10 CFR 50.55a

Palo Verde Nuclear Generating Station

Thomas N. Weber
Department Leader
Regulatory Affairs

Tel. 623-393-5764
Fax 623-393-5442

Mail Station 7636
PO Box 52034
Phoenix, Arizona 85072-2034

102-05759-TNW/RJR
October 18, 2007

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
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 – Thirteenth Refueling Outage
Inservice Inspection Summary Report

Pursuant to 10 CFR 50.55a and IWA-6230 and IWA-6240 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 submits the PVNGS Unit 1 Inservice Inspection Report for the thirteenth refueling outage, provided in the Enclosure. APS completed Unit 1's Refueling Outage on July 19, 2007.

This letter does not make any commitments to the NRC. If you have any questions or require additional information, please contact Glenn A. Michael at (623) 393-5750.

Sincerely,

Thomas N. Weber

TNW/GAM/RJR/gt

Enclosure

cc: E. E. Collins, Jr. NRC Region IV Regional Administrator
M. T. Markley NRC NRR Project Manager
G. G. Warnick NRC Senior Resident Inspector for PVNGS

A047

NRR

PALO VERDE NUCLEAR GENERATING STATION

UNIT 1

INSERVICE INSPECTION REPORT

THIRTEENTH REFUELING OUTAGE

ARIZONA PUBLIC SERVICE

5801 S. WINTERSBURG ROAD

TONOPAH, AZ 85354

PREPARED BY: _____ DATE: 10/13/07

REVIEWED BY: _____ DATE: 10/14/07
(All except B15.XX and C7.XX Pressure Testing)

REVIEWED BY: _____ DATE: 10/15/07
(B15.XX and C7.XX Pressure Testing)

APPROVED BY: _____ DATE: 10/15/07

COMMERCIAL SERVICE DATE: 01/28/1986
REPORT DATE: 10/13/2006

TABLE OF CONTENTS

SECTION	PAGE
1.0 Introduction	3
2.0 Examination Summary	3
3.0 Examination Techniques	4
4.0 Accessibility	4
5.0 Personnel	4
6.0 Equipment and Materials	4
7.0 Repairs and Replacements	4

APPENDICES

APPENDIX

APPENDIX A - Inservice Inspection Summary Report

APPENDIX B - Inservice Inspection Code Limitations

APPENDIX C - Form NIS-1

APPENDIX D - Forms NIS-2

UNIT 1 INSERVICE INSPECTION REPORT

1.0 Introduction

This report is a summary of the examinations performed during the thirteenth 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 second refueling for Interval 2, Period 3 which was conducted from May 19, 2007 through July 19, 2007. 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 summarize the examination results for each of the following categories:

1. ASME Section XI, Class 1 and 2 pressure retaining components and their supports.
2. Risk Informed – Inservice Inspection in accordance with EPRI TR-1006837 (Relief Request 32)
3. Risk Informed – Break Exclusion Region in accordance with PVNGS UFSAR Section 6.6.1.

This report is a summary of the ISI examinations performed during the Second Interval. This report is a summary of the Period 1, 2 and 3 examinations performed through the thirteenth refueling outage. All of the examination report numbers listed in Appendix A for the thirteenth refueling and examinations performed since the last Summary Report are in bold type.

2.0 Examination Summary

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

2.2 Various recordable indications were detected during the performance of examinations. These indications were recorded, evaluated found to be acceptable and are maintained on file.

2.3 It was identified that bare metal examinations of non-resistant bolting was not performed with insulation removed during the first and second periods. Corrective action documents (CRDR's) were initiated to address the first and second period examinations. Operability determinations were performed pending completion of the examinations during the third period and the examinations were scheduled. During the third period, examinations were performed and indications of leakage were identified at several locations. The bolting was removed for further examination and evaluation in accordance with relief request 12. All conditions were found to be acceptable.

2.4 The remainder of the second interval examinations are scheduled for completion during 1R14, this is within the one year extension allowed by ASME Section XI IWA-2430(d)

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
	ECT	Eddy Current

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, Mac Gill, Thomas, Inc. (LMT), Structural Integrity, Westinghouse 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

7.1 No repairs or replacement were performed as a result of Section XI ISI examinations performed during U1R13. The applicable records and reports for the specific maintenance repair and replacements performed after the last summary report are maintained on file at Palo Verde. The applicable NIS-2 forms are attached to Appendix D and are submitted for review with this report.

7.2 During an Augmented visual examination, a broken load collar / coupling was identified on hangers 3SG042H011 and 3SG045H011. Scope was expanded and the damaged load coupling was replaced under work order 3021090 and 3022219.

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 (RI-BER) B - ASME Class 1 systems C - ASME Class 2 systems
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, all examinations are acceptable unless stated otherwise.

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
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
AHE	47	MS SG1	One	13	13	47-1	99-1361	99-1280		
5.51 &						47-2	99-1360	99-1280		
5.52						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		
	48	MS SG1 East	Two	12	12	48-01	UT-04-006	MT-04-009		
						48-02	UT-04-007	MT-04-010		
						48-04	UT-04-009	MT-04-012		
						48-08	UT-04-011	MT-04-014		
						48-12	UT-04-013	MT-04-016		
						48-14A	UT-04-014	MT-04-017		
						48-16	UT-04-016	MT-04-019		
						48-20	UT-04-018	MT-04-021		
						48-24	UT-04-020	MT-04-023		No credit
						48-25	UT-04-021	MT-04-024		
						48-28	UT-04-023	MT-04-026		
						48-29	UT-04-024	MT-04-027		
						48-30	UT-04-025	MT-04-028		
	50	MS (West) SG	Three	5	5	50-16	UT-05-174			*** Risk Informed BER per EPRI**
						50-20	UT-05-176			**TR-1006834 implemented in**
						50-24	UT-05-178			**Period 3, replacing AHE**
						50-25	UT-05-179			**requirements**
						50-28	UT-05-181			
	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		
			Two	14	14	51-26	UT-04-028	MT-04-031		
						51-27	UT-04-029	MT-04-032		
						51-28	UT-04-030	MT-04-033		
						51-29	UT-04-031	MT-04-034		
						51-30	UT-04-032	MT-04-035		
						51-31	UT-04-033	MT-04-036		
						51-32	UT-04-034	MT-04-037		
						51-33	UT-04-035	MT-04-038		
						51-34	UT-04-036	MT-04-039		
						51-37	UT-04-037	MT-04-040		
						51-49	UT-04-038	MT-04-041		
						51-86	UT-04-039	MT-04-042		
						51-87	UT-04-040	MT-04-043		
						51-88	UT-04-041	MT-04-044		
	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		

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						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 UT-02-278	MT-02-187		
						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		
	57	Feedwater SG 2	Three	2	2	57-1	UT-05-187			*
						57-3	UT-05-188			
	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		
			Two	5	5	60-02	UT-04-067	MT-04-066		
						60-03	UT-04-068	MT-04-067		
						60-04	UT-04-069	MT-04-068		
						60-05	UT-04-070	MT-04-069		
						60-06	UT-04-071	MT-04-070		
	61	Downcomer SG1	Two	5	5	61-02	UT-04-072	MT-04-071		
						61-03	UT-04-073	MT-04-072		
						61-04	UT-04-074	MT-04-073		
						61-05	UT-04-075	MT-04-074		
						61-06	UT-04-076	MT-04-075		
			Three	4	4	61-14	UT-05-189			*
						61-15	UT-05-190			
						61-16	UT-05-191			
						61-17	UT-05-192			
	66	Blowdown SG1	One	9	9	66-1	99-1469	99-1416		
						66-2	99-1470	99-1416		
						66-3	99-1471	99-1416		
						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		
			Two	6	6	66-10	UT-04-080	MT-04-080		
						66-11	UT-04-081	MT-04-081		
						66-12	UT-04-082	MT-04-082		
						66-13	UT-04-083	MT-04-083		
						66-14	UT-04-084	MT-04-084		

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						66-15	UT-04-085	MT-04-085		
AHE	51	Atmos Dump SG1	Two	21	21	51-101	UT-04-042	MT-04-045		
5.61 &						51-102	UT-04-043	MT-04-046		
5.62						51-103	UT-04-044	MT-04-047		
						51-104	UT-04-045	MT-04-048		
						51-105	UT-04-046	MT-04-049		
						51-106	UT-04-047	MT-04-050		
						51-107	UT-04-048	MT-04-051		
						51-108	UT-04-049	MT-04-052		
						51-109	UT-04-050	MT-04-053		
						51-110	UT-04-051	MT-04-054		
						51-111	UT-04-052	MT-04-055		
						51-112	UT-04-053	MT-04-056		
						51-113	UT-04-054	MT-04-057		
						51-114	UT-04-055	MT-04-058		
						51-115	UT-04-056	MT-04-059		
						51-116	UT-04-057	MT-04-060		
						51-117	UT-04-058	MT-04-061		
						51-118	UT-04-059	MT-04-062		
						51-119	UT-04-060	MT-04-063		
						51-120	UT-04-061	MT-04-064		
						51-121	UT-04-062	MT-04-065		
AHE	47	MS SG1 West	One	7	6	47-3	99-1359	99-1280		
5.81 &						47-7	99-1358	99-1280		
5.82						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		
			Two	0	1	47-27	UT-04-005	MT-04-008		
	48	MS SG1 East	Two	9	9	48-03	UT-04-008	MT-04-011		
						48-07	UT-04-010	MT-04-013		
						48-11	UT-04-012	MT-04-015		
						48-15	UT-04-015	MT-04-018		
						48-19	UT-04-017	MT-04-020		
						48-23	UT-04-019	MT-04-022		
						48-27	UT-04-022	MT-04-025		
						48-34	UT-04-026	MT-04-029		
						48-35	UT-04-027	MT-04-030		Aug, Limited UT exam
	50	MS (West) SG	Three	4	4	50-15	UT-05-173			*
						50-19	UT-05-175			
						50-23	UT-05-177			
						50-27	UT-05-180			

ASME Class 1

B 1.22	2	Closure Head	One	1	1	2-4	99-1466 99-1479 99-1481 99-1483	99-1458		Accessible Areas RR#14
B 1.30	1	Reactor Vessel	One	50%	50%	1-14	*			Examined 0°-180°
B 1.40	2	Closure Head	One	33%	33%	2-1	99-1465 99-1478 99-1480 99-1482	99-1458		Examined 0°-120° *Separate Report by Wesdyne. Exam completed in 1R8
			Two	33%	33%	2-1	UT-04-107	MT-04-001		Examined 120-240°
			Three	**33%**	**34%**	**2-1**	**07-UT-1001**	**07-MT-1001**		**Examined 240-360°**
B 2.11 & 2.12	5	Pressurizer	One	66%	66%	5-2	99-1448 99-1450 99-1452 99-1454			Examined 0°-240°

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						5-3	99-1449 99-1451 99-1453 99-1455			1' long seam for 5-2
			Two	66%	66%	5-6	UT-02-243 UT-02-244 UT-02-245 UT-02-246			1' long seam for 5-8
						5-8	UT-02-238 UT-02-240 UT-02-241 UT-02-242			Examined 0°-240°
B 2.31	3	SG 1	One	33%	33%	3-5	01-1200 01-1211 01-1214 01-1234			Examined 0°-120°
			Two	33%	33%	3-5	UT-02-139 UT-02-140 UT-02-147 UT-02-149			Examined 120°-240°
			Three	0	0	3-108	UT-05-102			PSE
	4	SG 2	Three	0	0	4-108	UT-05-140			PSE
B 2.32	3	SG 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 01-1235			
B 2.40	3	SG 1	One	50%	50%	3-6	01-1201 01-1210 01-1215 01-1235			Examined 0°-180°
			Three	0	0	3-106	UT-05-101			PSE
						3-107	UT-05-100			PSE
	4	SG 2	Two	50%	50%	4-6	UT-02-260 UT-02-280 UT-02-281 UT-02-282			Examined 180°-360°
			Three	0	0	4-106	UT-05-138			PSE
						4-107	UT-05-139			PSE
B 3.90	1	Reactor Vessel	One	2	2	1-15	*			*Separate Report
						1-18	*			by Wesdyne. Exam
B 3.100	1	Reactor Vessel	One	2	2	1-15	*			completed in 1R8
						1-18	*			
B 3.110	5	Pressurizer	One	2	2	5-9	01-1283 01-1284 01-1286 01-1287			

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						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	5	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	3	SG 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			
			Three	0	0	3-100	UT-05-103			PSE
						3-101	UT-05-107			PSE
						3-102	UT-05-105			PSE
	4	SG 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			
			Three	0	0	4-100	UT-05-135 UT-05-218			PSE, 0 - 6 & 14 - 19, UT CC N-460 PSE 6 - 14, UT CC N-460
						4-101	UT-05-136			PSE, UT CC N-460
						4-102	UT-05-137			PSE, UT CC N-460
B 3.140	3	SG 1	One	1	1	3-9	01-1367 01-1368			
			Two	1	1	3-7	UT-02-132			
			Three	0	0	3-100 IR	UT-05-104			PSE
						3-101 IR	UT-05-108			PSE
						3-102 IR	UT-05-106			PSE
	4	SG 2	One	1	1	4-9	01-1369 01-1370			
			Two	1	1	4-7	UT-02-135			
			Three	0	0	4-100 IR	UT-05-203			PSE
						4-101 IR	UT-05-204			PSE
						4-102 IR	UT-05-205			PSE
B 4.11	2	Closure Head	Two	0	0	RPV Vent		ECT-*	04-235 04-236	Aug exam NRC Order EA-03-009, *Wesdyne Report
			Three	0	0	Vent Nozzles	UT-*	ECT-*	VT-05-644 **07-VT-1092**	Aug exam, NRC Order EA-03-009 *Wesdyne Report
B 4.12	2	Closure Head	One	8	8	CEDM Noz			01-1627	
			Two	8	8	CEDM Noz	UT-*	ECT-*	VT-02-700 04-235 04-236	All (EA-03-009) *Wesdyne Report

