821
1MRCEE01B	147	92	0307-1601	40011045-98	NX2227HK	683821
1MRCEE01B	96	95	0307-1601	40011045-121	NX2227HK	683821

STEAM GENERATOR 1MRCEE01B
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1MRCEE01B	122	95	0307-1601	40011045-100	NX2227HK	683821
1MRCEE01B	138	95	0307-1601	40011045-118	NX2227HK	683821
1MRCEE01B	96	97	0307-1601	40011045-143	NX2227HK	683821
1MRCEE01B	132	97	0307-1601	40011045-114	NX2227HK	683821
1MRCEE01B	138	97	0307-1601	40011045-116	NX2227HK	683821
1MRCEE01B	141	98	0307-1601	40011045-140	NX2227HK	683821
1MRCEE01B	130	99	0307-1601	40011045-142	NX2227HK	683821
1MRCEE01B	138	99	0307-1601	40011045-128	NX2227HK	683821
1MRCEE01B	148	99	0307-1601	40011045-193	NX2227HK	683821
1MRCEE01B	109	100	0307-1601	40011045-130	NX2227HK	683821
1MRCEE01B	135	102	0307-1601	40011045-124	NX2227HK	683821
1MRCEE01B	132	103	0307-1601	40011045-125	NX2227HK	683821
1MRCEE01B	132	105	0307-1601	40011045-139	NX2227HK	683821
1MRCEE01B	140	105	0307-1601	40011045-138	NX2227HK	683821
1MRCEE01B	144	105	0307-1601	40011047-6	NX2227HK	691280
1MRCEE01B	51	106	0307-1601	40011045-196	NX2227HK	683821
1MRCEE01B	64	107	0307-1601	40011045-154	NX2227HK	683821
1MRCEE01B	70	109	0307-1601	40011045-155	NX2227HK	683821
1MRCEE01B	45	110	0307-1601	40011045-171	NX2227HK	683821
1MRCEE01B	51	110	0307-1601	40011045-188	NX2227HK	683821
1MRCEE01B	69	110	0307-1601	40011045-156	NX2227HK	683821
1MRCEE01B	141	110	0307-1601	40011045-195	NX2227HK	683821
1MRCEE01B	40	111	0307-1601	40011045-173	NX2227HK	683821
1MRCEE01B	54	111	0307-1601	40011045-185	NX2227HK	683821
1MRCEE01B	66	111	0307-1601	40011045-159	NX2227HK	683821
1MRCEE01B	70	111	0307-1601	40011045-149	NX2227HK	683821
1MRCEE01B	53	112	0307-1601	40011045-184	NX2227HK	683821
1MRCEE01B	60	113	0307-1601	40011045-145	NX2227HK	683821.
1MRCEE01B	64	113	0307-1601	40011045-192	NX2227HK	683821
1MRCEE01B	122	113	0307-1601	40011045-123	NX2227HK	683821
1MRCEE01B	53	114	0307-1601	40011045-187	NX2227HK	683821
1MRCEE01B	97	114	0307-1601	40011045-134	NX2227HK	683821
1MRCEE01B	117	114	0307-1601	40011045-129	NX2227HK	683821
1MRCEE01B	100	115	0307-1601	40011045-176	NX2227HK	683821
1MRCEE01B	144	115	0307-1601	40011047-45	NX2227HK	691280
1MRCEE01B	48	117	0307-1601	40011045-169	NX2227HK	683821
1MRCEE01B	62	119	0307-1601	40011045-181	NX2227HK	683821
1MRCEE01B	33	120	0307-1601	40011045-172	NX2227HK	683821
1MRCEE01B	64	121	0307-1601	40011045-186	NX2227HK	683821
1MRCEE01B	45	124	0307-1601	40011045-175	NX2227HK	683821
1MRCEE01B	129	124	0307-1601	40011047-41	NX2227HK	691280
1MRCEE01B	137	124	0307-1601	40011047-40	NX2227HK	691280
1MRCEE01B	50	125	0307-1601	40011045-174	NX2227HK	683821
1MRCEE01B	60	125	0307-1601	40011045-189	NX2227HK	683821
1MRCEE01B	122	125	0307-1601	40011047-39	NX2227HK	691280
1MRCEE01B	130	127	0307-1601	40011047-38	NX2227HK	691280
1MRCEE01B	91	130	0307-1601	40011045-198	NX2227HK	683821
1MRCEE01B	95	130	0307-1601	40011047-4	NX2227HK	691280
1MRCEE01B	133	130	0307-1601	40011047-44	NX2227HK	691280
1MRCEE01B	135	130	0307-1601	40011045-199	NX2227HK	683821
1MRCEE01B	122	131	0307-1601	40011047-8	NX2227HK	691280

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STEAM GENERATOR 1MRCEE01B "COLD LEG"

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1MRCEE01B	75	132	0307-1601	40011045-178	NX2227HK	683821
1MRCEE01B	142	133	0307-1601	40011047-5	NX2227HK	691280
1MRCEE01B	27	136	0307-1601	40011045-200	NX2227HK	683821
1MRCEE01B	117	136	0307-1601	40011045-197	NX2227HK	683821
1MRCEE01B	142	137	0307-1601	40011047-1	NX2227HK	691280
1MRCEE01B	95	138	0307-1601	40011047-7	NX2227HK	691280
1MRCEE01B	104	141	0307-1601	40011047-71	NX2227HK	691280
1MRCEE01B	110	141	0307-1601	40011047-2	NX2227HK	691280
1MRCEE01B	133	142	0307-1601	40011047-3	NX2227HK	691280
1MRCEE01B	60	145	0307-1601	40011047-75	NX2227HK	691280
1MRCEE01B	122	145	0307-1601	40011047-79	NX2227HK	691280
1MRCEE01B	121	146	0307-1601	40011047-43	NX2227HK	691280
1MRCEE01B	60	147	0307-1601	40011047-76	NX2227HK	691280
1MRCEE01B	131	148	0307-1601	40011047-10	NX2227HK	691280
1MRCEE01B	61	150	0307-1601	40011047-47	NX2227HK	691280
1MRCEE01B	51	152	0307-1601	40011047-68	NX2227HK	691280
1MRCEE01B	122	153	0307-1601	40011047-70	NX2227HK	691280
1MRCEE01B	121	154	0307-1601	40011047-48	NX2227HK	691280
1MRCEE01B	60	155	0307-1601	40011047-67	NX2227HK	691280
1MRCEE01B	76	155	0307-1601	40011047-69	NX2227HK	691280
1MRCEE01B	87	156	0307-1601	40011047-74	NX2227HK	691280
1MRCEE01B	115	158	0307-1601	40011047-42	NX2227HK	691280
1MRCEE01B	58	159	0307-1601	40011047-77	NX2227HK	691280
1MRCEE01B	60	159	0307-1601	40011047-73	NX2227HK	691280
1MRCEE01B	90	159	0307-1601	40011047-46	NX2227HK	691280
1MRCEE01B	70	161	0307-1601	40011047-78	NX2227HK	691280
1MRCEE01B	54	163	0307-1601	40011045-180	NX2227HK	683821
1MRCEE01B	49	164	0307-1601	40011047-72	NX2227HK	691280
1MRCEE01B	32	177	0307-1601	40011045-183	NX2227HK	683821
1MRCEE01B	25	178	0307-1601	40011045-194	NX2227HK	683821
1MRCEE01B	64	181	0307-1601	40011045-11	NX2227HK	683821
1MRCEE01B	12	189	0307-1601	40011047-9	NX2227HK	691280