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
			Three	9	9	CEDM-Nozzles	* *	* *	VT-05-642 **07-VT-1111**	All, NRC Order EA-03-009 *Wesdyne Rpts
B 4.13	1	Reactor Vessel	One	5	5	Inst. Noz.			01-1627	
			Two	5	5	Inst. Noz			VT-02-705 VT-04-431	Reject – eval by CRDR 2312850 All (EA-03-009)
			Three	6	6	ICI			VT-05-641 VT-05-1158 **07-VT-1171**	All ICI's, includes ISI & Aug BMI. NRC Bulletin 2003-02
B 4.20	5	Pressurizer	One	12	12	Heater			01-1627	CEIB 89-06
			Two	12	12	Heater			VT-02-699 VT-04-433	CEIB 89-06
			Three	12	12	HEATERS			VT-05-645 **07-VT-1204**	All and Aug, CE-IB 89-06
B 5.40	20	PZR Surge	One	1	1	5-34	01-1288 01-1290	01-1232		
	31	PZR Safeties	One	1	1	5-29	01-1238 01-1239 01-1240 01-1278	01-1010		
	20	PZR Surge	Two	0	0	5-34			VT-04-386	Aug. VT
	29	PZR Spray	Two	1	1	5-33	RT-02-003	PT-02-147	VT-04-387	Aug. VT
	31	PZR Safeties	Two	1	1	5-31	UT-02-257	PT-02-155	VT-04-390	Aug. VT
						5-29			VT-04-388	Aug. VT
						5-30			VT-04-389	Aug. VT
						5-32			VT-04-391	Aug. VT
	20	PZR Surge	Three	0	0	5-34	UT-05-159		VT-05-646 **07-VT-1126**	Aug Vol & VT (bare metal - MRP 139)
						5-34-OL	**07-UT-1004**	**07-PT-1001**		**PSE post overlay. (MRP 139)**
	29	PZR Spray	Three	0	0	5-33	UT-05-168		VT-05-656 **07-VT-1138**	Aug Vol & VT (bare metal) Limited UT exam (MRP 139)
						5-33-OL	**07-UT-1006**	**07-PT-1003**		**PSE post overlay. (MRP 139)**
	31	PZR Safeties	Three	0	0	5-29	RT-05-011 UT-05-169		VT-05-657 **07-VT-1139**	Aug UT & Aug VT (bare metal) (MRP 139)
						5-29-OL	**07-UT-1007**	**07-PT-1004**		**PSE post overlay. (MRP 139)**
						5-30	RT-05-012 UT-05-170		VT-05-658 **07-VT-1140**	Aug Vol & Aug VT (bare metal - MRP 139)
						5-30-OL	**07-UT-1008**	**07-PT-1005**		**PSE post overlay. (MRP 139)**
						5-31	RT-05-013 UT-05-171		VT-05-659 **07-VT-1141**	Aug Vol & Aug VT (bare metal - MRP 139)
						5-31-OL	**07-UT-1009**	**07-PT-1006**		**PSE post overlay. (MRP 139)**
						5-32	RT-05-014 UT-05-532		VT-05-660 **07-VT-1142**	Aug Vol & Aug VT (bare metal - MRP 139)
						5-32-OL	**07-UT-1010**	**07-PT-1007**		**PSE post overlay. (MRP 139)**
B 6.10	2	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	2	Closure Head	One	18	18	1 thru 18	99-1511	99-1509		
			Two	18	18	19 thru 36	UT-02-211	MT-02-166		
						45	92-725	92-724		PSE in Warehouse
B 6.50	2	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	5	6 thru 10	UT-04-116		VT-02-626 VT-04-430	IEIN 80-27 All
			Three	6	6	Flange Studs	UT-05-124		VT-05-1111 **07-VT-1120**	ISI and Aug (IEIN 80-27& IEB 82-02)
	17	RCP 1B	One	5	5	1 thru 5	99-1706		99-1603 01-1654	
			Two	5	5	6 thru 10	UT-04-117		VT-02-630 VT-04-429	IEIN 80-27 All
			Three	6	6	Flange Studs	UT-05-125		VT-05-1113 **07-VT-1121**	ISI and Aug (IEIN 80-27& IEB 82-02)

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
	18	RCP 2A	One	5	5	1 thru 5	99-1487 99-1464		99-1500 01-1654	PSE
			Two	5	5	6 thru 10	UT-04-118		VT-02-634 VT-04-427	IEIN 80-27 All
			Three	6	6	11 thru 16	UT-05-126		VT-05-1115 **07-VT-1122**	ISI and Aug (IEIN 80-27& IEB 82-02)
	19	RCP 2B	One	5	5	1 thru 5	99-1707		99-1602 01-1654	
			Two	5	5	6 thru 10	UT-04-119		VT-02-638 VT-04-428	IEIN 80-27 All
			Three	6	6	11 thru 16	UT-05-127	**07-MT-1004**	VT-05-1117 **07-VT-1123**	ISI and Aug (IEIN 80-27& IEB 82-02)
B 6.190	18	RCP 2A	One	16	16	Flange			99-1488	Flange surface around each stud
B 6.190	**19**	**RCP 2B**	**Three**	**16**	**16**	**Flange**			**07-VT-1124**	**Accessible flange surface around each stud**
B 6.200	16	RCP 1A	One	5	5	1 thru 5			99-1601	
			Two	5	5	6 thru 10			VT-02-625	
B 6.200	**16**	**RCP 1A**	**Three**	**6**	**6**	**11 thru 16**			**07-VT-1120**	
	17	RCP 1B	One	5	5	1 thru 5			99-1603	
			Two	5	5	6 thru 10			VT-02-629	
B 6.200	**17**	**RCP 1B**	**Three**	**6**	**6**	**11 thru 16**			**07-VT-1121**	
	18	RCP 2A	One	5	5	1 thru 5			99-1197 99-1500	Rejected 6 nuts, PSE 6 nuts/clamp ring
			Two	5	5	6 thru 10			VT-02-633	
B 6.200	**18**	**RCP 2A**	**Three**	**6**	**6**	**11 thru 16**			**07-VT-1122**	
	19	RCP 2B	One	5	5	1 thru 5			99-1602	
			Two	5	5	6 thru 10			VT-02-637	
B 6.200	**19**	**RCP 2B**	**Three**	**6**	**6**	**11 thru 16**			**07-VT-1123**	
B 7.20	5	Pressurizer	One	20	20	20 studs/nuts			99-1498 01-1272	IEB 82-02 Removed
			Two	20	20	20 studs/nuts		MT-02-172	VT-02-596 VT-04-394	IEB 82-02
			Three	20	20	20 studs/nuts		**07-MT-1003**	VT-05-1109 **07-VT-1117**	PSE IEB 82-02
B 7.30	3	SG1	One	40	40	40 studs/nuts			99-1492 01-1271	IEB 82-02 Removed
			Two	40	40	40 studs/nuts		MT-02-173	VT-02-594 VT-04-405	IEB 82-02
			Three	40	40	40 studs/nuts		**07-MT-1002**	VT-05-1107 **07-VT-1114**	PSE, IEB 82-02
	4	SG2	One	40	40	40 studs/nuts			99-1493 01-1294	IEB 82-02 Removed
			Two	40	40	40 studs/nuts		MT-02-174	VT-02-595 VT-04-406	IEB 82-02
			Three	40	40	40 studs/nuts		**07-MT-1002**	VT-05-1108 **07-VT-1115**	IEB 82-02
B 7.50	31	PZR Safeties	One	1	1	PSV200			99-1499 01-1431	IEB 82-02 Removed
						PSV201			99-1499 01-1431	IEB 82-02 Removed
						PSV202			99-1499 01-1431	IEB 82-02 Removed
						PSV203			99-1499 01-1431	IEB 82-02 Removed
			Two	1	1	PSV200		MT-02-168	VT-02-597 VT-04-395	IEB 82-02 Removed
						PSV201		MT-02-169	VT-02-598 VT-04-396	IEB 82-02 Removed

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						PSV202		MT-02-170	VT-02-599 VT-04-397	IEB 82-02 Removed
						PSV203		MT-02-171	VT-02-600 VT04-398	IEB 82-02 Removed
			Three	2	2	PSV200			VT-05-1118	8 studs and 16 nuts (IEB 82-02)
						PSV201			VT-05-1162	8 studs and 16 nuts (IEB 82-02)
						PSV202			VT-05-1119	8 studs and 16 nuts (IEB 82-02)
						PSV203			VT-05-1163	8 studs and 16 nuts (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 2			01-1475 01-1501	Disassembled / 2 rejects PSE
			Two	5	5	6 thru 10			VT-02-635 VT-02-636	
	19	RCP 2B	One	5	5	1 thru 5			99-1602	
			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	
			Three	**1**	**1**	**UV651**			**07-VT-1130**	
	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	PV100E			VT-02-614	
	28	PZR Spray 1B	One	2	2	V241			99-1283 99-1665 01-1024	Reject Re-exam Re-exam
						V242			99-1283	
			Two	1	1	V100F			VT-02-615	
	30	Aux PZR Spray	Three	2	2	HV203			VT-05-1136	PSE, Installed
						HV205			VT-05-1137	PSE, Installed
	31	PZR Safeties	One	1	1	PSV200			99-1713	
			Two	1	1	PSV202			VT-02-601	
			Three	**2**	**2**	**PSV200**			**07-VT-1199**	**Aug**
						PSV201			**07-VT-1199**	
						PSV202			**07-VT-1199**	**Aug**
						PSV203			**07-VT-1199**	
	32	Drain Line 1A	One	2	2	V234			99-1588	
						V334			99-1587	
	33	Drain Line 1B	Two	2	2	V235			VT-04-313	
						V335			VT-04-314	
	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	One	1	1	V215			01-1042	
	39	HPSI Long Term	One	1	1	V523			01-1040	

APPENDIX A
1R13 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	V522			VT-02-421	
						V957			VT-02-578	
	40	HPSI Long Term	Two	1	1	V532			VT-02-579	
B 7.80	2	RVLMS	One	1	1	2-21			01-1600	CEDM 92 & 96
B 8.20	5	Pressurizer	One	66%	66%	5-1	99-1445 99-1446 99-1447 99-1486	01-1006		Examined 0°-240°
B 8.30	3	SG 1	One	33%	33%	3-1	01-1304 01-1330 01-1331 01-1332	01-1292		Examined 0°-120°
			Three	34%	34%	3-104		MT-05-100		PSE ID & OD, MT Coverage 99.8%,
	4	SG2	Two	33%	33%	4-1	UT-02-130 UT-02-136 UT-02-137 UT-02-141	MT-02-165		Examined 120°-240°, MT on OD only.
B 9.11	6	RCS Piping	One	7	7	1-31	*	01-1599		*Separate report by
& 9.12						1-34	*	01-1599		Wesdyne. Exams
						6-7	*	01-1599		completed in U1R8
						3-30	01-1356 01-1359	01-1299		
						4-30	01-1357 01-1360	01-1291		
						7-7	*	01-1599		
						17-2	01-1361 01-1362	01-1291		
			Two	0	0	16-1		MT-02-179		
						17-1		MT-02-181		
						18-1		MT-02-178		
						19-1		MT-02-180		
			Three	8	0	6-1	UT-05-143	PT-05-056		PSE, P3 = RR32
						3-103	UT-05-144	MT-05-110		PSE
						4-103	UT-05-145	MT-05-111		PSE
						7-1	UT-05-146	PT-05-057		PSE
						8-13	UT-05-147	MT-05-113		PSE
						8-16	UT-05-148	PT-05-058		PSE
						8-19	UT-05-149	PT-05-059		PSE
						10-13	UT-05-150	MT-05-116		PSE
						10-16	UT-05-151	PT-05-060		PSE
						10-19	UT-05-152	PT-05-061		PSE
						12-13	UT-05-153	MT-05-119		PSE
						12-16	UT-05-154	PT-05-062		PSE
						12-19	UT-05-155	PT-05-063		PSE
						14-13	UT-05-156	MT-05-122		PSE
						14-16	UT-05-157	PT-05-064		PSE
						14-19	UT-05-146	PT-05-065		PSE
	20	PZR Surge	One	1	1	20-1	01-1289	01-1232		
			Three	0	0	6-4	UT-05-160		VT-05-647 07-VT-1127	**Aug VT (bare metal - pre-overlay), (MRP 139)**
						6-4-OL	**07-UT- 1005**	**07-PT-1002**		**TT, PWSCC - PSE post overlay. (MRP 139)**
						20-1-OL	**07-UT- 1004**	**07-PT-1001**		**TT - PSE, post overlay. (MRP 139)**
						20-11-OL	**07-UT-1005**	**07-PT-1002**		**TT - PSE, post overlay. (MRP 139)**
	21	SD Cooling 1	One	3	3	6-11	01-1380 01-1383	01-1275		
						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		