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSGEL002
2. Code Class ASME Section III Class 2
3. Item Description: Main Steam Feedwater SG# 1
4. N-5 Data Package Number: 1SG01-1
5. W.O. Number: 2458123
6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Replace a section of 14" pipe and fittings on line 1PSGEL002 with > 0.1% Chrome content materials. Ref. 01-P-SGF-119.
9. ☐ ISI Flaw — NDE Method of Flaw Detection: — Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Replacement with more corrosion resistant material to counter effect of flow accelerated corrosion.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 2, 1974 w/~~Winter~~ 1975 summer 6/18/02 dg 6-18-02
13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 2, 1974 w/Winter 1975
14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda
15. Preservice Inspection Required: ☒ YES ☐ NO

Initial [illegible] Date 6/6/02 — If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☒ YES ☐ NO

Initial [illegible] Date 6/6/02 — If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 6/6/02 — 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial [illegible] Date 6/6/02 — 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
14" Pipe SA 333 Gr. 6	APN 00070175	N/A	94933	644123
14", 90° Elbow SA 420 Gr. WPL6	APN 00070173	N/A	22693	644123

19. Planner [illegible] Signature 6/6/02 Date — Printed Name: HERBERT L. GREEN
20. ISI [illegible] Signature 6/18/02 Date — Printed Name: R. P. INDAP
21. ANII [illegible] Signature 6-18-02 Date — Printed Name: R.G. HOGSTRON

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

   P. O. Box 53999, Phoenix Arizona 85072-2034

2. Plant: Palo Verde Nuclear Generating Station

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

3. Work Performed by: Arizona Public Service

Date: 06/06/2002

Sheet: 1 of 2

Unit: 1

Work Order Number 2458123

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Main Steam Feedwater

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Summer 1975 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
SG Feedwater Pipe Spool S011	N/A	N/A	N/A	1PSGEL002	2002	Replacement	NO

7. Description of Work: Replace a section of 14" pipe and fittings on line 1PSGEL002 with > 0.1% Chrome content materials. Ref. 01-P-SGF-119.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-1 ☒

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSGEL005
2. Code Class ASME Section III Class 2
3. Item Description: Main Steam Feedwater SG# 2
4. N-5 Data Package Number: 1SG02-1
5. W.O. Number: 2458128
6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Replace the 24" x 16" and 16" x 14" reducers and associated piping on line 01PSGEL005 with > 0.1% Chrome content materials. Ref. 01-P-SGF-119.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Replacement with more corrosion resistant material is a preventive action to counter effect of flow accelarated corrosion. RPIndap 6/14/02
11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 2, 1974 w/~~Winter~~ 1975 summer EPZ 6/14/02 6-18-02
13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 2, 1974 w/Winter 1975
14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda
15. Preservice Inspection Required: ☒ YES ☐ NO

Initial [illegible] Date 6/6/02 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☒ YES ☐ NO

Initial [illegible] Date 6/6/02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 6/6/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial [illegible] Date 6/6/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
24" Pipe SA 106 Gr. C	APN 00070177	N/A	183371	644121
24" x 16" Reducer SA 234 Gr. WPC	APN 00066490	N/A	1887B	644121
16" x 14" Reducer SA 234 Gr. WPC	APN 00070172	N/A	912336	644121
16" Pipe SA 106 Gr. C	APN 00070176	N/A	2267B	644121

19. Planner [illegible] Signature 6/6/02 Date Printed Name: HERBERT L. GREEN
20. ISI RPIndap Signature 6/14/02 Date Printed Name: R. P. INDAP
21. ANII [illegible] Signature 6-18-02 Date Printed Name: RG Hogstrom

PV-80093 Ver. 6 73DP-9ZZ17

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

   P. O. Box 53999, Phoenix Arizona 85072-2034

2. Plant: Palo Verde Nuclear Generating Station

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

3. Work Performed by: Arizona Public Service

Date: 06/06/2002

Sheet: 1 of 2

Unit: 1

Work Order Number 2458128

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Main Steam Feedwater

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Summer 1975 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
SG Feedwater Pipe Spool S011	N/A	N/A	N/A	1PSGEL005	2002	Replacement	NO
SG Feedwater Pipe Spool S010	N/A	N/A	N/A	1PSGEL005	2002	Replacement	N0

7. Description of Work: Replace replace the 24" x 16" and 16" x 14" reducers and associated piping on line 01PSGEL005 with > 0.1% Chrome content materials. Ref. 01-P-SGF-119.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-1 ☒

   Other ☐ Pressure ~~1830~~ 1168 psi Test Temperature 565 °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: Replace the 24" x 16" and 16" x 14" reducers and associated piping on line 01PSGEL005 with > 0.1% Chrome content materials IAW work order 2458128. Ref. 01-P-SGF-119.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: [illegible] SOE [illegible] Date: 10/29/02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 6-18-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible]
Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264
National Board, State, Province, and Endorsements

Date: 10-29-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1SG348H00E 2. Code Class SECTION III Subsection NF Class 2

3. Item Description 1/4 KIP SNUBBER

4. N-5 Package Number 1SG02-6 5. W.O. Number 2458175

6. Original Construction Code Edition 1974 EDITION THRU WINTER 1975 ADDENDA

7. Original Installation Code Edition 1974 EDITION THRU WINTER 1975 ADDENDA

8. Work Description Replace Snubber

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
This snubber failed functional test, not a pressure boundery item. This is a like for like replacement

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition 1974 EDITION THRU WINTER 1975 ADDENDA

13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION THRU WINTER 1975 ADDENDA

14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 10-5-02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

DMG (Initial) 10-5-02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 10-5-02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 10-5-02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1SG348H00E	N/A	18138	N/A	N/A

19. Planner [signature] (Signature) 10-5-02 (Date) Print Name David Goodlet

20. ISI Engineer Alan Morrow (Signature) 10/05/02 (Date) Print Name Alan Morrow

21. ANII [signature] (Signature) 10-5-02 (Date) Print Name Robert Hogstram

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 10/04/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2458175 (Work Order Number)

3. Work Performed by Arizona Public Service (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S Wintersburg Road, Tonopah Arizona 85354-752 (Address) Expiration Date N/A

4. Identification of System "SG" Steam Generator

5. (a) Applicable Construction Code Subsect. NF Class 2 19 74 Edition, W'75 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
1/4 Kip Snubber	Pacific Scientific	18138	N/A	1SG348H00E	81	Replacement	Yes

7. Description of Work Snubber Replacement (No Welding)

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks WO#2458175 Removed snubber Serial number 3919 and replaced it with serial number 18138

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/

Certificate of Authorization No. /A Expiration Date N/A

Signed R.L. Browing ISI ENG (Owner or Owner's Designee, Title) Date 10/7/02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-5-02 to 10-7-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB 9685 NI Az 264 (National Board, State, Province, and Endorsements)

Date 10-7-02

ASME SECTION XI REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 1SI139H007
2. Code Class ASME Section III Subsection NF Class 3
3. Item Description: 1Kip Snubber
4. N-5 Data Package Number: 1CH08-1
5. W.O. Number: 2458196
6. Original Construction Code Edition: 1974 Edition, Winter 1976 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Replace Snubber
9. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

    Not a failure. Replaced snubber for precautionary measures. This is a like-for-like replacement.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 3, 1974 Edition, Winter 1976 Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III NF Cl 3, 1974 Edition, Winter 1975 Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO

Initial DMG Date 10-16-02 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial DMG Date 10-16-02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 10-16-02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMG Date 10-16-02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1SI139H007	1801102-05	22713	n/a	WO 2458196

19. Planner [signature] 10-16-02 Printed Name: David Goodlet
    Signature Date

20. ISI [signature] 10-16-02 Printed Name: [signature]
    Signature Date

21. ANII [signature] 10-16-02 Printed Name: R.G. HOGSTROM
    Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

   P. O. Box 53999, Phoenix Arizona 85072-2034

2. Plant: Palo Verde Nuclear Generating Station

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

3. Work Performed by: Arizona Public Service

Date: 10-16-2002

Sheet: 1 of 2

Unit: 1

Work Order Number 2458196

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SI: Safety Injection.

5. (a) Applicable Construction Code ASME Section III NF, Class 3 1974 Edition, Winter 1976 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
1Kip Snubber	Pacific Scientific	22713	n/a	1SI139H007	1982	Replacement	YES

7. Description of Work: Replaced Snubber; no welding.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

Remarks: WO# 2458196 removed snubber s/n 6880 and installed s/n 22713.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: R Findley Consulting Metallurgical Engineer Date: 10-16-02

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-16-02 to 10-16-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264
National Board, State, Province, and Endorsements

Date: 10-16-02

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 1PCHNV471
2. Code Class ASME Secton III Class 3
3. Item Description: 3" Borg Warner 300# swing check valve
4. N-5 Data Package Number: 1CH12-1
5. W.O. Number: 2458786
6. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Inspection of valve iaw check valve program.
9. ☐ ISI Flaw — NDE Method of Flaw Detection: — Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

No pressure boundary failure. A bonnet nut is being replaced with a replacement spare.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec III Cl 3, 1971 Edition Winter 1973 Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 3, 1974 Edition 1975 Winter Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO

Initial DGG Date 10-7-2002 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial DGG Date 10-7-2002 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DGG Date 10-7-2002 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DGG Date 10-7-2002 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet Nut	N/A	N/A	41039	MR 689249

19. Planner [signature] 10-7-2002 Printed Name: David Goodlet
Signature Date

20. ISI [signature] 10/7/02 Printed Name: R.L. BROWNING
Signature Date

21. ANII [signature] 10-7-02 Printed Name: Robert Hogstrom
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

   P. O. Box 53999, Phoenix Arizona 85072-2034

2. Plant: Palo Verde Nuclear Generating Station

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

3. Work Performed by: Arizona Public Service

Date: 10-07-2002

Sheet: 1 of 2

Unit: 1

Work Order Number 2458786

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: CH; Chemical & Volumn Control System

5. (a) Applicable Construction Code ASME Section III ND, Class 3 1971 Edition, Winter 1973 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Bonnet Nut	n/a	n/a	n/a	1PCHNV471	2002	Replacement	NO

7. Description of Work: Inspection of valve 1PCHNV471 iaw check valve program.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: WO# 2458786 for valve 1PCHNV471 will replace 1 bonnet nut.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: [signature], Consulting Mat. Engineer Date: 10-8-2002
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-7-02 to 10-8-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature]
Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264
National Board, State, Province, and Endorsements

Date: 10-8-02

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JCHNPSV0345
2. Code Class ASME Section III Class 2
3. Item Description: Crosby relief valve
4. N-5 Data Package Number: 1CH13-1
5. W.O. Number: 2460315
6. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Remove valve and test iaw with site program.
9. ☐ ISI Flaw — NDE Method of Flaw Detection: — Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

    Not a pressure boundary failure. Valve is being replaced due to not lifting at required set pressure.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1976 Summer Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO

Initial DMG Date 10-11-02 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☒ YES ☐ NO

Initial DMG Date 10-11-02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 10-11-02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMG Date 10-11-02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1JCHNPSV0345	n/a	~~N61180-00-0002~~	n/a	~~WO 2435047~~
"	N/A	N61180-01-0009	N/A	MR# 692040
				DMG 10-16-02

19. Planner [signature] 10-11-02 Printed Name: David Goodlet
    Signature Date
20. ISI [signature] 10-11-02 Printed Name: R.L. BROWNING
    Signature Date
21. ANII [signature] 10-11-02 Printed Name: R.G. HOLSTROM
    Signature Date

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

As Required by the Provisions of the ASME Code Section XI

Owner: Arizona Public Service Company, et. al.

P. O. Box 53999, Phoenix Arizona 85072-2034

Date: 10-11-2002

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

5801 South Wintersburg Road., Tonopah. Arizona 85354-7529

Unit: 1

Work Order Number 2460315

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: CH: Chemical and Volumn Control System

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Summer 1976 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Valve	Crosby	N61180-01-0009	n/a	1JCHNPSV-0345	1991	Replacement	YES

7. Description of Work: Installed spare valve due to existing valve not passing set pressure test.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

Remarks: Valve 1JCHNPSV0345 was replaced with spare under wo# 2460315 due to failure of set pressure testing.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: Alan Morrow ISI Engineer Date: 10/28/02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-11-02 to 10-28-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R B Fyfrom
Inspectors Signature

Commissions: NB 9685 "N" "P" AZ264
National Board, State, Province, and Endorsements

Date: 10-28-02

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID: 1PDGAL004 RPI 6/26/02
2. Code Class: ASME Secton III Class 3
3. Item Description: DG JACKET WATER MAKE-UP
4. N-5 Data Package Number: 1DW03-1
5. W.O. Number: 2467856
6. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Modify line 1PDGAL004 and replace valve 1JDGAUV001 with a manual operated globe valve 1PDGAV063 per DMWO 220055. Ref. EDC 2002-0097.
9. ☐ ISI Flaw — NDE Method of Flaw Detection: — Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
The valve is being replaced due to operability issues. No failure in the pressure boundary area. See the EDC for more details. RPI 6/26/02
11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 3, 1974 w/Winter 1975
13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 3, 1974 w/Winter 1975
14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda
15. Preservice Inspection Required: ☒ YES ☐ NO
Initial HH Date 6/8/02 — If required, include a step in the W.O. to perform Preservice Inspection
16. ASME Section XI Pressure Test Required: ☒ YES ☐ NO
Initial HH Date 6/8/02 — If required, include a step in the W.O. for ISI & ANII Inspection.
Initial HH Date 6/8/02 — 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial HH Date 6/8/02 — 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
FLANGE	APN 43580509	N/A	1G9465ACA-B	655213
PIPE	APN 43510409	N/A	453904	655213
VALVE	APN 45000258	ASG3-8	N/A	655213
FLANGE	APN 43580509	N/A	AWE-B	688761
All-THREAD (STUDS)	APN 43110014	N/A	N/A	
NUTS	APN 43122013	N/A	N/A	

19. Planner [signature] Signature — 6/8/02 Date — Printed Name: HERBERT L. GREEN
20. ISI [signature] Signature — 6/26/02 Date — Printed Name: R.P. INDAP
21. ANII [signature] Signature — 6-26-02 Date — Printed Name: R.G. HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

   P. O. Box 53999, Phoenix Arizona 85072-2034

2. Plant: Palo Verde Nuclear Generating Station

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

3. Work Performed by: Arizona Public Service

Date: 06/08/2002

Sheet: 1 of 2

Unit: 1

Work Order Number 2467856

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System:

5. (a) Applicable Construction Code ASME Section III ND Class 3 1974 Edition, Winter 1975 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Jacket Water Make-up Valve	Target Rock	3 (2SMH-S3)	N/A	1JDGAUV001	1978	Replacement	YES
Jacket Water Make-up line	N/A	N/A	N/A	1PDGAL004	2002	Replacement	No

7. Description of Work: Modify line 1PDGAL004 and replace valve 1JDGAUV001 with a manual operated globe valve 1PDGAV063 per DMWO 220055.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-1 ☒ 10/4/02

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

Remarks: Modify line 1PDGAL004 and replace valve 1JDGAUV001 with a manual operated globe valve 1PDGAV063 per DMWO 220055. Ref. EDC 2002-0097.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: Alan Morrow Sr ISI Engineer Date: 10/9/02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 6-26-02 to 10-9-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264
National Board, State, Province, and Endorsements