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						21-1		PT-04-063		Aug.
						21-3		PT-04-050		Aug.
						21-4	UT-04-127	PT-04-053		Aug.
						21-5	UT-04-128	PT-04-054		Aug.
						21-6		PT-04-048		Aug.
						6-11		PT-04-059		Aug.
						21-7	UT-04-129	PT-04-057		Aug.
						21-8	UT-04-130	PT-04-058		Aug.
						21-9	UT-04-131	PT-04-049		Aug.
						21-10	UT-04-132	PT-04-051		Aug.
						21-11		PT-04-055		Aug.
						21-11A		PT-04-060		Aug.
						21-12	UT-04-126	PT-04-052		Aug. Limited UT exam
						21-12A		PT-04-042		Aug.
						21-13		PT-04-043		Aug.
						21-13A		PT-04-066		Aug.
						21-14	UT-04-120	PT-04-056		Aug.
						21-15	UT-04-122	PT-04-064		Aug.
						21-16	UT-04-121	PT-04-062		Aug.
						21-17	UT-04-123	PT-04-067		Aug.
						21-18	UT-04-124	PT-04-045		Aug.
						21-19	UT-04-125	PT-04-046		Aug.
						21-20		PT-04-047		Aug.
			Three	1	1	6-11	UT-05-161	PT-05-111	VT-05-648 **07-VT-1128**	Aug Surf, Vol & VT (bare metal - MRP-139)
						21-14	UT-05-223	PT-05-112		P3 = RR32
						21-15	UT-05-224 **UT-06-045**	PT-05-113 **PT-06-013**		Aug exams
						21-16	UT-05-225 **UT-06-046**	PT-05-114 **PT-06-014**		Aug exams
						21-17	UT-05-226 **UT-06-047**	PT-05-115 **PT-06-015**		Aug exams
						21-20	UT-05-222 **UT-06-048**	PT-05-110 **PT-06-016**		Aug exams
						21-21	**UT-06-050**	**PT-06-017**		**PSE**
						21-22	**UT-06-051**	**PT-06-018**		**PSE**
						21-23	**UT-06-052**	**PT-06-019**		**PSE**
						21-24	**UT-06-053**	**PT-06-020**		**PSE**
						21-25	**UT-06-054**	**PT-06-021**		**PSE**
						21-26	**UT-06-055**	**PT-06-022**		**PSE**
	22	SD Cooling 2	One	1	1	22-11	99-1600	99-1590		
						22-14	99-1599	99-1590		
						22-23	01-1510 01-1511	01-1327		Needs PDI re-exam
			Two	0	0	22-1		PT-02-103		
						7-9		PT-02-105		
						22-18		PT-02-112		
			Three	2	0	7-9	UT-05-162		VT-05-649 **07-VT-1131**	Aug Vol & VT (bare metal - MRP 139), P3 = RR32
	23	SI 1A	One	3	3	9-10	01-1541 01-1542	01-1007		
						23-1	01-1543	01-1007		
						23-2	01-1544	01-1007		
						23-4	01-1545 01-1546	01-1007		Needs PDI re-exam
			Two	1	1	23-6	UT-02-287 UT-02-289	PT-02-172		Aug. Limited UT exam
						23-4	UT-04-001			PDI re-exam, Limited UT exam
			Three	0	0	9-10			VT-05-650 **07-VT-1132**	Aug VT (bare metal - MRP-139), P3 = RR32
	24	SI 1B	Two	3	3	24-6	UT-02-179 UT-02-182	PT-02-116		Aug. Limited UT exam

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						24-14	UT-02-185 UT-02-189	PT-02-098		Limited UT exam
						24-16	UT-02-177 UT-02-188	PT-02-101		Limited UT exam
						24-19	UT-02-176 UT-02-178	PT-02-099		Limited UT exam
			Three	1	0	11-10	UT-05-163		VT-05-651 **07-VT-1133**	Limited UT, Aug VT (bare metal - MRP-139), P3 = RR32
	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 UT-02-226	PT-02-146		Limited UT exam
						25-6	UT-02-221 UT-02-222	PT-02-173		Limited UT exam
						13-10	UT-02-228	PT-02-174		
			Three	0	0	13-10			VT-05-652 **07-VT-1134**	Aug VT (bare metal - MRP-139), P3 = RR32
	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 UT-02-184	PT-02-114		Limited Aug. UT exam
						26-17	UT-02-180 UT-02-183	PT-02-113		Limited UT exam
			Three	0	0	15-9	UT-05-164		VT-05-653 **07-VT-1135**	Limited UT exam, Aug VT (bare metal - MRP-139), P3 = RR32
	29	PZR Spray	One	2	2	29-10	99-1467	99-1436		
						29-11	99-1468	99-1436		
			Two	1	1	29-1	UT-02-233 UT-02-234 UT-04-002	PT-02-149		PSE, Need PDI re-exam Re-exam
						29-2	UT-02-235 UT-02-236 UT-04-003	PT-02-150		PSE, Limited UT exam, Need PDI re-exam Re-exam, Limited UT exam
						29-9	UT-02-237 UT-02-239 UT-04-004	PT-02-148		PSE, Need PDI re-exam Re-exam
			Three	2	2	**29-1-OL**	**07-UT-1006**	**07-PT-1003**		**TT - PSE, post overlay. (MRP 139)**
						29-2	UT-05-165			Limited UT exam
						29-4	UT-05-166			P3 = RR32
						29-5	UT-05-167			
	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	27	PZR Spray 1A	One	4	4	9-11		01-1044		
& 9.22						27-42		01-1044		
						27-43		01-1044		
						27-44		01-1044		
			Three	0	0	9-11			VT-05-654 **07-VT-1136**	Aug VT (bare metal - MRP 139), P3 = RR32
	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		

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
			Three	0	0	11-11			VT-05-655 **07-VT-1137**	Aug VT (bare metal - MRP 139), P3 = RR32
	30	Aux PZR Spray	One	2(2)	2(2)	30-7		99-1233		()Identifies augment
						30-13		99-1233		
						30-1	01-1621 01-1623	01-1640		88-08
						30-2	01-1622 01-1624	01-1640		88-08
			Two	2	2 (2)	30-5		PT-02-153		
						30-6		PT-02-154		
						30-1	UT-02-229 UT-02-230	PT-02-151		PSE, IEB 88-08, Limited UT exam
						30-2	UT-02-231 UT-02-232	PT-02-152		PSE, IEB 88-08, Limited UT exam
			Three	0	0	30-4		PT-05-083		PSE, P3 = RR32
						30-5		PT-05-084		PSE
						30-6		PT-05-085		PSE
						30-7		PT-05-100		PSE
						30-9		PT-05-087		PSE
						30-10		PT-05-088		PSE
						30-11		PT-05-089		PSE
						30-12		PT-05-090		PSE
						30-13		PT-05-091		PSE
	32	Drain 1A	One	3	3	8-18		99-1504		
						32-1		99-1504		
						32-2		99-1504		
			Three	0	0	8-18			VT-05-669 **07-VT-1143**	Aug VT (bare metal - MRP 139), P3 = RR32
	33	Drain Line 1B	Two	3	3	33-1		PT-02-106		
						33-5		PT-02-107		
						10-18		PT-02-104		
			Three	0	0	10-18			VT-05-661 **07-VT-1144**	Aug VT (bare metal - MRP 139), P3 = RR32
	34	Drain Line 2A	Three	0	0	12-18			VT-05-652 **07-VT-1145**	Aug VT (bare metal - MRP 139), P3 = RR32
	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		
			Three	4	0	14-18			VT-05-663 **07-VT-1146**	Aug VT (bare metal - MRP 139), P3 = RR32
	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		
			Three	2	0	13-11			VT-05-1142 **07-VT-1147**	Aug VT (bare metal - MRP 139), P3 = RR32

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
	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 UT-02-303	PT-02-162		Limited UT exam
			Three	0	0	39-26	UT-05-219	PT-05-103		Aug exams, P3 = RR32
						39-27	UT-05-220	PT-05-104		Aug exams
						39-30	UT-05-214	PT-05-105		Aug exams
						39-31	UT-05-216	PT-05-106		Aug exams
						39-32	UT-05-215	PT-05-107		Aug exams
						39-33	UT-05-217	PT-05-108		Aug exams
						39-33-A	UT-05-221	PT-05-109		Limited UT exam
						39-53		**PT-06-023**		**PSE**
						39-54		**PT-06-024**		**PSE**
						39-55		**PT-06-025**		**PSE**
						39-56		**PT-06-026**		**PSE**
						39-57		**PT-06-027**		**PSE**
						39-58		**PT-06-028**		**PSE**
						39-59		**PT-06-029**		**PSE**
						39-60		**PT-06-030**		**PSE**
						39-61		**PT-06-031**		**PSE**
						39-62		**PT-06-032**		**PSE**
						39-63		**PT-06-033**		**PSE**
						39-64		**PT-06-034**		**PSE**
						39-65		**PT-06-035**		**PSE**
						39-66		**PT-06-036**		**PSE**
						39-67		**PT-06-037**		**PSE**
						39-68	**UT-06-056**	**PT-06-038**		**PSE**
						39-69	**UT-06-057**	**PT-06-039**		**PSE**
						39-70	**UT-06-058**	**PT-06-040**		**PSE**
						39-71	**UT-06-059**	**PT-06-041**		**PSE**
						39-72	**UT-06-060**	**PT-06-042**		**PSE**
	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	6	RCS Piping	One	1	1	9-8	01-1355 01-1358	01-1291		
			Two	0	0	13-8	UT-02-212	MT-02-176		Limited UT exam
B 9.32	6	RCS Piping	One	1	1	8-17		99-1505		
			Two	1	1	13-9		MT-02-177		
	21	SD Cooling 1	Two	0	0	21-1A		PT-04-065		Aug
						21-13B		PT-04-044		Aug
	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
	36	Letdown	One	1	1	RC-91-H5		99-1591		
						RC-91-H6		99-1591		
			Two	1	1	RC-91-H6		PT-02-089		91% CC N460
B 12.10	**19**	**RCP 2B**	**Three**	**2**	**2**	**19-3**	**07-UT-1002**			
						19-4	**07-UT-1003**			
B 12.20	18	RCP 2A	One	1	1	Bowl Interior			99-1497	

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 12.20	**19**	**RCP 2B**	**Three**	**1**	**1**	**Bowl Interior**			**07-VT-1125**	**Examined to extent practical**
B12.50	21	SD Cooling 1	Two	1	1	UV653			VT-04-286	Internal surfaces
	24	SI 1B	Two	1	1	V543			VT-02-523	Internal surfaces
	25	SI 2A	Two	1	1	V215			VT-04-297	Internal surfaces
B 13.10	1	Reactor Vessel	One	33%	33%	Interior			01-1534	accessible areas
			Two	33%	33%	Interior			VT-04-317	accessible areas
			Three	34%	34%	Interior			VT *	* Separate Wesdyne Report
B13.50	1	Reactor Vessel	Three	100%	100%	Beltline Attachment			VT *	* Separate Wesdyne Report
B13.60	1	Reactor Vessel	Three	100%	100%	AttachmentBeyond Beltline			VT *	* Separate Wesdyne Report
B13.70	1	Reactor Vessel	Three	100%	100%	Core Support			VT *	* Separate Wesdyne Report
B 14.10	2	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	2	Closure Head	Two	ALL	ALL	Head			04-235 04-236	Aug BMI, NRC Order EA-03-009
			Three	100%	100%	Head			VT-05-643 **07-VT-1111**	Aug BMI, NCR Order EA-03-009
B 15.10, 20, 30, 40, 50, 60 & 70	Various	RCS Piping	One	ALL	ALL	Press Bound			99-1585 99-1647 99-1711 01-1012 01-1013 01-1557	RR#11 & 12 SIBPSV169 disassy .
									01-1627 01-1628 01-1012 01-1013 01-1557 01-1627 01-1628 01-1629 01-1630 01-1646 01-1647	reject
			Two	ALL	ALL	Press Boundary			VT-02-698* VT-04-414 VT-04-432 VT-04-436 VT-04-438 VT-04-447 VT-04-466*	*100% RCS ea. Outage
			Three	100%	*	RCS Pressure Boundary			VT-05-664 **VT-06-725** **07-VT-1104** **07-VT-1163** **07-VT-1165** **07-VT-1166** **07-VT-1167** **07-VT-1204** **07-VT-1207**	* RCS 100% each outage N-498-4
Flywheel	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			

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
			Two	1	1	Flywheel	UT-02-208			
	19	RCP 2B	One	1	1	Flywheel	01-1434			
			Two	1	1	Flywheel	UT-02-205			
		Spare Flywheel	**Three**	**0**	**0**	**Flywheel**	**UT-06-061** **UT-06-062** **UT-06-063** **UT-06-064**			**PSE Spare Flywheels**
F 1.10	20	PZR Surge	One	2	2	RC-28-H1			99-1284	
						RC-28-H2			99-1218	
			Two	2	2	RC-28-H842			VT-04-001	RR#4
						RC-28-H844			VT-04-002	RR#4
			Three			**RC-028H001**			**07-VT-1152** **07-VT-1153**	**Aug pre-overlay** **Aug post-overlay**
						RC-028H002			**07-VT-1154** **07-VT-1155**	**Aug pre-overlay** **Aug post-overlay**
						RC-028H003			**07-VT-1156** **07-VT-1157**	**Aug pre-overlay** **Aug post-overlay**
						RC-028H004			**07-VT-1158** **07-VT-1159**	**Aug pre-overlay** **Aug post-overlay**
	21	SD Cooling 1	One	7	7	SI-240-H10			99-1227	
						SI-240-H11			99-1226	
						SI-240-H13			99-1225	
						RC-51-H1			01-1182	Support Deleted
						RC-51-H2			01-1181	
						RC-51-H3			01-1180	
						RC-51-H821			01-1433	
			Two	7	7	RC-51-H2			VT-02-640 VT-04-324	Expansion
						RC-51-H3			VT-02-429 VT-04-325	Expansion
						RC-51-H4			VT-02-422	Support Deleted
						RC-51-H5			VT-02-423 VT-04-326	
						RC-51-H6			VT-02-703	Support Deleted
						RC-51-H822			VT-02-474	
						SI-240-H1			VT-02-430	Support Deleted
						SI-240-H2			VT-02-425 VT-04-323	
						SI-240-H3			VT-02-431 VT-02-605 VT-04-315	Reject Re-exam
						SI-240-H4			VT-02-433 VT-04-327	Expansion
						SI-240-H5			VT-02-432 VT-02-607 VT-04-316	Reject Re-exam
						SI-240-H6			VT-02-434	Support Deleted
						SI-240-H7			VT-02-435 VT-04-328	Expansion
						SI-240-H8			VT-04-329	
						SI-240-H9			VT-02-659 VT-04-330	Expansion
						SI-240-H10			VT-02-661 VT-04-331	Expansion
						SI-240-H11			VT-02-662 VT-04-332	Expansion
						SI-240-H12			VT-02-424	Support Deleted
						SI-240-H13			VT-04-333	
						SI-240-H823			VT-02-427	
						SI-240-H824			VT-02-428	
			Three	2	0	SI-240-H3			VT-05-667	Re-exam CRDR 2564714, RR #4
						SI-240-H5			VT-05-668	Re-exam CRDR 2564714, RR #4
						SI-240-H002			**VT-06-755**	**PSE**