Date: 10-9-02

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PDGBL015 RPP 6/26/02 by [illegible]
2. Code Class— ASME Secton III Class 3
3. Item Description: DG JACKET WATER MAKE-UP
4. N-5 Data Package Number: 1DW03-1
5. W.O. Number: 2467900
6. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Modify line 1PDGBL015 and replace valve 1JDGBUV002 with a manual operated globe valve 1PDGBV064 per DMWO 220055. Ref. EDC 2002-0098.
9. ☐ ISI Flaw — NDE Method of Flaw Detection: — Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
the valve is being replaced due to operability issues. No failure in the (ASME) pressure retaining boundary. See EDC for more details. RPP 6/26/02
11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 3, 1974 w/Winter 1975
13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 3, 1974 w/Winter 1975
14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda
15. Preservice Inspection Required: ~~☒ YES~~ ☒ NO
Initial [illegible] Date 6/8/02 — If required, include a step in the W.O. to perform Preservice Inspection
16. ASME Section XI Pressure Test Required: ☒ YES ☐ NO
Initial [illegible] Date 6/8/02 — If required, include a step in the W.O. for ISI & ANII Inspection.
Initial [illegible] Date 6/8/02 — 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial [illegible] Date 6/8/02 — 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
FLANGE	APN 43580509	N/A	AWE-B	655213
PIPE	APN 43510409	N/A	D852653	655213
VALVE	APN 45000258	ASG3-8	N/A	655213
FLANGE	APN 43580509	N/A	H4887	691842
All-THREAD (STUDS)	APN 43110014	N/A	N/A	688830
Nuts	APN 43122013	N/A	N/A	688830

19. Planner [signature] 6/8/02 (Signature / Date) Printed Name: HERBERT L. GROSS
20. ISI [signature] 6/26/02 (Signature / Date) Printed Name: R.P. INDAP
21. ANII [signature] 6-26-02 (Signature / Date) Printed Name: R.G. HOGSTROM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 10/19/02
P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2467900 (Work Order Number)

3. Work Performed by Arizona Public Service Co. (Name) Type Code Symbol Stamp None
Authorization No. N/A
5801 S. Wintersburg Rd., Tonopah, AZ 85354 (Address) Expiration Date N/A

4. Identification of System DG

5. (a) Applicable Construction Code ASME Sect. III Cl 3 19 74 Edition, W '75 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Kerotest	ASG2-3	N/A	1PDGBV064	'91	Replacement	Yes
Line	N/A	N/A	N/A	1PDGBL015	'02	Replacement	No

7. Description of Work Modify line 1PDGBL015 and replace valve 1JDGBUV002 with 1PDGBV064.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-1 ☑

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks: Modify line 1PDGBL015 and replace valve 1JDGBUV002 with a manual operated globe valve 1PDGBV064 per DMWO 220055. Ref. EDC 2002-0098.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: Allan Morrow Sr ISI Engineer Date: 10/19/02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 6-26-02 to 10-19-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264
National Board, State, Province, and Endorsements

Date: 10-19-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JSIBUV0631 2. Code Class 2
3. Item Description HOT LEG INJECTION B CHECK VALVE LEAKOFF VALVE
4. N-5 Package Number 1SI02-1 5. W.O. Number 2470872
6. Original Construction Code Edition ASME SECT. III, CL 2 1974 EDITION S'75 ADD
7. Original Installation Code Edition ASME SECT. III, CL 2 1974 EDITION W'75 ADD
8. Work Description REPLACE THE PLUG TO CORRECT SEAT LEAKAGE.

9. ☐ ISI Flaw NDE Method of Flaw Detection
Report Number

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
Plug is being replaced to correct seat leakage. No failure of any pressure retaining item.

11. Repair/Replacement Work Organization ARIZONA PUBLIC SERVICE
12. Replacement Item Construction or reconciled Code/Edition ASME SECT. III, CL 2 1974 EDITION ~~W~~S'75 ADD
.3. Repair/Replacement Activity Construction Code/Edition ASME SECT. III, CL 2 1974 EDITION W'75 ADD
14. ASME Section XI Code/Edition ASME SECT. ~~III, CL 2~~ XI 1992 EDITION 92 ADD

15. Preservice Inspection Required. ☐ YES ☑ NO
JD (Initial) 06/11/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO
JD (Initial) 06/11/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.
JD (Initial) 06/11/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
JD (Initial) 06/11/01 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
BONNET NUT	4312108	N/A	0RE0947	MR 692950

19. Planner [signature] (Signature) 6-10-02 (Date) Print Name JAMES I. DAVIS
0. ISI Engineer [signature] (Signature) 6-18-02 (Date) Print Name R.P. INDAP
21. ANII [signature] (Signature) 6-18-02 (Date) Print Name R.G. HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 10/22/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2470872 (Work Order Number)

3. Work Performed by Arizona Public Service (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd., Tonapah, Arizona 85354-7529 (Address) Expiration Date N/A

4. Identification of System Safety Injection

5. (a) Applicable Construction Code ASME Sec III, Cl 2 19 74 Edition, S75 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Fisher Controls	6548723	4186	1JSIBUV0631	1979	Repaired	Yes
Bonnet nut	Fisher Controls	Ht# OE0947	N/A	1JSIBUV0631	2002	Replacement	No

7. Description of Work Replace the valve bonnet nut.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work Order 2470872 replaced the bonnet nut lost during disassembly. There was no failure invovled.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [illegible], Consulting Metallurgical Engineer (Owner or Owner's Designee, Title) Date 10/23/02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-18-02 to 10-23-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] (Inspector's Signature) Commissions NB 9685 "ANIC" Az. 264 (National Board, State, Province, and Endorsements)

Date 10-23-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID S/N - BS 08622 2. Code Class ASME III, CLASS 2

3. Item Description MAIN STEAM SAFETY VALVE; DRESSER - 3707RA-RT25 ; 1290 PSIG

4. N-5 Package Number N/A 5. W.O. Number 2511997

6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Maintenance overhaul of safety valve. Code part replacement from spare valves or from approved purchased spare parts based upon inspection results.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME Sec. III boundary. The Disc replacement is to enhance performance.

11. Repair/Replacement Work Organization NWS Technologies

12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
DISC	00064290	~~ADF99~~ ADG02		PO# 500238999
SPINDLE	45568003		A19374	PO# 33207018

19. Planner [signature] (Signature) 7-10-02 (Date) Print Name David Goodlet

20. ISI Engineer [signature] (Signature) 8/16/02 (Date) Print Name Ramakant Indap

21. ANII [signature] (Signature) 8-16-02 (Date) Print Name Robert Hogstrom

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID S/N - BT-01672 2. Code Class ASME III, CLASS 2

3. Item Description MAIN STEAM SAFETY VALVE; DRESSER - 3707RA-RT25 ; 1315 PSIG

4. N-5 Package Number N/A 5. W.O. Number 2511997

6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Maintenance overhaul of safety valve. Code part replacement from spare valves or from approved purchased spare parts based upon inspection results.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME Sec. III boundary. The Disc replacement is to enhance performance.

11. Repair/Replacement Work Organization NWS Technologies

12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
DISC	00064290	ADG01		PO# 500238999
SPINDLE	45560003		AA37A	PO# 33207018
SPRING ASSM.	00065849	AAC67		FROM BS-08585

19. Planner [signature] (Signature) 7-10-02 (Date) Print Name David Goodlet

20. ISI Engineer [signature] (Signature) 8/16/02 (Date) Print Name Ramakant Indap

21. ANII [signature] (Signature) 8-16-02 (Date) Print Name Robert Hogstrom

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID S/N - BT-01670 2. Code Class ASME III, CLASS 2

3. Item Description MAIN STEAM SAFETY VALVE; DRESSER - 3707RA-RT25 ; 1290 PSIG

4. N-5 Package Number N/A 5. W.O. Number 2511997

6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Maintenance overhaul of safety valve. Code part replacement from spare valves or from approved purchased spare parts based upon inspection results.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME Sec. III boundary. The Disc replacement is to enhance performance.

11. Repair/Replacement Work Organization NWS Technologies

12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
DISC	00064290	ADG00		PO# 500238999

19. Planner [signature] (Signature) 7-18-02 (Date) Print Name David Goodlet

20. ISI Engineer [signature] (Signature) 8/10/02 (Date) Print Name Ramakant Indap

21. ANII [signature] (Signature) 8-16-02 (Date) Print Name Robert Hogstrom

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID S/N - BS08618 2. Code Class ASME III, CLASS 2

3. Item Description MAIN STEAM SAFETY VALVE; DRESSER - 3707RA-RT25 ; 1250 PSIG

4. N-5 Package Number n/a 5. W.O. Number 2511997

6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Maintenance overhaul of safety valve. Code part replacement from spare valves or from approved purchased spare parts based upon inspection results.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME Sec. III boundary. The Disc replacement is to enhance performance.

11. Repair/Replacement Work Organization NWS Technologies

12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
DISC	00064290	AD904		PO# 500238999

19. Planner [signature] (Signature) 7-10-02 (Date) Print Name David Goodlet

20. ISI Engineer [signature] (Signature) 8/16/02 (Date) Print Name Ramakant Indap

21. ANII [signature] (Signature) 8-16-02 (Date) Print Name Robert Hogstrom

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID S/N - BS08634 2. Code Class ASME III, CLASS 2

3. Item Description MAIN STEAM SAFETY VALVE; DRESSER - 3707RA-RT25 ; 1315 PSIG

4. N-5 Package Number N/A 5. W.O. Number 2511997

6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Maintenance overhaul of safety valve. Code part replacement from spare valves or from approved purchased spare parts based upon inspection results.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME Sec. III boundary. The Disc replacement is to enhance performance.

11. Repair/Replacement Work Organization NWS Technologies

12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
DISC	00064290	ADE36		PO# 500238999

19. Planner [signature] (Signature) 7-10-02 (Date) Print Name David Goodlet

20. ISI Engineer [signature] (Signature) 8/16/02 (Date) Print Name Ramakant Indap

21. ANII [signature] (Signature) 8-16-02 (Date) Print Name Robert Hogstrom

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID S/N - BS08608 2. Code Class ASME III, CLASS 2

3. Item Description MAIN STEAM SAFETY VALVE; DRESSER - 3707RA-RT25 ; 1315 PSIG

4. N-5 Package Number N/A 5. W.O. Number 2511997

6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Maintenance overhaul of safety valve. Code part replacement from spare valves or from approved purchased spare parts based upon inspection results.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME Sec. III boundary. The Disc replacement is to enhance performance.

11. Repair/Replacement Work Organization NWS Technologies

12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
DISC	00064290	ADGD3		PO# 500238999

19. Planner [signature] (Signature) 7-10-02 (Date) Print Name David Goodlet

20. ISI Engineer [signature] (Signature) 8-16-02 (Date) Print Name Ramakant Indap

21. ANII [signature] (Signature) 8-16-02 (Date) Print Name Robert Hogstrom

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID S/N - BS08573 2. Code Class ASME III, CLASS 2

3. Item Description MAIN STEAM SAFETY VALVE; DRESSER - 3707RA-RT25 ; 1290 PSIG

4. N-5 Package Number N/A 5. W.O. Number 2511997

6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Maintenance overhaul of safety valve. Code part replacement from spare valves or from approved purchased spare parts based upon inspection results.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME Sec. III boundary. The Disc replacement is to enhance performance.

11. Repair/Replacement Work Organization NWS Technologies

12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
DISC	00064290	ADE37		PO# 500238999
SPINDLE	45560003		A19374	PO# 33207018

19. Planner [signature] (Signature) 7-10-02 (Date) Print Name David Goodlet

20. ISI Engineer [signature] (Signature) 8/16/02 (Date) Print Name Ramakant Indap

21. ANII [signature] (Signature) 8-16-02 (Date) Print Name Robert Hogstrom

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID S/N - BS08587 2. Code Class ASME III, CLASS 2

3. Item Description MAIN STEAM SAFETY VALVE; DRESSER - 3707RA-RT25 ; 1315 PSIG

4. N-5 Package Number N/A 5. W.O. Number 2511997

6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Maintenance overhaul of safety valve. Code part replacement from spare valves or from approved purchased spare parts based upon inspection results.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME Sec. III boundary. The Disc replacement is to enhance performance.

11. Repair/Replacement Work Organization NWS Technologies

12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
DISC	00064290	ADE19		PO# 500238999
SPINDLE	4556-0003		A1937A	PO# 33207018

19. Planner [signature] (Signature) 7-10-02 (Date) Print Name David Goodlet

20. ISI Engineer [signature] (Signature) 8/16/02 (Date) Print Name Ramakant Indap

21. ANII [signature] (Signature) 8-16-02 (Date) Print Name Robert Hogstrom

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 07/10/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 3

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) WO# 2511997 (Work Order Number)

3. Work Performed by NWS Technologies (Name) Type Code Symbol Stamp None

Authorization No. N/A

131 Venture Bldg., Spartanburg, S.C., 29301 (Address) Expiration Date N/A

4. Identification of System SG - Main Steam

5. (a) Applicable Construction Code ASME III Class 2 19 74 Edition, S'75 Addenda, 1711 Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Disc	Dresser	ADG03	N/A	BS-08608	2001	Replacement	Yes
Disc	Dresser	ADG04	N/A	BS-08618	2001	Replacement	Yes
Disc	Dresser	ADE36	N/A	BS-08634	2001	Replacement	Yes
Disc	Dresser	ADG00	N/A	BT-01670	2001	Replacement	Yes
Disc	Dresser	ADG01	N/A	BT-01672	2001	Replacement	Yes
Spindle	Dresser	N/A	N/A	BT-01672	2002	Replacement	No
Spring assembly	Dresser	AAC67	N/A	BT-01672	2002	Replacement	No

7. Description of Work Off-site overhaul and testing of spare main steam safety valves.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) — Date 07/10/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) — Sheet 2 of 3

2. Plant Palo Verde Nuclear Generating Station (Name) — Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) — WO# 2511997 (Work Order Number)

3. Work Performed by NWS Technologies (Name) — Type Code Symbol Stamp None

Authorization No. N/A

131 Venture Bldg., Spartanburg, S.C., 29301 (Address) — Expiration Date N/A

4. Identification of System SG - Main Steam

5. (a) Applicable Construction Code ASME III Class 2 19 74 Edition, S'75 Addenda, 1711 Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Disc	Dresser	ADG02	N/A	BS-08622	2001	Replacement	Yes
Spindle	Dresser	N/A	N/A	BS-08622	2002	Replacement	No
Disc	Dresser	ADE37	N/A	BS-08573	2001	Replacement	Yes
Spindle	Dresser	N/A	N/A	BS-08573	2002	Replacement	No
Disc	Dresser	ADE19	N/A	BS-08587	2001	Replacement	Yes
Spindle	Dresser	N/A	N/A	BS-08587	2002	Replacement	No

7. Description of Work Off-site overhaul and testing of spare main steam safety valves.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work order # 2511997 for disassembly, inspection, reconditioning and testing of Main Steam safety valves. A new designed Disc will be installed to enhance performance. Other parts will be replaced as needed based upon inspection. These parts will be obtained from other spare valves or from approved purchased spare parts.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Alan Morrow ISI Engineer (Owner or Owner's Designee, Title) Date 9/25/02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-6-02 to 10-9-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB 9685 'ANIC' Az 264 (National Board, State, Province, and Endorsements)

Date 10-9-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JRCEPSV0203 2. Code Class ASME III, CLASS 1

3. Item Description PRESSURIZER SAFETY VALVE; DRESSER 31709N; 2460 PSIG

4. N-5 Package Number 1RC03-2 5. W.O. Number 2511998

6. Original Construction Code Edition ASME III CLASS 1, 1974 EDITION, SUMMER 1975 ADDENDA

7. Original Installation Code Edition ASME III CLASS 1, 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Off site reconditioning and testing of spare valve in preparation for replacement of existing installed valve. Parts will be replaced based upon inspection.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME Sec. III boundary.