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI-240-H014			**VT-06-713**	**PSE**
						SI-240-H015			**VT-06-714**	**PSE**
						SI-240-H016			**07-VT-1129**	**Aug**
						SI-240-H017			**VT-06-716**	**PSE**
	22	SD Cooling B	One	4	4	RC-68-H5			01-1177	
						RC-68-H6			01-1176	Support Deleted
						SI-193-H17			01-1178	
						SI-193-H19			01-1179	Support Deleted
			Two	4	4	RC-68-H3			VT-02-663	Expansion
						SI-193-H8			VT-02-496 VT-02-652	Reject Re-exam
						SI-193-H9			VT-02-497	RR #4
						SI-193-H17			VT-02-664	Expansion
						SI-193-H20			VT-02-508	
						SI-193-H23			VT-02-665	Expansion
						SI-193-H25			VT-02-498	Support Deleted
	23	SI 1A	One	1	1	SI-207-H5			01-1005	Support Deleted
			Two	2	2	SI-207-H3			VT-02-666	Expansion
						SI-207-H7			VT-02-509	
						SI-207-H11			VT-02-510	
	24	SI 1B	One	2	2	SI-223-H3			99-1230	
						SI-223-H4			99-1229	Support Deleted
			Two	2	2	SI-223-H1			VT-02-475	
						SI-223-H2			VT-02-477	Support Deleted
	25	SI 2A	One	2	2	SI-156-H7			99-1221	Support Deleted
						SI-156-H9			99-1220	
			Two	1	1	SI-156-H9			VT-02-667	Expansion
						SI-160-H1			VT-02-511	
	26	SI 2B	One	2	2	SI-179-H9			99-1223	Support Deleted
						SI-179-H11			99-1222	
			Two	3	3	SI-175-H21			VT-02-507 VT-02-655	Reject Re-exam
						SI-175-H22			VT-02-512	Support Deleted
						SI-175-H23			VT-02-513	
						SI-179-H11			VT-02-669	Expansion
	27	PZR Spray 1A	One	9	9	RC-62-H26			99-1209	
						RC-62-H27			99-1208	
						RC-62-H28			99-1207	
						RC-62-H29			99-1206	Support Deleted
						RC-62-H30			99-1205	
						RC-62-H31			99-1204	Support Deleted
						RC-62-H32			99-1203	
						RC-62-H33			99-1202	
						RC-62-H34			99-1262	Support Deleted
			Two	8	8	RC-16-H5			VT-02-537	
						RC-16-H6			VT-02-608	
						RC-16-H7			VT-02-609	
						RC-16-H15			VT-02-536	Support Deleted
						RC-62-H35			VT-02-610	
						RC-62-H36			VT-02-611	Support Deleted
						RC-62-H37			VT-02-612	
						RC-62-H38			VT-02-613	
	28	PZR Spray 1B	One	9	9	RC-17-H24			99-1217	
						RC-17-H34			99-1216	
						RC-17-H35			01-1172	
						RC-17-H36			99-1215	
						RC-17-H38			99-1214	
						RC-17-H39			99-1213	Support Deleted
						RC-17-H40			99-1212	
						RC-17-H41			99-1211	Support Deleted
						RC-17-H42			99-1210	
			Two	8	8	RC-17-H43			VT-02-616	

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						RC-17-H44			VT-02-617	Support Deleted
						RC-17-H45			VT-02-618	
						RC-17-H46			VT-02-619	
						RC-18-H9			VT-02-620	
						RC-18-H10			VT-02-534	Support Deleted
						RC-18-H11			VT-02-621	Support Deleted
						RC-18-H12			VT-02-535	
	29	PZR Spray	One	2	2	RC-18-H16			99-1439	
						RC-18-H18			99-1440	
			Two	1	1	RC-18-H17			VT-04-003	RR#4
			Three			**RC-018H016**			**07-VT-1160** **07-VT-1161**	**Aug pre-overlay** **Aug post-overlay**
	32	Drain 1A	One	2	2	RC-60-HA			99-1326	Support Deleted
						RC-60-HB			99-1327	Support Deleted
	33	Drain Line 1B	Two	2	2	RC-58-HA			VT-02-493	
						RC-58-HB			VT-02-494	Support Deleted
	34	Drain Line 2A	Two	2	2	RC-96-HA			VT-02-532	
						RC-96-HB			VT-02-533	Support Deleted
	36	Letdown	One	9	9	RC-91-H1			99-1592	
						RC-91-H5			99-1593	
						RC-91-H6			99-1594	
						RC-91-HB			99-1325	Support Deleted
						RC-91-HD			99-1323	
						RC-91-HE			99-1319	Support Deleted
						RC-91-HY			99-1321	
						RC-91-HZ			99-1324	
						RC-91-HAA			99-1322	
						RC-91-HAK			99-1320	
			Two	10	10	RC-91-H6			VT-02-415	
						RC-91-HAJ			VT-02-416	
						RC-91-HP			VT-02-417	
						RC-91-H2			VT-04-004	RR#4
						RC-91-HAP			VT-04-005	RR#4
						RC-91-HAQ			VT-04-006	RR#4
						RC-91-HQ			VT-04-007	RR#4
						RC-91-HR			VT-04-008	RR#4
						RC-91-HS			VT-04-009	RR#4
						RC-91-HT			VT-04-010	RR#4
	37	Charging	One	14	14	CH-5-H2			99-1265	Support Deleted
						CH-5-H3			99-1266	
						CH-5-H25			99-1267	
						CH-5-H26			99-1268	Support Deleted
						CH-5-H27			99-1269	
						CH-5-H28			99-1270	
						CH-5-H30			99-1271	
						CH-5-H34			99-1272	
						CH-5-H35			99-1273	
						CH-5-H36			99-1274	
						CH-5-H42			99-1275	
						CH-5-H43			99-1276	Support Deleted
						CH-5-H44			99-1277	
						CH-5-HAA			99-1264	Support Deleted
			Two	9	9	CH-5-H13			VT-02-580	
						CH-5-H17			VT-02-581	
						CH-5-H18			VT-02-582	
						CH-5-H19			VT-02-583	
						CH-5-H20			VT-02-584	
						CH-5-H21			VT-02-585	
						CH-5-H22			VT-02-586	
						CH-5-H32			VT-02-587	
						CH-5-H37			VT-02-588	
	39	HPSI 1	One	4	4	SI-248-H26			99-1238	Support Deleted

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI-248-H27			99-1237	
						SI-248-H28			99-1236	
						SI-248-H30			99-1235	Support Deleted
						SI-248-H25			99-1239	
			Two	5	5	SI-248-H17			VT-02-418 VT-04-334	
						SI-248-H18			VT-02-419	Support Deleted
						SI-248-H19			VT-02-572	
						SI-248-H20			VT-02-573	
						SI-248-H29			VT-02-420	
			Three	11	0	**SI-248-H-18**			**VT-06-717**	**PSE**
						SI-248-H-32			**VT-06-719**	**PSE**
						SI-248-H-34			**VT-06-721**	**PSE**
						SI-248-H-35			**VT-06-722**	**PSE**
						SI-248-H-37			**VT-06-724**	**PSE**
	40	HPSI 2	One	3	3	SI-199-H13			01-1016	
						SI-199-H14			01-1017	
						SI-199-H21			01-1015	Support Deleted
			Two	4	4	SI-199-H15			VT-02-574	
						SI-199-H16			VT-02-575	
						SI-199-H17			VT-02-576	
						SI-199-H18			VT-02-577	
F 1.40	3	SG 1	One	1	1	3-40			01-1329	
			Three	0	0	3-140			VT-05-665	PSE
	4	SG 2	Two	1	1	4-40			VT-02-623	
			Three	0	0	4-140			VT-05-666	PSE
	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	
	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	
N/A	**6**	**RCS Piping**	**Three**	**0**	**0**	**RC31 Inst. Nozzles**			**07-VT-1118**	**Aug BMI VT-2 (IN 2004-11)**
						RC34 Inst. Nozzles			**07-VT-1118**	**Aug BMI VT-2 (IN 2004-11)**
						RC79 Inst. Nozzles			**07-VT-1118**	**Aug BMI VT-2 (IN 2004-11)**
						RC93 Inst. Nozzles			**07-VT-1118**	**Aug BMI VT-2 (IN 2004-11)**

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
ASME Class 2										
C 1.10	41	SG 1	One	1	1	41-3	01-1384 01-1387 01-1390 01-1408			Examined 0°-180°
						41-4	01-1385 01-1388 01-1391 01-1407			Examined 0°-180°
			Three	0	0	41-105	UT-05-115			PSE
						41-106	UT-05-118			PSE
						41-118	UT-05-109			PSE
	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	50%	50%	69-1	99-1485			Examined 0°-180°
			Three	50%	50%	69-1	UT-05-133			Examined 180 to 360°, Limited UT exam CC N-460
	84	SD Cooling A	Two	50%	50%	74-123	UT-04-111			Examined 0°-180°
	87	SD Cooling HX B	Three	50%	50%	75-78	UT-05-201			180 to 360 Deg
C 1.20	41	SG 1	One	1	1	41-5	01-1386 01-1389 01-1392 01-1393 01-1394 01-1395 01-1409 01-1410			Examined 0°-180°
			Three	1	1	41-107	UT-05-121			PSE
	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 01-1207 01-1219 01-1241			Examined 0°-180°
			Three	1	1	41-104	UT-05-110			PSE, Limited UT exam CC N-460
	42	SG 2	Two	1	1	42-1	UT-02-261 UT-02-258 UT-02-259 UT-02-275			Examined 0°-180°
	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	50%	50%	69-2	99-1484			Examined 0°-180°
			Three	50%	50%	69-2	UT-05-134			Examined 180° to 360°
	84	SD Cooling A	Two	50%	50%	74-124	UT-04-112			Examined 0°-180°
	87	SD Cooling HX B	Three	50%	50%	75-79	UT-05-202			Examined 180° to 360°
C 2.21	41	SG 1	One	1	1	41-34	01-1279 01-1280	01-1008		
			Two	2	2	41-9	UT-04-108	MT-04-006		
						41-10	UT-04-109	MT-04-007		
			Three	3	3	41-102	UT-05-111	MT-05-101		PSE
						41-103	UT-05-113	MT-05-102		PSE
						41-109	UT-05-119	MT-05-105		PSE
						41-110	UT-05-120	MT-05-106		PSE
						41-114	UT-05-122	MT-05-107		PSE
						41-115	UT-05-123	MT-05-108		PSE

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
	42	SG 2	One	1	1	42-35	01-1281 01-1282	01-1009		
			Three	0	0	42-100	RT-05-026 UT-05-198	PT-05-034		PSE
						42-101	RT-05-027 UT-05-199	PT-05-035		PSE
	84	SD Cooling A	Two	1	1	74-122	UT-04-110	MT-04-088		
	87	SD Cooling HX B	Three	1	1	75-76	UT-05-200	MT-05-147		
C 2.22	41	SG 1	Two	2	2	41-9	UT-04-113			Inner Radius (ID) RR8
						41-10	UT-04-114			Inner Radius (ID) RR8
			Three	3	3	41-102-IR	UT-05-112			PSE
						41-103-IR	UT-05-114			PSE
						41-114-IR		MT-05-129		PSE RR#8
						41-115-IR		MT-05-130		PSE RR#8
	84	SD Cooling A	Two	1	1	74-122	UT-04-115			Inner Radius (ID)
	87	SD Cooling HX B	Three	1	1	75-76	UT-05-206			
C 3.10	41	SG 1	One	1	1	41-42		01-1447		
			Three	0	0	41-112	UT-05-117	MT-05-103		PSE
						41-113	UT-05-116	MT-05-104		PSE
	42	SG 2	Two	1	1	42-43		MT-04-090		
	68	Regen HTEXCH	Two	2	2	68-10		PT-02-132		96% CC N460
						68-11		PT-02-133		96% CC N460
	44	MS SG1 270	Two	1	1	SG-33-H16		MT-02-184		
	45	MS SG2 270	One	1	1	SG-42-H14		99-1430		
			Two	2	2	SG-42-H15		MT-02-185		
						SG-42-H16		MT-02-186		
	55	Feedwater SG 2	One	1	1	SG-5-H9		01-1184 01-1185		
	62	Aux FW SG1	Two	1	1	AF-18-H1		PT-04-040		
	64	Blowdown SG 1	One	3	3	SG-39-H15		01-1298 01-1302		
						SG-39-H17		01-1303		Support Deleted
						SG-53-H1		01-1002		Support Deleted
			Two	2	2	SG-39-H1		MT-02-203		
						SG-53-H5		MT-02-200 PT-02-176		
	65	Blowdown SG 2	One	2	2	SG-48-H20		01-1295		Support Deleted
						SG-52-H1		01-1003		Support Deleted
			Two	3	3	SG-48-H14		MT-04-077		
						SG-48-H16		MT-04-078		
						SG-48-H26		MT-04-079		
	71	LPSI Discharge	One	1	1	SI-87-H11		99-1435		
	76	CS Suction	One	1	1	SI-9-H4		99-1373		
	77	Cont Spray A	Three	1	1	SI-79-H7		PT-05-038		
	80	Cont Spray B	Three	1	1	SI-119-H5		PT-05-039		
	83	SD Cooling 1	Two	2	2	SI-87-H4		PT-04-061		
						SI-90-H1		PT-04-041		
			Three	2	2	SI-70-H1		PT-05-102		
						SI-70-H6		PT-05-043		
	86	SD Cooling HX B	Three	2	2	SI-72-H1		PT-05-044		
						SI-72-H12		PT-05-045		
	88	East Wrap	One	1	1	SI-72-H13		99-1516		
	89	East Wrap	One	1	1	SI-194-H14		99-1619		
	91	West Wrap	One	4	4	SI-70-H9		99-1374		
						SI-70-H11		99-1256		
						SI-70-H12		99-1456		
						SI-70-H16		99-1256		
	92	West Wrap	One	1	1	SI-241-H21		99-1605		
			Two	2	2	SI-239-H1		PT-04-017		
						SI-241-H16		PT-04-018		
	93	CS Discharge 1	Two	1	1	SI-89-H13		PT-04-020		
	94	LPSI A	Two	2	2	SI-070-H5		PT-02-121		