11. Repair/Replacement Work Organization NWS Technologies

12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 1, 1974 ED., S'75 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 1, 1974 ED., W'75 ADD.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

DMG (Initial) 06/03/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 06/03/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 06/03/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1JRCEPSV0203	N/A	BY-14538	N/A	N/A
Disc	4502-0245	ABK32	L3181	PO 33207018

19. Planner [signature] (Signature) 6-3-02 (Date) Print Name David Goodlet

20. ISI Engineer [signature] (Signature) 6-4-02 (Date) Print Name Ramakant Indap

21. ANII [signature] (Signature) 8-7-02 (Date) Print Name Robert Hogstrom

PV-E0093 Ver. 6

73DP-9ZZ17

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 07/10/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2511998 (Work Order Number)

3. Work Performed by PVNGS Maintenance Dept. (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd., Tonopah, Az. 85354-7529 (Address) Expiration Date N/A

4. Identification of System RC - Reactor Coolant system

5. (a) Applicable Construction Code ASME III Class 1 19 74 Edition, S'75 Addenda, 1711 Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Disc	Dresser	ABK32	N/A	BY-14538	2002	Replacement	No

7. Description of Work Off-site overhaul and testing of spare pressurizer safety valves.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work order # 2511998, for off-site reconditioning and testing of 4 spare pressurizer safety valves. Replacement parts will be obtained from approved spares.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Allen Monour ISI Engineer (Owner or Owner's Designee, Title) Date 9/25/02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-7-02 to 10-9-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] (Inspector's Signature) Commissions NB 9685 'ANIC' Az 264 (National Board, State, Province, and Endorsements)

Date 10-9-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1MRCEA13 2. Code Class ASME Section III, Class 1

3. Item Description REACTOR COOLANT SYSTEM PRESSURIZER HEATER

4. N-5 Package Number 2RC01-1A 5. W.O. Number 2514365

6. Original Construction Code Edition ASME Section III, Class 1, 1971 Edition, Winter 1973 Addenda

7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda

8. Work Description Replace Defective Pressurizer Heater, Make Fillet Weld between Pressurizer Nozzle and new Heater Sleeve.

9. ☐ ISI Flaw NDE Method of Flaw Detection N/A

Report Number N/A

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
Electrical Portion of Heater Failed, No Failure on ASME Pressure Retaining Boundary.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition ASME Sec.III Cl.1/'71 Edition '73 Winter Addenda

13. Repair/Replacement Activity Construction Code/Edition ASME Sec. III, Class 1,/'74 Edition, '75 Winter Addenda

14. ASME Section XI Code/Edition ASME Section XI, 1992 Edition, 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☑ NO

N/A (Initial) 5/10/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

N/A (Initial) 5/10/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

KVS (Initial) 5/10/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

KVS (Initial) 5/10/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
Heater	44450049	46J	N/A	691125

19. Planner [signature] (Signature) 5/16/2002 (Date) Print Name Karl V. Savage

ISI Engineer [signature] (Signature) 5/16/02 (Date) Print Name Ramakant P. Indap

21. ANII [signature] (Signature) 5-21-02 (Date) Print Name Robert G. Hogstrom

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. — Date: 06/21/2002

   P. O. Box 53999, Phoenix Arizona 85072-2034 — Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station — Unit: 1

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 — Work Order Number 2514365

3. Work Performed by: Arizona Public Service — Type of Code Stamp None

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: RC, ASME Section III, Class 1

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1971 Edition, Winter 1973 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Heater	Watlow	N/A	N/A	1MRCEA13	'02	Replacement	NO

7. Description of Work: Replace Defective Pressurizer Heater, Make Fillet Weld between PZR Nozzle and Htr.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

Remarks: Work Order# 2514365 To Replace Pressurizer Back-Up Heater 1MRCEA13.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: [illegible], Consulting Metallurgical Engineer Date: 10-18-02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 5-21-02 to 10-18-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible]
Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264
National Board, State, Province, and Endorsements

Date: 10-18-02

ASME SECTION XI - REPAIR/REPLACEMENT

Page ___ of ___

1. Component ID 1PCHNV816 2. Code Class ASME III CLASS 2

3. Item Description 1-1/2" BORG WARNER "Y" TYPE GLOBE VALVE

4. N-5 Package Number 1CH14-3 5. W.O. Number 2540753

6. Original Construction Code Edition 1974 EDITION, WINTER 1975 ADDENDA

7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA

8. Work Description Disassemble valve , inspect for cause of seat leakage and rework as necessary. Remove and replace bonnet seal weld for access for inspection of valve internals.

9. ☐ ISI Flaw NDE Method of Flaw Detection ___
Report Number ___

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
No failure in the ASME Sec. III boundary. The existing bonnet seal weld needs to be removed for access to inspect valve internals.

11. Repair/Replacement Work Organization PVNGS maintenance department.

12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 Ed., W'75 Add.

13. Repair/Replacement Activity Construction Code/Edition ASME III, CLASS 2, 1974 Ed., W'75 Add.

14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☑ NO

DMG (Initial) 08/26/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

DMG (Initial) 08/26/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DMG (Initial) 08/26/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DMG (Initial) 08/26/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
Seal Weld	n/a	n/a	n/a	n/a

19. Planner [signature] (Signature) 8-26-02 (Date) Print Name David Goodlet

20. ISI Engineer [signature] (Signature) 8/29/02 (Date) Print Name Ramakant Indap

21. ANII [signature] (Signature) 8-29-02 (Date) Print Name Robert Hogstrom

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) — Date 08/26/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) — Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) — Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) — 2540753 (Work Order Number)

3. Work Performed by PVNGS Maintenance Department (Name) — Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd., Tonopah, Az. 85354-7529 (Address) — Expiration Date N/A

4. Identification of System CH - Chemical and Volumn Control

5. (a) Applicable Construction Code ASME III Class 2 19 74 Edition, W'75 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Bonnet Seal Weld	n/a	n/a	n/a	1PCHNV816	n/a	Replacement	No

7. Description of Work Remove bonnet seal weld to allow for inspection and rework of valve internals.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks WO# 2540753 will remove the bonnet seal weld to allow access to 1-1/2" globe valve 1PCHNV816 internals for inspection and rework to correct seat leakage.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed R.L. Brown RLB ISI Eng (Owner or Owner's Designee, Title) Date 10/10/02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-29-02 to 10-10-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB 9685 "ANIC" Az 264 (National Board, State, Province, and Endorsements)

Date 10-10-02

Station 9545

ASME SECTION XI - REPAIR/REPLACEMENT

Component ID 1JRCEPV0100E 2. Code Class ASME Section III Class 1

3. Item Description Pressurizer Spray Control Valve

4. N-5 Package Number 1RC01-1 5. W.O. Number 2556794

6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda

7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda

8. Work Description Replace the plug/stem assembly during valve repack.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____ Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
No failure of ASME III pressure boundary. The stem needs to be replaced. Replacing the plug/stem assembly is an ALARA effort.