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI-070-H8		PT-02-130		
	95	Train B Chase	Three	1	1	SI-194-H6		PT-05-049		
	99	LPSI to Loop 2B	Two	1	1	SI-174-H13		PT-02-129		
	100	LPSI Suction A	One	1	1	SI-369-H1		99-1457		
			Two	1	1	84-5		PT-02-178		
	101	LPSI Sump B	Three	1	1	85-5		PT-05-050		
	102	SI Suction A	One	3	3	SI-307-H2		01-1446		
						SI-307-H3		01-1446		
						SI-307-H15		01-1446		
	103	Refuel. Suction A	Two	2	2	CH-424-H6		PT-02-118		
						CH-142-H20		PT-04-069		
	104	SI Suction B	Two	1	1	SI-308-H3		PT-02-159		
	105	SI B	Three	3	3	CH-149-H2		PT-05-051		
						CH-149-H8		PT-05-052		
						CH-425-H6		PT-05-053		
	113	HPSI Discharge	One	1	1	SI-107-H22		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		
	75	LPSI A	Two	3	3	73-3A		PT-04-004		
						73-3B		PT-04-005		
						73-3C		PT-04-006		
	78	CS A	Two	3	3	80-3A		PT-04-007		
						80-3B		PT-04-008		
						80-3C		PT-04-009		
	81	Cont Spray B	Three	3	3	81-3A		PT-05-040		
						81-3B		PT-05-041		
						81-3C		PT-05-042		
	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
	117	HPSI Pump B	Two	4	4	117-1A		PT-04-034		
						117-1B		PT-04-035		
						117-1C		PT-04-036		
						117-1D		PT-04-037		
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			
	49	MS (East) SG	Three	20	20	V171	UT-05-128 UT-05-213			20 Studs Installed - no rejects, PSE of 3 studs for CRDR 2842463.
	50	MS (West) SG	Three	20	20	V181	UT-05-129			20 Studs Installed
	56	Feedwater SG 1	Two	40	40	V132	UT-02-209			20 Studs
						V174	UT-02-210			20 Studs
	57	Feedwater SG 2	Three	20	20	V137	UT-05-130			20 Studs Installed
			Three	20	20	V177	UT-05-131			20 Studs Installed
C 5.11	58	Aux Feed SG 1	Two	0(1)	0(1)	58-1	RT-04-001	PT-04-001		IEB 79-13
& 5.12			Three	1	0	58-1	RT-05-019	PT-05-036		PSE
	59	Aux Feed SG 2	Two	2(4)	2(4)	59-1	UT-02-219 UT-02-220 UT-02-225	PT-02-140		PSE
						59-12	UT-04-134	PT-04-068		PSE
						59-16	UT-02-159 UT-02-160 UT-02-161	PT-02-097		PSE, AUG (IEB 79-13)
						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 UT-02-284	PT-02-091		
			Three	0	0	59-1	RT-05-020	PT-05-037		PSE
	62	Aux Feed SG 1	Two	1	1	62-6	UT-04-077	PT-04-002		
			Three	3	3	62-5	UT-05-193			

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						62-6	UT-05-194			
						62-12	UT-05-195			
						62-13	UT-05-196			
	63	Aux Feed SG 2	One	0	0	63-4	01-1525 01-1526	01-1188		Needs PDI re-exam
			Two	1(1)	1(1)	63-4	UT-04-078			Aug, PDI re-exam
						63-23	UT-04-079	PT-04-003		
	70/73	LPSI Suction A & B	One	1	1	70-58	99-1258	99-1257		
			Two	1	1	70-56	UT-02-174 UT-02-175	PT-02-111		
	82/85	SD Cooling HX A/B	One	2	2	72-50	99-1372	99-1316		
						73-49	01-1428	01-1189		
	83/86	SD Cooling HX 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 01-1547	01-1190		
						77-7	01-1521 01-1540	01-1371		Limited exam
						77-14	01-1522 01-1523 01-1524	01-1371		Limited exam
			Two	7	7	76-7	UT-04-089	PT-04-013		Limited UT Exam
						76-8	UT-04-090	PT-04-014		
						77-8	UT-04-091	PT-04-015		
						77-16	UT-04-092	PT-04-016		Limited UT Exam
						78-9J	UT-04-086	PT-04-010		
						78-11	UT-04-087	PT-04-011		
						79-14	UT-04-088	PT-04-012		Limited UT Exam
	90/93	SI East/West Wrap	Two	0(1)	0(1)	84-9	UT-04-093	PT-04-019		Aug, Limited UT exam
	94/95	SI A & B	One	1	1	74-40	01-1427	01-1430		
			Two	2	2	74-37	UT-02-172 UT-02-173	PT-02-109		
						74-38	UT-02-170 UT-02-171	PT-02-110		
			Three	1	1	74-30	UT-05-197			
	96 thru 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 01-1277	01-1293		
			Two	2	2	77-22	UT-02-162	PT-02-095		
						77-27	UT-02-163 UT-02-164	PT-02-096		Limited UT exam
	100	LPSI Suction A	Two	2	2	70-121	UT-02-165 UT-02-166	PT-02-093		Limited UT exam
						84-3	UT-02-291 UT-02-293	PT-02-177		Limited UT exam
	102	SI Suction A	One	0	0	84-12	01-1487 01-1488	01-1191		
			Two	1(1)	1(1)	84-26	UT-02-150 UT-02-169 UT-04-095	PT-02-090 PT-04-022		Limited UT exam Limited UT exam
						84-12	UT-04-094	PT-04-021		Aug, Limited UT exam
	103	Refuel. Suction A	One	1	1	86-57	01-1305	01-1300		
			Two	1	1	86-1	UT-02-186 UT-02-187	PT-02-117		Limited UT exam

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
	104	SI Suction B	One	1	1	85-46	01-1307 01-1308 01-1309	01-1301		Limited exam
			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 UT-02-279	PT-02-165		
C 5.21	106 / 107	HPSI Discharge A/ B	One	4	4	106-1	01-1244 01-1248 01-1252	01-1193		Limited exam
						106-21	01-1254 01-1257 01-1260	01-1193		Limited exam
						107-11	01-1245 01-1249 01-1253	01-1194		Limited exam
						107-42	01-1225 01-1226 01-1227	01-1194		Limited exam
			Two	4	4	106-64	UT-04-096	PT-04-024		Limited UT exam
						106-68	UT-04-097	PT-04-025		
						107-1	UT-04-098	PT-04-026		Limited UT exam
						107-22	UT-04-099	PT-04-027		
	108 / 109	HPSI Discharge	One	2	2	109-4	01-1246 01-1250	01-1195		Limited exam
						109-21	01-1489	01-1502		
			Two	3	3	108-1	UT-04-100	PT-04-028		
						108-4	UT-04-101	PT-04-029		
						108-25	UT-04-102	PT-04-030		
	110 / 111	HPSI Discharge	One	2	2	110-6	01-1247 01-1251	01-1229		Limited exam
						110-39	01-1261 01-1263 01-1265	01-1196		Limited exam
	112 / 113	HPSI Discharge A & B	One	3	3	112-1	01-1255 01-1258	01-1197		Limited exam
						112-33		01-1197		
						112-34	01-1259 01-1256	01-1183 01-1374		Limited exam
						112-45	01-1262 01-1264 01-1266	01-1197		Limited exam
			Two	2	2	113-21	UT-04-103	PT-04-031		Limited UT exam
						113-28	UT-04-104	PT-04-032		Limited UT exam
	114 / 115	HPSI1A, 1B, 2A & 2B	One	1	1	115-13	01-1310 01-1311	01-1274		Limited exam
			Two	1	1	115-20	UT-02-298 UT-02-299	PT-02-102		Limited UT exam
	118 / 119	HPSI Long Term	Two	4	4	118-49	UT-02-167 UT-02-168	PT-02-094		Limited UT exam
						119-52	UT-02-300 UT-02-301	PT-02-166		Limited UT exam
						119-26	UT-04-105	PT-04-038		
						119-53	UT-04-106	PT-04-039		Limited UT exam
C 5.30	106/ 107	HPSI Discharge A&B	One	1	1	107-53		01-1194		
			Two	1	1	106-61		PT-04-023		
			Three	**0**	**0**	**107-65**		**07-PT-1008**		**PSE**
C 5.41&	82/85	SD Cooling HX 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		

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
C 5.51&	43	MS SG1 90	One	1	1	43-2	99-1443	99-1432		
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		
			Three	0	0	44-1	RT-05-015	MT-05-131		PSE
	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		
			Three	0	0	54-1	RT-05-016	PT-05-066		PSE
						54-15	RT-05-017	PT-05-067		PSE
	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 01-1619	01-1532		PSE (Vol is RT)
			Two	1	1	55-26	UT-02-294	MT-02-196		PSE
			Three	0	0	55-1	RT-05-025	PT-05-069		PSE
						55-15	RT-05-018	PT-05-070		PSE
						55-16	UT-05-182	PT-05-071		PSE
						55-17	UT-05-183	PT-05-072		PSE
						55-18	UT-05-184	PT-05-073		PSE
						55-19	UT-05-185	PT-05-074		PSE
						55-20	UT-05-186	PT-05-075		PSE
	57	Feedwater SG 2	Three	2	2	57-1	UT-05-187			*
						57-3	UT-05-188			
	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 01-1560 01-1561	01-1530		PSE (Vol is RT)
						58-35	01-1562	01-1530		PSE (Vol is RT)
						58-36	01-1563	01-1530		PSE (Vol is RT)
			Two	0(4)	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)
			Three	0	0	41-111	UT-05-227	MT-05-142		PSE
	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 01-1512 01-1514 01-1516	99-1198 01-1231		PSE
						59-16A	99-1291 01-1513 01-1515 01-1517	99-1198 01-1231		PSE

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						59-6	01-1417 01-1419 01-1421 01-1424	01-1375		PSE
						59-35	01-1418 01-1420 01-1422 01-1425	01-1375		PSE
						59-36	01-1423 01-1426 01-1527	01-1375		PSE
			Two	1(1)	1(1)	59-12		MT-02-197		Now C 5.11
						59-13	UT-04-066	MT-02-198		AUG (IEB 79-13)
						59-25	UT-02-151 UT-02-152	MT-02-160		
			Three	4	4	61-14	UT-05-189			*
						61-15	UT-05-190			
						61-16	UT-05-191			
						61-17	UT-05-192			
			Three	0	0	64-1	RT-05-021	MT-05-143		PSE
						64-30	RT-05-022	MT-05-144		PSE
	65	Blowdown SG 2	One	1	1	65-28	01-1243	01-1003		
			Two	1	1	65-52	UT-02-153 UT-02-154	MT-02-159		
			Three	0	0	65-1	RT-05-023	MT-05-145		PSE
						65-28	RT-05-024	MT-05-146		PSE
C 6.10	116	HPSI Pump A	by end of interval			116-2		01-1473		
	117	HPSI Pump A	by end of interval			117-1		PT-04-033		
C6.20	49	MS (East) SG2	Three	1	1	V554		MT-05-132		
						V556		MT-05-133		
	86	SD Cooling HX B	Three	1	1	V464		PT-05-046		
	89	East Wrap	Three	1	1	V656		PT-05-048		
	106	HPSI A	Three	1	1	V404		PT-05-054		
	107	HPSI B	Three	1	1	V478		PT-05-055		
C 7.10 C 7.30 C 7.50 C 7.70	N/A	Pressure Vessels Piping Pumps Valves	One	All	All	Press Bound			01-1011 01-1012 01-1013 01-1014 01-1312 01-1317 01-1318 01-1319 01-1320 01-1321 01-1323 01-1324 01-1325 01-1326 01-1432 01-1436 01-1437 01-1440 01-1441 01-1443 01-1444 01-1445 01-1485 01-1486 01-1496 01-1504	

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
									01-1507 01-1508 01-1509 01-1536 01-1537 01-1538 01-1539 01-1557 01-1597 01-1615 01-1625 01-1626 01-1627 01-1629 01-1630 01-1631 01-1632 01-1633 01-1634 01-1635 01-1636 01-1638 01-1642 01-1644 01-1645 01-1646 01-1647 01-1648 01-1649 01-1650 01-1653 VT-03-001 VT-03-002 VT-03-003 VT-03-005	
			Two	ALL	ALL	Press Boundary			VT-03-004 VT-03-006 VT-03-007 VT-03-008 VT-03-009 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-03-023 VT-03-024 VT-03-025 VT-03-026 VT-03-027 VT-03-028 VT-03-029 VT-03-030 VT-03-031 VT-03-032	

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
									VT-03-033 VT-03-034 VT-03-035 VT-04-335 VT-04-336 VT-04-337 VT-04-343 VT-04-345 VT-04-346 VT-04-348 VT-04-349 VT-04-350 VT-04-351 VT-04-352 VT-04-353 VT-04-354 VT-04-355 VT-04-356 VT-04-357 VT-04-358 VT-04-359 VT-04-362 VT-04-364 VT-04-365 VT-04-366 VT-04-368 VT-04-369 VT-04-370 VT-04-371 VT-04-374 VT-04-375 VT-04-377 VT-04-382 VT-04-383 VT-04-384 VT-04-385 VT-04-392 VT-04-409 VT-04-411 VT-04-412 VT-04-419 VT-04-420	
			Three	All*	*	Press Bound			VT-05-1168 **VT-07-022** **VT-07-023** **VT-07-026** **VT-07-034** **07-VT-1016** **07-VT-1038** **07-VT-1042** **07-VT-1073** **07-VT-1074** **07-VT-1077** **07-VT-1089** **07-VT-1090** **07-VT-1092** **07-VT-1099** **07-VT-1101** **07-VT-1102** **07-VT-1103**	*** Period requirement - partial Code Case N-498-4, RR 12, 15, 16. Re-exam / evaluation per Relief Request 12** **Re-exam Acc. 07-VT-1195** **Re-exam Acc. 07-VT-1179** **Re-exam Acc. 07-VT-1179** **Acc. by RR 12 evaluation**

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
									07-VT-1105	
									07-VT-1106	
									07-VT-1107	
									07-VT-1109	
									07-VT-1162	
									07-VT-1163	
									07-VT-1166	
									07-VT-1167	
									07-VT-1178	
									07-VT-1179	**Rej. Ref. 07-VT-1038 & 1042.**
									07-VT-1180	
									07-VT-1181	
									07-VT-1182	**Rej. Ref. 07-VT-1193.**
									07-VT-1183	
									07-VT-1184	
									07-VT-1185	**Rej. Ref. 07-VT-1192**
									07-VT-1186	
									07-VT-1188	**Rej. Ref. 07-VT-1196 & 1198**
									07-VT-1189	
									07-VT-1190	
									07-VT-1191	
									07-VT-1192	**Re-exam Acc. 07-VT-1185**
									07-VT-1193	**Re-exam Acc. 07-VT-1182**
									07-VT-1194	
									07-VT-1195	**Rej. Ref. 07-VT-1016**
									07-VT-1196	**Re-exam Acc. 07-VT-1188**
									07-VT-1198	**Re-exam Acc. 07-VT-1188**
									07-VT-1204	
									07-VT-1206	**VT-2 and bolt removal.**
									07-VT-1209	
									07-VT-1211	
									07-VT-1221	
F 1.20	43	MS SG 1 90	One	2	2	SG-36-H17			99-1240	
						SG-36-H884			99-1242	
						SG-36-H885			99-1241	
			Two	1	1	SG-36-H11			VT-02-622	RR #4
			Three	2	2	SG-36-H11			VT-05-546 VT 05-1150	AUG RR#4 PSE
						SG-36-H16			VT-05-547	RR#4
						SG-36-H17			VT-05-548	RR#4
F 1.20	**43**	**MS SG 1 90**	**Three**	**2**	**0**	**SG-36-H11**			**VT-06-752** **07-VT-1148** **07-VT-1177** **07-VT-1203**	**AUG RR 4** **AUG** **Expansion** **PSE**
						SG-36-H16			**07-VT-1177**	**Expansion**
						SG-36-H885			**07-VT-1177**	**Expansion**
	44	MS SG1 270	One	2	2	SG-33-H17			99-1278	
						SG-33-H18			99-1243	Support Deleted
			Two	3	3	SG-33-H16			VT-02-694	RR #4
						SG-33-H881			VT-02-693	RR #4
						SG-33-H882			VT-02-695	RR #4
			Three	1	1	SG-33-H11			VT-05-549 **07-VT-1149** **07-VT-1177** **07-VT-1203**	RR#4 **AUG** **Expansion** **PSE**
						SG-33-H16			VT-05-550 **07-VT-1177**	AUG RR#4 **Expansion**
						SG-33-H17			VT-05-551 VT 05-1152	AUG RR#4 PSE, RR #4
						SG-33-H882			**07-VT-1177**	**Expansion**
	45	MS SG 2 270	One	1	1	SG-42-H14			99-1244	
			Two	3	3	SG-42-H11			VT-02-690	RR #4
						SG-42-H15			VT-04-014	RR#4, Removed
						SG-42-H16			VT-04-015	RR#4

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
			Three	3	1	SG-42-H-11			VT-05-552 **07-VT-1150** **07-VT-1177** **07-VT-1203**	AUG RR#4 **Aug Reject - WO 3021090** **Aug** **PSE**
						SG-42-H-16			VT-05-553 **07-VT-1177**	AUG RR#4 **Expansion**
						SG-42-H-17			VT-05-554	RR#4
						SG-42-H891			**07-VT-1177**	**Expansion**
	46	MS SG 2 90	One	2	2	SG-45-H17			99-1441	
						SG-45-H18			99-1463	Support Deleted
			Two	3	3	SG-45-H11			VT-02-691	RR #4
						SG-45-H887			VT-02-689	RR #4
						SG-45-H888			VT-02-692	RR #4
			Three	1	1	SG-45-H-11			VT-05-555 **07-VT-1151** **07-VT-1177** **07-VT-1203**	AUG RR#4 **Aug. Reject - WO 3022219** **Aug** **PSE**
						SG-45-H-16			VT-05-556 **07-VT-1177**	RR#4 Expansion
						SG-45-H-17			VT-05-557 VT-05-1155	AUG RR#4 PSE, RR #4
						SG-45-H-888			**07-VT-1177**	**Expansion**
	47	MS SG1 270	One	1	1	SG-206-H1			99-1318	
	48	MS SG1 270	Two	1	1	SG-207-H1			VT-04-016	
	49	MS (East) SG	Three	1	1	SG-208-H1			VT-05-674	RR #4
	50	MS (West) SG	Three	1	1	SG-209-H1			VT-05-675	
	51	Atm Dump SG1	One	1	1	SG-59-H6			99-1575	
			Two	1	1	SG-70-H6			VT-04-017	
	52	Atm Dump SG2	One	0	1	SG-103-H6			01-1566	PSE
			Three	2	1	SG-84-H6			VT-05-676	
	53	Steam to Aux FW	One	4	4	SG-81-H1			99-1679	
						SG-81-H2			99-1680	
						SG-83-H1			99-1681	
						SG-83-H2			99-1682	
			Two	2	2	SG-81-H4			VT-02-602	Support Deleted
						SG-83-H4			VT-02-603	Support Deleted
			Three	2	2	SG-81-H1			VT-05-677	
						SG-81-H3			VT-05-1156	
						SG-83-H3			VT-05-678	
	54	Feedwater SG 1	One	7	7	SG-2-H2			01-1602	Expansion
						SG-2-H4			01-1022	
						SG-2-H5			01-1021	
						SG-2-H12			01-1062 01-1603	Reject Re-exam
						SG-2-H13			01-1020	
						SG-2-H14			01-1019	
						SG-2-H15			01-1018	
						SG-2-H803			01-1025	
						SG-13-H1			01-1612	Expansion
			Two	7	7	SG-2-H09			VT-04-018	RR#4
						SG-2-H10			VT-04-019	RR#4
						SG-2-H11			VT-04-020	RR#4
						SG-2-H806			VT-04-021	
						SG-2-H811			VT-04-022	RR#4
						SG-13-H1			VT-04-023	RR#4
						SG-13-H802			VT-04-024	RR#4
	55	Feedwater SG 2	One	9	9	SG-5-H9			01-1173	
						SG-5-H10			01-1174	
						SG-5-H11			01-1175	
						SG-5-H12			01-1036	
						SG-5-H14			01-1477	PSE
						SG-5-H805			01-1037	
						SG-5-H809			01-1038	

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SG-5-H812			01-1039	
						SG-14-H1			01-1034	
						SG-14-H804			01-1035	
			Two	7	7	SG-5-H4			VT-02-559	
						SG-5-H5			VT-02-560 VT-02-656	Reject Re-exam
						SG-5-H6			VT-02-561	RR #4
						SG-5-H7			VT-02-562	
						SG-5-H8			VT-02-564	RR #4
						SG-5-H13			VT-02-563 VT-02-657	Reject Re-exam
						SG-5-H14			VT-02-565	
	56	FW SG1	Two	1	1	SG-202-H1			VT-04-025	
	57	Feedwater SG 2	Three	1	1	SG-205-H2			VT-05-679	
	58	Aux & Dwncmr SG1	One	7	7	SG-8-H2			01-1604	
						SG-8-H3			01-1606	
						SG-8-H4			01-1608	
						SG-8-H5			01-1607	
						SG-8-H20			01-1609	
						SG-8-H901			01-1448	
						SG-8-H903			01-1605	
			Two	7	7	SG-8-H6			VT-02-520	RR #4
						SG-8-H7			VT-02-449	RR #4
						SG-8-H8			VT-02-451 VT-02-649	Reject Re-exam
						SG-8-H9			VT-02-452	
						SG-8-H10			VT-02-453	
						SG-8-H11			VT-02-454	
						SG-8-H17			VT-02-519	RR #4
	59	Aux / Dwncmr SG2	One	6	6	AF-6-H1			99-1261	
						SG-11-H8			99-1201	
						SG-11-H9			99-1246	
						SG-11-H10			99-1245	
						SG-11-H11			99-1200	
						SG-11-H12			99-1199 99-1332	
			Two	6	6	SG-11-H3			VT-02-702	PSE
						SG-11-H13			VT-02-566	
						SG-11-H14			VT-02-567	
						SG-11-H15			VT-02-568	
						SG-11-H16			VT-04-026	
						SG-11-H17			VT-04-408	RR#4, PSE
						SG-11-H18			VT-02-455	
						SG-11-H19			VT-02-570	
F 1.20	**59**	**Aux / Dwncmr SG2**	**Three**	**10**		**SG-11-H4**			**07-VT-1205**	**PSE**
	60	Dwncmr FW SG1	One	1	1	SG-200-H9			99-1668	
						SG-200-H13			99-1669	PSE
						SG-200-H14			99-1670	PSE
			Three	2	2	SG-200-H9			VT-05-680	
						SG-200-H13			VT-05-681	
						SG-200-H14			VT-05-682	
	61	Dwncmr FW SG2	One	0	0	SG-203-H13			99-1671	PSE
						SG-203-H14			99-1672	PSE
			Two	2	2	SG-203-H13			VT-04-027	
						SG-203-H14			VT-04-028	
			Three	1	1	SG-203-H8			VT-05-683	
	62	Aux FW SG1	One	1	1	AF-4-H3			99-1461	
			Two	1	1	AF-18-H1			VT-04-042	
			Three	2	2	AF-18-H2			VT-05-684	
						AF-18-H3			VT-05-685	
	63	Aux FW SG2	One	2	2	AF-6-H2			99-1462	
						AF-16-H1			99-1460	

APPENDIX A
1R13 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	AF-6-H3			VT-04-043	RR#4
						AF-6-H5			VT-04-044	RR#4
			Three	1	1	AF-6-H4			VT-05-686	
	64	Blowdown SG 1	One	12	12	SG-39-H10			01-1449	
						SG-39-H11			01-1450	Support Deleted
						SG-39-H12			01-1451	
						SG-39-H13			01-1452	Support Deleted
						SG-39-H14			01-1453	Support Deleted
						SG-39-H15			01-1454	
						SG-39-H16			01-1455	
						SG-39-H17			01-1456	Support Deleted
						SG-39-H26			01-1457	
						SG-53-H1			01-1031	Support Deleted
						SG-53-H2			01-1032	Support Deleted
						SG-53-H924			01-1033	
			Two	13	13	SG-39-H1			VT-02-480	Support Deleted
						SG-39-H2			VT-02-481	Support Deleted
						SG-39-H3			VT-02-482	Support Deleted
						SG-39-H4			VT-02-483	
						SG-39-H5			VT-02-484	
						SG-39-H6			VT-02-485	Support Deleted
						SG-39-H27			VT-02-486	Support Deleted
						SG-53-H3			VT-02-488	Support Deleted
						SG-53-H4			VT-02-489	
						SG-53-H5			VT-02-490	
						SG-53-H6			VT-02-491	Support Deleted
						SG-53-H7			VT-02-492	Support Deleted
						SG-39-H922			VT-04-029	RR#4
			Three	5	0	SG-39-H38			VT-05-687	PSE
	65	Blowdown SG 2	One	12	12	SG-48-H2			01-1030	Support Deleted
						SG-48-H3			01-1478	Support Deleted
						SG-48-H4			01-1479	
						SG-48-H19			01-1480	Support Deleted
						SG-48-H20			01-1481	Support Deleted
						SG-48-H21			01-1482	
						SG-48-H925			01-1029	
						SG-52-H1			01-1026	Support Deleted
						SG-52-H2			01-1027	Support Deleted
						SG-52-H3			01-1483	Support Deleted
						SG-52-H4			01-1484	
						SG-52-H923			01-1028	
			Two	11	11	SG-48-H13			VT-02-456	Support Deleted
						SG-48-H14			VT-02-457	RR #4
						SG-48-H15			VT-02-458	Support Deleted
						SG-48-H16			VT-02-459	RR #4
						SG-48-H17			VT-02-460	Support Deleted
						SG-48-H18			VT-02-461	RR #4
						SG-48-H22			VT-02-462	Support Deleted
						SG-48-H23			VT-02-463	RR #4
						SG-48-H24			VT-02-464	RR #4
						SG-48-H25			VT-02-465	Support Deleted
						SG-48-H26			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	SI-67-H4			99-1248	
						SI-307-H16			99-1428	PSE
			Three	4	4	SI-241-H20			VT-05-694	RR #4
						SI-241-H22			VT-05-695	Removed
						SI-307-H16			VT-05-696	RR #4
						SI-307-H17			VT-05-697	
	71	LPSI Discharge A	One	1	1	SI-87-H11			99-1247 99-1375	