11. Repair/Replacement Work Organization Arizona Public Service

12. Replacement Item Construction or reconciled Code/Edition ASME III, Class 1, 1974 Edition, W 1975 Addenda

13. Repair/Replacement Activity Construction Code/Edition ASME III, Class 1, 1974 Edition, W 1975 Addenda

14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required ☐ YES ☑ NO

BV (Initial) 09/26/02 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☐ YES ☑ NO

BV (Initial) 09/26/02 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

BV (Initial) 09/26/02 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

BV (Initial) 09/26/02 (Date) 18. Include a step in the W.O. to record below all applicable numbers for replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
1JRCEPV0100E Plug	N/A	SB3657-3	SB3657-3	2556794

19. Planner Barbara Vidal (Signature) 10/3/02 (Date) Print Name Barbara Vidal

20. ISI Engineer Alan Morrow (Signature) 10/3/02 (Date) Print Name Alan Morrow

21. ANII [signature] (Signature) 10-3-02 (Date) Print Name Robert G. Hoestron

PV-E0093 Ver. 7

73DP-9ZZ17

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 09/26/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2556794 (Work Order Number)

3. Work Performed by Arizona Public Service (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd Tonopah AZ 85354 (Address) Expiration Date N/A

4. Identification of System RC - Reactor Coolant System

5. (a) Applicable Construction Code ASME Sec III Class 1 19 74 Edition, '75 W Addenda, W '75 Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Press Cont Vlv Plug	Fisher	SB3657-3	N/A	1JRCEPV100E	1995	Replacement	Yes

7. Description of Work

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks No failure of ASME III pressure boundary. The stem needs to be replaced. Replacing the plug/stem assembly is an ALARA effort. WO# 2556794.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed [illegible], Consulting Metallurgical Engineer (Owner or Owner's Designee, Title) Date 10-23-02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-3-02 to 10-23-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible] (Inspector's Signature) Commissions NB 9685 "ANIC" Az. 264 (National Board, State, Province, and Endorsements)

Date 10-23-02

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 1PC005H015 2. Code Class ASME Section III Subsection NF Class 3
3. Item Description: 1/4 KIP Snubber
4. N-5 Data Package Number: 1PC02-1 5. W.O. Number: 2558858
6. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Replace Snubber
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a failure. Changed for precautionary measure. This is a like-for-like replacement.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 3, 1974 Edition, Summer 1976 Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec III NF Cl 3, 1974 Edition, Winter 1975 Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
15. Preservice Inspection Required: ☒ YES ☐ NO

Initial [illegible] Date 10-15-02 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial [illegible] Date 10-15-02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 10-15-02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial [illegible] Date 10-15-02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1PC005H015	1801104-05	14461	n/a	MR 688817

19. Planner [illegible] 10-15-02 Printed Name: David Goodlet
Signature Date

20. ISI [illegible] 10-16-02 Printed Name: R. P. INDAP
Signature Date

21. ANII [illegible] 10-16-02 Printed Name: R.G. HOLGSTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. Date: 10/10/2002

   P. O. Box 53999, Phoenix Arizona 85072-2034 Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station Unit: 1

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2558858

3. Work Performed by: Arizona Public Service Type of Code Stamp None

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: PC: Pool Cooling

5. (a) Applicable Construction Code ASME Section III NF, Class 3 1974 Edition, Summer 1976 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
1/4 Kip Snubber	Pacific Scientific	14461	n/a	1PC005H015	1980	Replacement	YES

7. Description of Work: Snubber replacement; no welding.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

Remarks: WO# 2558858 removed snubber 1PC005H015, s/n 38087 and replaced with s/n 14461.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: Alan Morrow Sr IST Engineer Date: 10/22/02

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-16-02 to 10-22-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264

National Board, State, Province, and Endorsements

Date: 10-22-02

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1SI240H003
2. Code Class ASME Section III Class 1
3. Item Description: Restraint on Shutdown Cooling Loop 1 Piping
4. N-5 Data Package Number: 1SI07-5
5. W.O. Number: 2558933
6. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Replace the spherical bearing and pin with components from the shock arrestor originally installed at 1SI159H003B, which was removed from service by WO 2325130.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO

Initial N/A J.D Date 10-19-02 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial N/A J.D Date 10-19-02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 10-19-02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D. Date 10-19-02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bearing and pin assembly	N/A	13238	N/A	WO 2325130

19. Planner [signature] 10-19-02 Printed Name: James I. Davis
    Signature Date

20. ISI Alan Morrow 10/19/02 Printed Name: Alan Morrow
    Signature Date

21. ANII [signature] 10-19-02 Printed Name: R.G. Houstron
    Signature Date

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 10/21/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2558933 (Work Order Number)

3. Work Performed by Arizona Public Service (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd., Tonapah, Arizona 85354-7529 (Address) Expiration Date N/A

4. Identification of System Safety Injection

5. (a) Applicable Construction Code ASME Sect III, Cl 1 19 74 Edition, W75 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Strut	Corner & Lada	1SI240H005	N/A	1SI240H003	1983	Repaired	Yes
Bearing/Pin assy.	Pacific Scientific	13238	N/A	1SI240H003	1981	Replacement	No

7. Description of Work Replace the bearing and pin assembly in the strut paddle for 1SI240H003.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Work Order 2558933 replaced the bearing and pin assembly. These components were obtained from a shock arrestor that was removed from 1SI159H003B by work order 2325130 and had been tagged and placed in an APS storage location. The serial numbers were verified with the original N-5 Data.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Alan Morrow Sr ISI Engineer (Owner or Owner's Designee, Title) Date 10/22/02

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-18-02 to 10-22-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB 9685 "AWC" Az 264
National Board, State, Province, and Endorsements

Date 10-22-02

ASME SECTION XI – REPAIR / REPLACEMENT

RPZ 10-25-02

Page 1 of X 2

1. Component ID 1PRCEL051
2. Code Class ASME Section III Class 1
3. Item Description: Shut Down Cooling Line
4. N-5 Data Package Number: 1RC-01
5. W.O. Number: 2560340
6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Blend vibration induced wear/gouges on Shut Down Cooling (SDC) line 1PRCEL051 upstream of valve SIV651 per DFWO 2560318 instructions.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
    This fretting damage is caused by the line vibration which resulted in relative movement between the pipe and the metal insulation .Preliminary inspection indicates no violation of design min. wall.The vibration is being addressed under CRDR#2557486
11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition, Summer 1975 Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO

Initial N/A Date _____ If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial N/A Date _____ If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 10/15/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial N/A Date _____ 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.

19. Planner [signature] Signature 10/15/02 Date Printed Name: Herbert Green

20. ISI [signature] Signature 10/15/02 Date Printed Name: Robert Browning

21. ANII [signature] Signature 10-15-02 Date Printed Name: R.G. Hogstrom

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PRCEL070
2. Code Class ASME Section III Class 1
3. Item Description: RC Loop #2 Drain line
4. N-5 Data Package Number: 1RC-01
5. W.O. Number: 2560340
6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Blend vibration induced wear/gouges on RC Loop #2 Drain line line 1PRCEL070 upstream of valve SIV651 per DFWO 2560318 instructions.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
    This fretting damage is caused by the line vibration which resulted in relative movement between the pipe and the metal insulation .Preliminary inspection indicates no violation of design min. wall.The vibration is being addressed under CRDR#2557486
11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition, Summer 1975 Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO

Initial N/A Date _____ If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial N/A Date _____ If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 10/24/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial N/A Date _____ 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.