APPENDIX A
1R13 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	SI-78-H1			VT-02-541	
						SI-78-H2			VT-02-542	
						SI-87-H1			VT-02-543	
						SI-87-H2			VT-02-544	
						SI-87-H3			VT-02-545	
			Three	1	1	SI-78-H3			VT-05-698	RR #4
	73	LPSI Suction B	Two	1	1	SI-308-H14			VT-02-546	
			Three	4	4	SI-34-H4			VT-05-699	RR #4
						SI-194-H1			VT-05-700	RR #4
						SI-308-H12			VT-05-701	RR #4
						SI-308-H13			VT-05-702	RR #4
	74	LPSI B	Three	6	6	SI-129-H1			VT-05-703	RR #4
						SI-129-H2			VT-05-704	RR #4
						SI-129-H3			VT-05-705	RR #4
						SI-129-H4			VT-05-706	RR #4
						SI-129-H5			VT-05-707	
						SI-129-H6			VT-05-708	
	76	CS Suction A	One	1	1	SI-9-H4			99-1376 99-1438	
						SI-67-H1			99-1427	PSE
						SI-67-H3			99-1426	PSE
			Three	3	3	SI-67-H1			VT-05-709	
						SI-67-H2			VT-05-710	
						SI-67-H3			VT-05-711	
	77	CS Discharge A	One	4	4	SI-79-H1			99-1377	
						SI-79-H2			99-1378	
						SI-79-H3			99-1379	
						SI-79-H4			99-1380	
			Two	3	3	SI-79-H5			VT-04-033	RR#4
						SI-79-H6			VT-04-034	RR#4
						SI-82-H2			VT-04-035	RR#4
			Three	3	3	SI-79-H7			VT-05-712	RR #4
						SI-79-H8			VT-05-713	RR #4
						SI-79-H9			VT-05-714	
	79	CS Suction B	One	3	3	SI-79-H4			99-1517	
						SI-34-H2			99-1518	
						SI-34-H3			99-1519	
			Two	1	1	SI-33-H4			VT-04-039	
			Three	2	2	SI-34-H5			VT-05-715	
						SI-34-H6			VT-05-716	RR #4
	80	CS Discharge B	One	3	3	SI-119-H7			99-1527	
						SI-119-H8			99-1528	
						SI-119-H9			99-1529	
			Two	4	4	SI-119-H1			VT-04-040	RR#4
						SI-119-H2			VT-04-041	RR#4
						SI-119-H3			VT-04-045	RR#4
						SI-119-H4			VT-04-046	RR#4
			Three	3	3	SI-119-H5			VT-05-717	
						SI-119-H6			VT-05-718	RR #4
						SI-147-H1			VT-05-719	RR #4
	82	SD Cooling HX A	One	2	2	SI-78-H4			99-1296	
						SI-78-H5			99-1595 01-1564	PSE
						SI-79-H10			99-1297 01-1458	
			Three	1	1	SI-78-H4			VT-05-723	RR #4
	83	SD Cooling HX A	One	4	4	SI-87-H9			99-1312	
						SI-89-H1			99-1300	
						SI-89-H2			99-1299	
						SI-89-H3			99-1298	
			Two	3	3	SI-87-H4			VT-04-047	
						SI-90-H1			VT-04-320	

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI-90-H2			VT-04-321	RR#4
			Three	12	12	SI-70-H1			VT-05-724	
						SI-70-H2			VT-05-726	RR #4
						SI-70-H3			VT-05-727	RR #4
						SI-70-H6			VT-05-728	
						SI-70-H7			VT-05-729	
						SI-82-H1			VT-05-730	RR #4
						SI-87-H5			VT-05-731	RR #4
						SI-87-H6			VT-05-732	RR #4
						SI-87-H7			VT-05-733	RR #4
						SI-87-H8			VT-05-734	RR #4
						SI-89-H5			VT-05-735	RR #4
						SI-90-H4			VT-05-736	RR #4
	85	SD Cooling HXB	One	3	3	SI-119-H10			99-1530	
						SI-123-H6			99-1531	
						SI-123-H7			99-1532	
			Two	6	6	SI-119-H11			VT-04-050	RR#4
						SI-119-H13			VT-04-051	RR#4
						SI-119-H14			VT-04-052	RR#4
						SI-123-H2			VT-04-053	RR#4
						SI-123-H5			VT-04-054	RR#4
						SI-123-H8			VT-04-055	RR#4
			Three	1	1	SI-123-H1			VT-05-737	RR #4
	86	SD Cooling HXB	One	3	3	SI-129-H10			99-1406	
						SI-129-H11			99-1405	
						SI-129-H12			99-1407	
			Two	7	7	SI-072-H5			VT-04-056	
						SI-072-H6			VT-04-057	RR#4
						SI-129-H7			VT-04-058	RR#4
						SI-129-H8			VT-04-059	RR#4
						SI-129-H9			VT-02-672	Expansion, RR #4
						SI-135-H1			VT-02-675	Expansion, RR #4
						SI-135-H2			VT-04-060	RR#4
						SI-135-H3			VT-04-061	
			Three	15	15	SI-72-H1			VT-05-738	RR #4
						SI-72-H2			VT-05-739	RR #4
						SI-72-H3			VT-05-740	RR #4
						SI-72-H4			VT-05-741	RR #4
						SI-72-H12			VT-05-742	
						SI-129-H9			VT-05-743	RR #4
						SI-129-H13			VT-05-744	RR #4
						SI-134-H1			VT-05-745	RR #4
						SI-134-H2			VT-05-746	RR #4
						SI-134-H3			VT-05-747	
						SI-134-H5			VT-05-748	RR #4
						SI-134-H6			VT-05-749	RR #4
						SI-134-H7			VT-05-750	RR #4
						SI-134-H8			VT-05-751	RR #4
						SI-147-H2			VT-05-752	RR #4
	88	East Wrap	One	8	8	SI-72-H11			99-1533	
						SI-72-H13			99-1534	
						SI-72-H14			99-1535	
						SI-72-H21			01-1333	
						SI-72-H22			01-1334	
						SI-73-H1			01-1459	
						SI-73-H2			01-1460	
						SI-73-H3			01-1461	
			Two	0	0	SI-72-H11			VT-02-685	Expansion, RR #4
						SI-72-H13			VT-02-686	Expansion, RR #4
						SI-72-H14			VT-02-687	Expansion, RR #4
						SI-73-H2			VT-02-688	Expansion, RR #4
			Three	6	6	SI-72-H15			VT-05-753	RR #4

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI-72-H16			VT-05-754	RR #4
						SI-72-H17			VT-05-755	RR #4
						SI-72-H18			VT-05-756	RR #4
						SI-72-H19			VT-05-757	
						SI-72-H20			VT-05-758	
	89	East Wrap	One	4	4	SI-194-H12			99-1536	
						SI-194-H13			99-1537	
						SI-194-H14			99-1640	
						SI-194-H23			99-1641	
			Two	0	0	SI-194-H13			VT-02-668	Expansion, RR #4
			Three	1	1	SI-173-H1			VT-05-759	RR #4
						SI-194-H23			VT-05-760	RR #4
	90	East Wrap	Two	2	2	SI-134-H09			VT-04-062	
						SI-134-H10			VT-04-063	
	91	West Wrap	One	7	7	SI-70-H9			99-1255	
						SI-70-H10			99-1254	
						SI-70-H11			99-1253	
						SI-70-H12			99-1252	
						SI-70-H13			99-1249	
						SI-70-H15			99-1251	
						SI-70-H16			99-1250	
			Two	2	2	SI-71-H2			VT-04-064	
						SI-71-H3			VT-04-065	
			Three	1	1	SI-70-H14			VT-05-761	
	92	West Wrap	One	5	5	SI-239-H1			99-1673	Expansion
						SI-239-H2			99-1674	Expansion
						SI-239-H3			99-1598 01-1565	 PSE
						SI-241-H9			99-1418	PSE
						SI-241-H12			99-1417	PSE
						SI-241-H14			99-1419	PSE
						SI-241-H15			99-1597	
						SI-241-H21			99-1596	
			Two	5	5	SI-241-H9			VT-02-653	Expansion, RR #4
						SI-241-H12			VT-02-654	Expansion, RR #4
						SI-241-H14			VT-02-658	Expansion, RR #4
						SI-241-H21			VT-02-660	Expansion, RR #4
						SI-239-H1			VT-04-066	
						SI-239-H2			VT-04-067	
						SI-241-H11			VT-04-068	RR#4
						SI-241-H16			VT-04-069	
			Three	2	2	SI-2-H1			VT-05-762	Removed
						SI-2-H5			VT-05-763	Removed
	93	West Wrap	Two	2	2	SI-89-H10			VT-04-070	RR#4
						SI-89-H13			VT-04-071	
			Three	2	2	SI-89-H11			VT-05-764	
						SI-89-H12			VT-05-765	
	94	LPSI A	One	3	3	SI-89-H7			99-1398	
						SI-89-H8			99-1399	
						SI-89-H9			99-1400	
						SI-241-H5			99-1302	PSE
						SI-241-H7			99-1423	PSE
						SI-241-H8			99-1421	PSE
			Two	7	7	SI-070-H4			VT-02-589	
						SI-070-H5			VT-02-697	
						SI-070-H8			VT-02-495	
						SI-241-H6			VT-02-624	RR #4
						SI-241-H7			VT-02-642	RR #4
						SI-241-H08			VT-04-072	RR#4
						SI-241-H17			VT-04-073	RR#4
			Three	5	5	SI-89-H6			VT-05-766	
						SI-241-H2			VT-05-767	RR #4

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI-241-H3			VT-05-768	RR #4
						SI-241-H4			VT-05-769	RR #4
						SI-241-H5			VT-05-770	RR #4
	95	LPSI B	One	6	6	SI-72-H8			99-1401	
						SI-72-H10			99-1402	
						SI-134-H11			99-1403	
						SI-134-H12			99-1404	
						SI-194-H3			99-1414	
						SI-194-H5			99-1415	
			Two	10	10	SI-72-H10			VT-02-644	Expansion, RR #4
						SI-194-H5			VT-02-650	Expansion, RR #4
						SI-072-H7			VT-04-074	RR#4
						SI-072-H9			VT-04-075	RR#4
						SI-194-H4			VT-04-076	RR#4
						SI-194-H7			VT-04-077	RR#4
						SI-194-H8			VT-04-078	RR#4
						SI-194-H9			VT-04-079	RR#4
						SI-194-H10			VT-04-080	RR#4
						SI-194-H11			VT-04-081	RR#4
						SI-194-H15			VT-04-082	RR#4
						SI-194-H21			VT-04-083	RR#4
			Three	3	3	SI-134-H4			VT-05-771	
						SI-194-H2			VT-05-772	
						SI-194-H6			VT-05-773	
	96	LPSI to Loop 1A	One	3	3	SI-202-H7			99-1342	
						SI-202-H8			99-1343	Support Deleted
						SI-202-H9			99-1344	Support Deleted
			Two	8	8	SI-202-H1			VT-02-670	Expansion
						SI-202-H2			VT-02-467	RR #4
						SI-202-H3			VT-02-468	RR #4
						SI-202-H4			VT-02-469 VT-02-651	Reject Re-exam
						SI-202-H6			VT-02-470	RR #4
						SI-202-H7			VT-02-671	Expansion
						SI-202-H10			VT-02-471	Support Deleted
						SI-202-H11			VT-02-472	Support Deleted
						SI-202-H12			VT-02-673	Expansion
						SI-202-H15			VT-02-473	RR #4
						SI-202-H16			VT-02-674	Expansion
						SI-202-H18			VT-02-676	Expansion
						SI-202-H5			VT-04-084	Snubber deleted
	97	LPSI to Loop 1B	One	10	10	SI-220-H8			01-1468	
						SI-220-H9			99-1333	
						SI-220-H10			99-1334	
						SI-220-H11			99-1335	Support Deleted
						SI-220-H12			99-1336	
						SI-220-H13			99-1337	
						SI-220-H14			99-1338	Support Deleted
						SI-220-H15			99-1339	
						SI-220-H19			99-1340	
						SI-220-H22			99-1341	Support Deleted
			Two	7	7	SI-220-H1			VT-02-444	
						SI-220-H5			VT-02-677	Expansion
						SI-220-H16			VT-02-446	RR #4
						SI-220-H17			VT-02-447	
						SI-220-H18			VT-02-448	
						SI-220-H20			VT-02-443 VT-02-648	Reject RR #4 Re-exam
						SI-220-H21			VT-02-445	Support Deleted
						SI-220-H27			VT-02-678	Expansion
						SI-220-H28			VT-02-450	Support Deleted
	98	LPSI to Loop 2A	One	2	2	SI-155-H5			99-1329	

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI-155-H6			99-1328	
			Two	5	5	SI-155-H6			VT-02-679	Expansion
						SI-155-H1			VT-04-085	
						SI-155-H2			VT-04-086	Snubber deleted
						SI-155-H3			VT-04-087	Snubber deleted
						SI-155-H4			VT-04-088	Snubber deleted
						SI-155-H7			VT-04-089	
	99	LPSI to Loop 2B	Two	5	5	SI-174-H4			VT-02-680	Expansion
						SI-174-H7			VT-02-554	Support Deleted
						SI-174-H8			VT-02-555	
						SI-174-H9			VT-02-556	Support Deleted
						SI-174-H11			VT-02-681	Expansion
						SI-174-H12			VT-02-682	Expansion
						SI-174-H13			VT-02-558	
						SI-174-H10			VT-04-090	RR#4
	100	LPSI Suction A	One	2	2	SI-241-H19			99-1330 99-1642 01-1469	Reject Re-exam Re-exam
						SI-369-H1			99-1331	
			Two	1	1	84-5			VT-02-696	
	101	Cont LPSI B Suction	Two	0	0	SI-194-H16			VT-02-683	Expansion
						SI-194-H22			VT-02-684	Expansion
			Three	8	1	85-5			VT-05-774	
	102	SI Suction A	One	6	6	SI-8-H4			99-1303	PSE
						SI-9-H1			99-1429	PSE
						SI-307-H2			99-1422	PSE
						SI-307-H5			99-1304	PSE
						SI-307-H6			99-1425	PSE
						SI-307-H7			99-1424	PSE
						SI-307-H2			01-1462	
						SI-307-H3			01-1463	
						SI-307-H4			01-1464	Support Deleted
						SI-307-H5			01-1465	
						SI-307-H8			01-1466	
						SI-307-H15			01-1467	
			Two	7	7	SI-8-H1			VT-02-436	RR #4
						SI-8-H2			VT-02-437	Support Deleted
						SI-8-H3			VT-02-438	RR #4
						SI-8-H4			VT-02-439	RR #4
						SI-307-H6			VT-02-440	RR #4
						SI-307-H7			VT-02-441	RR #4
						SI-307-H14			VT-02-442	Support Deleted
			Three	7	7	SI-8-H5			VT-05-775	RR #4
						SI-9-H1			VT-05-776	RR #4
						SI-9-H2			VT-05-777	RR #4
						SI-9-H5			VT-05-778	RR #4
						SI-307-H9			VT-05-779	RR #4
						SI-307-H10			VT-05-780	RR #4
						SI-307-H11			VT-05-781	RR #4
	103	Refuel Suction A	One	6	6	CH-142-H3			99-1420	PSE
						CH-142-H13			99-1408	
						CH-142-H14			99-1409	
						CH-142-H15			99-1410	
						CH-142-H19			99-1412	
						CH-142-H22			99-1411	
						CH-424-H1			99-1413	
						CH-424-H2			99-1386	PSE
						CH-424-H3			99-1385	PSE
			Two	6	6	CH-142-H8			VT-02-504	
						CH-142-H20			VT-02-522	
						CH-142-H21			VT-02-505	
						CH-424-H2			VT-02-499	