19. Planner [signature] 10/24/02 Printed Name: Herbert L. Green
    Signature Date

20. ISI Alan Morrow 10/24/02 Printed Name: Alan Morrow
    Signature Date

21. ANII [signature] 10-24-02 Printed Name: R.G. Hoostron
    Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

   P. O. Box 53999, Phoenix Arizona 85072-2034

   Date: 10/15/2002

   Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

   Unit: 1

   Work Order Number 2560340

3. Work Performed by: Arizona Public Service

   Type of Code Stamp None

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: Shut Down Cooling line 1PRCEL051 and RC drain line 1PRCEL070

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1975 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Shut Down Cooling	Pullman Power	N5254 (S002)	N/A	1PRCEL051	1977	Repaired	YES
Shut Down Cooling	Pullman Power	N5250 (S003)	N/A	1PRCEL051	1979	Repaired	YES
RC Loop #2 Drain Line	N/A	N/A	N/A	1PRCEL070	1981	Repaired	No

7. Description of Work: Blend vibration induced wear/gouges on lines 1PRCEL051 and 1PRCEL070 upstream of SIV651 per DFWO 2560318 instructions.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: work order 2560340

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: RPMdap, Consulting Metallurgical Engineer Date: 10-25-02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-15-02 to 10-25-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

B D [illegible]
Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264
National Board, State, Province, and Endorsements

Date: 10-25-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1MEWBE01 2. Code Class ASME Section III Class 3

3. Item Description ESSENTIAL COOLING WATER HEAT EXCHANGER "B"

4. N-5 Package Number 1EW02-1 5. W.O. Number 2560355

6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda.

7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda.

8. Work Description WELD BUILD-UP MATERIAL REPAIR OF DEFECTS IDENTIFIED IN THE TUBE (Spray Pond) SIDE OF THE HEAT EXCHANGER.

9. ☐ ISI Flaw NDE Method of Flaw Detection _____

Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.

WELD REPAIR REQUIRED AFTER INSPECTION OF THE METAL SURFACES PRIOR TO PERIODIC COATING, THERE WAS NO FAILURE OF THE CODE PRESSURE BOUNDRY.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition Sec. III Cl.3/'74 Edition '75 Winter Addenda

13. Repair/Replacement Activity Construction Code/Edition Sec. III Cl.3/'74 Edition '75 Winter Addenda

14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☑ NO

KJS (Initial) 10/15/2002 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO

KJS (Initial) 10/15/2002 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

KJS (Initial) 10/15/2002 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

N/A (Initial) 10/15/2002 (Date) 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1MEWBE01	N/A	N/A	N/A	N/A

19. Planner [signature] (Signature) 10/15/02 (Date) Print Name KARL V. SAVAGE

20. ISI Engineer [signature] (Signature) 10/16/02 (Date) Print Name ~~RAMAKANT P. INDAP~~ Alan Morrow 10/16/02

21. ANII [signature] (Signature) 10-16-02 (Date) Print Name ROBERT G. HOGSTROM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. (Name) Date 10/15/02

P.O. Box 53999, Phoenix, Arizona 85072-2034 (Address) Sheet _____ of _____

2. Plant Palo Verde Nuclear Generating Station (Name) Unit 1

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2560355 (Work Order Number)

3. Work Performed by Arizona Public Service Company (Name) Type Code Symbol Stamp None

Authorization No. N/A

5801 S.Wintersburg Rd.,Tonopah Arizona,85354-7529 (Address) Expiration Date N/A

4. Identification of System EW, ASME Section III, Class 3

5. (a) Applicable Construction Code Section III, Class 3 19 74 Edition, W/'75 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
1B EW Ht. Exch.	Struther Wells Corp.	17606329132	14441	1MEWBE01	'78	Repaired	Yes

7. Description of Work Weld Build-up, Material Repair.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-1 ☑

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8 1/2 x 11 in., (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

9. Remarks Pressure Test per N-416-1, Performed Weld Repair/Build-up of Eroded areas designated by Engineering in the Tube (Spray Pond) Side of the Heat Exchanger.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair (repair or replacement) conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date N/A

Signed Alan Monow ISI Engineer Date 10/19/02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-16-02 to 10-21-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB 9685 "N" "I" AZ264
National Board, State, Province, and Endorsements

Date 10-21-02

ASME SECTION XI – REPAIR / REPLACEMENT

Page of

1. Component ID 1JCHEPSV0345 2. Code Class ASME Section III Class 2
3. Item Description: Pressure Safety Valve Nozzle and Disc Insert
4. N-5 Data Package Number: 1CH13-1 5. W.O. Number: 2561273
6. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
7. Original Installation Code Edition: 1971 Edition, Winter 1973 Addenda
8. Work Description: Rework valve as required to address set point verification failure.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
~~Rework the flange to existing configurations at PVNGS and~~
✓ return to stores as a spare. No failure involved. (ASME boundary) RPindap 10-28-02
└ Replace nozzle & disc insert to reestablish set point and
RPindap 10-28-02

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1976 Summer Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO

Initial Alex Date 10/25/02 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial Alex Date 10/25/02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Alex Date 10/25/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Alex Date 10/25/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
PSV Nozzle	APN 45070039	92031-40-0015		MR 694856
PSV Disc Insert	APN 45630021	92.032-34-0010		MR 694856

19. Planner DW Shaffer (Signature) 10/25/02 (Date) Printed Name: David W. Shaffer

20. ISI Alan Morrow (Signature) 10/27/02 (Date) Printed Name: Alan Morrow

1. ANII RL Hogstron (Signature) 10-28-02 (Date) Printed Name: RL Hogstron

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

P. O. Box 53999, Phoenix Arizona 85072-2034

Date: 10/31/2002

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

Unit: 1

Work Order Number 2561273

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: (CH) CHEMICAL AND VOLUME CONTROL

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Summer 1976 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Nozzle	Crosby	N92031-40-0015	N/A	UTC #355525	1978	Replacement	NO
Disc Insert	Crosby	N92032-34-0010	N/A	UTC #355525	1978	Replacement	NO
Valve	Crosby	N61180-00-0008	N/A	UTC #355525	1978	Repaired	YES

7. Description of Work: Disasembled removed valve for inspection and troublshooting to correct identified deficiencies causing set point verification failure. Inspection determined the replacement of the Nozzel and Disc Insert was required.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐

Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

). Remarks: Work Order #2561273:
A spare Crosby Pressure Safety Valve (PSV) was repaired under this work order. A unique record in the Site Work Management System (SWMS) for this valve is known as a "Physical Item" and is identified by a Unit Tracking Code (UTC). This UTC number is entered as the "Other Identification" on the front of this form.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: Alan Monow FSI Engineer Date: 10/31/02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-28-02 to 10-31-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264
National Board, State, Province, and Endorsements

Date: 10-31-02

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSGEHV0044 2. Code Class ASME Section III Class 2
3. Item Description: ANCHOR/DARLING 6"-900# PRESSURE SEAL GATE VALVE
4. N-5 Data Package Number: 1SG02-4 5. W.O. Number: 2562551
6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Replace valve bonnet to correct leak from packing
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

No failure in the ASME Sec. III boundary.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO

Initial DMG Date 10-26-02 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required: ☒ YES ☐ NO

Initial DMG Date 10-26-02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 10-26-02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMG Date 10-26-02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet		869G-1	K171	MR 692949

19. Planner [signature] 10-26-02 Printed Name: David Goodlet
Signature Date

20. ISI [signature] 10/26/02 Printed Name: R.L. BROWNING
Signature Date

21. ANII [signature] 10-26-02 Printed Name: RG HOGSTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

   P. O. Box 53999, Phoenix Arizona 85072-2034

2. Plant: Palo Verde Nuclear Generating Station

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

3. Work Performed by: Arizona Public Service

Date: 10-26-2002

Sheet: 1 of 2

Unit: 1

Work Order Number 2562551

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG: Main Steam

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Summer 1975 Addenda, _____ Code Case

   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Bonnet	Anchor/Darling	869G-1	n/a	1JSGEHV-44	2002	Replacement	NO

7. Description of Work: Replace bonnet to correct leakage from packing.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-1 ☐

   Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: WO# 2562551 for valve 1JSGEHV0044. The valve bonnet was replaced due to leakage from packing.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: [illegible], Consulting Metallurgical Engineer Date: 10-29-02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE 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 Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-26-02 to 10-29-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[illegible]
Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264
National Board, State, Province, and Endorsements

Date: 10-29-02