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						CH-424-H3			VT-02-500	RR #4
						CH-424-H6			VT-02-521	
			Three	6	6	CH-142-H1			VT-05-782	
						CH-142-H2			VT-05-783	
						CH-142-H3			VT-05-784	
						CH-142-H4			VT-05-785	
						CH-142-H5			VT-05-786	Removed
						CH-142-H6			VT-05-787	
	104	SI Suction B	One	7	7	SI-33-H1			99-1520	Support Deleted
						SI-33-H2			99-1521	
						SI-33-H3			99-1522	
						SI-308-H5			99-1523	
						SI-308-H8			99-1524	
						SI-308-H10			99-1525	
						SI-308-H11			99-1526	
			Two	7	7	SI-308-H1			VT-02-547	
						SI-308-H2			VT-02-548	
						SI-308-H3			VT-02-549	
						SI-308-H4			VT-02-550	
						SI-308-H6			VT-02-571	Support Deleted
						SI-308-H7			VT-02-551	Support Deleted
						SI-308-H15			VT-04-091	
			Three	6	6	SI-31-H1			VT-05-788	RR #4
						SI-31-H2			VT-05-789	
						SI-31-H3			VT-05-790	Removed
						SI-31-H4			VT-05-791	RR #4
						SI-31-H5			VT-05-792	RR #4
						SI-308-H9			VT-05-793	RR #4
	105	Refuel. Suction B	One	7	7	CH-149-H9			01-1396	
						CH-149-H10			01-1397	
						CH-149-H12			01-1398	
						CH-149-H13			01-1399	
						CH-149-H14			01-1400	
						CH-149-H21			01-1401	
						CH-149-H28			01-1402	
			Two	7	7	CH-149-H4			VT-04-092	
						CH-149-H5			VT-04-093	
						CH-149-H6			VT-04-094	
						CH-149-H7			VT-04-095	
						CH-149-H25			VT-04-096	
						CH-149-H26			VT-04-097	
						CH-149-H27			VT-04-098	
			Three	8	8	CH-149-H1			VT-05-794	
						CH-149-H2			VT-05-795	
						CH-149-H3			VT-05-796	
						CH-149-H8			VT-05-797	
						CH-425-H1			VT-05-798	
						CH-425-H6			VT-05-799	
						CH-425-H7			VT-05-800	
						CH-425-H8			VT-05-801	
	106	HPSI Discharge A	One	8	8	SI-99-H1			01-1046	
						SI-99-H2			01-1047	
						SI-100-H1			01-1048	
						SI-100-H2			01-1049	
						SI-100-H3			01-1050	
						SI-100-H5			01-1051	
						SI-100-H34			01-1052	
						SI-106-H1			01-1053	
			Two	7	7	SI-100-H9			VT-04-099	
						SI-100-H10			VT-04-100	
						SI-100-H11			VT-04-101	
						SI-105-HB			VT-04-102	RR#4

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI-105-HC			VT-04-103	RR#4
						SI-105-HD			VT-04-104	RR#4
						SI-105-HE			VT-04-105	RR#4
			Three	7	7	SI-100-H4			VT-05-802	
						SI-100-H6			VT-05-803	RR #4
						SI-100-H7			VT-05-804	RR #4
						SI-100-H8			VT-05-805	RR #4
						SI-100-H15			VT-05-806	
						SI-100-H16			VT-05-807	
						SI-100-H36			VT-05-808	RR #4
	107	HPSI Discharge B	One	6	6	SI-107-H3			01-1057	
						SI-107-H11			01-1056	
						SI-107-H12			01-1059	
						SI-112-HC			01-1055	
						SI-112-HG			01-1054	
						SI-112-HH			01-1058	
			Two	6	6	SI-107-H5			VT-04-106	RR#4
						SI-107-H6			VT-04-107	
						SI-107-H7			VT-04-108	
						SI-107-H8			VT-04-109	
						SI-107-H9			VT-04-110	
						SI-107-H10			VT-04-111	
			Three	6	6	SI-107-H1			VT-05-809	RR #4
						SI-107-H2			VT-05-810	RR #4
						SI-107-H4			VT-05-811	RR #4
						SI-107-H46			VT-05-812	RR #4
						SI-107-H48			VT-05-813	RR #4
						SI-112-HD			VT-05-814	
	108	HPSI Discharge	One	11	11	SI-100-H22			99-1388	
						SI-100-H23			99-1387	
						SI-100-H24			99-1389	
						SI-100-H25			99-1390	
						SI-100-H26			99-1391	
						SI-100-H27			99-1392	
						SI-100-H28			99-1393	
						SI-100-H29			99-1394	
						SI-100-H31			99-1395	
						SI-100-H32			99-1396	
						SI-100-H35			99-1397	
			Two	11	11	SI-100-H12			VT-04-112	RR#4
						SI-100-H13			VT-04-113	RR#4
						SI-100-H18			VT-04-114	RR#4
						SI-100-H19			VT-04-115	RR#4
						SI-100-H20			VT-04-116	RR#4
						SI-100-H21			VT-04-117	RR#4
						SI-118-HA			VT-04-118	RR#4
						SI-118-HB			VT-04-119	RR#4
						SI-118-HD			VT-04-120	RR#4
						SI-118-HR			VT-04-121	RR#4
						SI-118-HS			VT-04-122	RR#4
			Three	11	11	SI-118-HE			VT-05-815	RR #4
						SI-118-HF			VT-05-816	RR #4
						SI-118-HG			VT-05-817	RR #4
						SI-118-HH			VT-05-818	RR #4
						SI-118-HJ			VT-05-819	RR #4
						SI-118-HK			VT-05-820	RR #4
						SI-118-HL			VT-05-821	RR #4
						SI-118-HM			VT-05-822	RR #4
						SI-118-HN			VT-05-823	RR #4
						SI-118-HP			VT-05-824	RR #4
						SI-118-HQ			VT-05-825	RR #4
	109	HPSI Discharge	One	7	7	SI-107-H13			01-1335	

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI-107-H14			01-1336	
						SI-107-H15			01-1337	
						SI-107-H16			01-1338	
						SI-107-H21			01-1339	
						SI-107-H47			01-1340	
						SI-107-H50			01-1341	
			Two	7	7	SI-107-H19			VT-04-123	RR#4
						SI-107-H20			VT-04-124	RR#4
						SI-107-H25			VT-04-125	RR#4
						SI-107-H26			VT-04-126	RR#4
						SI-107-H27			VT-04-127	RR#4
						SI-107-H28			VT-04-128	RR#4
						SI-107-H29			VT-04-129	RR#4
			Three	7	7	SI-107-H30			VT-05-826	
						SI-107-H31			VT-05-827	
						SI-107-H32			VT-05-828	
						SI-107-H34			VT-05-829	
						SI-107-H35			VT-05-830	
						SI-107-H36			VT-05-831	
						SI-107-H37			VT-05-832	
	110	HPSI Discharge	One	7	7	SI-103-HB			01-1403	
						SI-103-HD			01-1404	
						SI-103-HE			01-1405	
						SI-218-H1			01-1342	
						SI-218-H2			01-1343	
						SI-218-H3			01-1344	
						SI-218-H4			01-1345	
			Two	7	7	SI-107-H39			VT-04-130	RR#4
						SI-107-H41			VT-04-131	
						SI-107-H42			VT-04-132	
						SI-107-H43			VT-04-133	
						SI-107-H44			VT-04-134	RR#4
						SI-107-H45			VT-04-135	RR#4
						SI-107-H49			VT-04-136	RR#4
			Three	6	6	SI-103-HA			VT-05-833	RR #4
						SI-107-HA			VT-05-834	RR #4
						SI-110-HA			VT-05-835	RR #4
						SI-218-HA			VT-05-836	RR #4
						SI-218-HB			VT-05-837	
						SI-236-HB			VT-05-838	RR #4
	111	HPSI Discharge	One	3	3	SI-100-H37			01-1348	
						SI-100-HA			01-1346	
						SI-100-HB			01-1347	
			Two	4	4	SI-236-H1			VT-04-137	
						SI-236-H2			VT-04-138	RR#4
						SI-236-H3			VT-04-139	RR#4
						SI-236-H4			VT-04-140	
			Three	3	3	SI-100-H30			VT-05-839	
						SI-100-H38			VT-05-840	RR #4
						SI-100-H40			VT-05-841	RR #4
	112	HPSI Discharge	One	3	3	SI-176-H1			01-1349	
						SI-176-H2			01-1350	
						SI-176-H3			01-1351	
			Two	3	3	SI-100-H17			VT-04-141	
						SI-102-HA			VT-04-142	
						SI-102-HB			VT-04-143	
			Three	4	4	SI-101-HA			VT-05-842	
						SI-101-HB			VT-05-843	RR #4
						SI-101-HC			VT-05-844	
						SI-101-HD			VT-05-845	
	113	HPSI Discharge	One	5	5	SI-107-H22			01-1061	
						SI-107-H24			01-1060	

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI-157-H2			01-1352	
						SI-157-H3			01-1353	
						SI-157-H4			01-1354	
			Two	4	4	SI-106-HA			VT-04-144	
						SI-109-HA			VT-04-145	
						SI-157-HA			VT-04-146	
						SI-176-HA			VT-04-147	
			Three	4	4	SI-157-H1			VT-05-846	RR #4
						SI-157-H5			VT-05-847	RR #4
						SI-157-H6			VT-05-848	
						SI-157-H9			VT-05-849	RR #4
	115	HPSI 2A & 2B	Two	3	3	SI-157-H10			VT-02-502	Support Deleted
						SI-157-H11			VT-02-503	RR #4
						SI-176-H4			VT-02-501	RR #4
	118	HPSI A Recirc	Three	24	24	SI-106-H2			VT-05-850	
						SI-106-H3			VT-05-851	
						SI-106-H4			VT-05-852	
						SI-106-H5			VT-05-853	
						SI-106-H6			VT-05-854	
						SI-106-H7			VT-05-855	
						SI-106-H8			VT-05-856	RR #4
						SI-106-H9			VT-05-857	
						SI-106-H10			VT-05-858	RR #4
						SI-106-H11			VT-05-859	RR #4
						SI-106-H12			VT-05-860	RR #4
						SI-106-H13			VT-05-861	
						SI-106-H14			VT-05-862	
						SI-106-H15			VT-05-863	
						SI-106-H16			VT-05-864	
						SI-106-H18			VT-05-865	
						SI-106-H19			VT-05-866	
						SI-106-H20			VT-05-867	
						SI-106-H21			VT-05-868	
						SI-106-H22			VT-05-869	
						SI-106-H23			VT-05-870	
						SI-106-H24			VT-05-871	
						SI-106-H25			VT-05-872	
						SI-106-H26			VT-05-873	
	119	HPSI A Recirc	Three	30	30	SI-114-H1			VT-05-874	
						SI-114-H2			VT-05-875	
						SI-114-H3			VT-05-876	
						SI-114-H4			VT-05-877	
						SI-114-H5			VT-05-878	
						SI-114-H6			VT-05-879	
						SI-114-H7			VT-05-880	
						SI-114-H8			VT-05-881	
						SI-114-H9			VT-05-882	
						SI-114-H10			VT-05-883	RR #4
						SI-114-H12			VT-05-884	RR #4
						SI-114-H13			VT-05-885	
						SI-114-H14			VT-05-886	
						SI-114-H15			VT-05-887	
						SI-114-H16			VT-05-888	
						SI-114-H17			VT-05-889	
						SI-114-H18			VT-05-890	
						SI-114-H21			VT-05-891	
						SI-114-H22			VT-05-893	
						SI-114-H25			VT-05-894	
						SI-114-H26			VT-05-895	
						SI-114-H27			VT-05-896	RR #4
						SI-319-HA			VT-05-897	RR #4
						SI-319-HB			VT-05-898	

APPENDIX A
1R13 INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone	Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						SI-319-HC			VT-05-899	
						SI-319-HD			VT-05-900	
						SI-319-HE			VT-05-901	
						SI-319-HF			VT-05-902	
						SI-319-HG			VT-05-903	
						SI-319-HH			VT-05-904	
F 1.40	41	SG 1	One	2	2	41-42			01-1498	
						41-43			01-1499	
			Three	0	0	41-41			VT-05-1166	PSE
						41-42			VT-05-1167	PSE
	42	SG 1	Two	2	2	42-42			VT-04-011	
						42-43			VT-04-013	
			Three	0	0	42-41			VT-05-672	PSE
						42-42			VT-05-673	PSE
	72	LPSI Pump A	One	3	3	72-3A			01-1472	
						72-3B			01-1472	
						72-3C			01-1472	
	75	LPSI Pump B	Two	3	3	73-3A			VT-04-030	
						73-3B			VT-04-031	
						73-3C			VT-04-032	
	78	CS Pump A	Two	3	3	80-3A			VT-04-036	
						80-3B			VT-04-037	
						80-3C			VT-04-038	
	81	Cont Spray B	Three	3	3	81-3A			VT-05-720	
						81-3B			VT-05-721	
						81-3C			VT-05-722	
	116	HPSI Pump A	One	4	4	116-1A			01-1474	
						116-1B			01-1474	
						116-1C			01-1474	
						116-1D			01-1474	
	117	HPSI Pump B	Two	4	4	117-1A			VT-04-148	
						117-1B			VT-04-149	
						117-1C			VT-04-150	
						117-1D			VT-04-151	

APPENDIX B

CODE LIMITATIONS

REFUELING OUTAGE NUMBER THIRTEEN

CODE LIMITATIONS

ASME ITEM	ZONE/COMPONENT	ITEM ID	REPORT NO.

No limited examinations during the 1R13 reporting cycle

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 third 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 12-25-05 TO 07-19-07

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 Category and Item Numbers with the corresponding examination report numbers.

10. ABSTRACT OF CONDITIONS NOTED

The evaluation of the results form the ISI examinations indicate the integrity of the systems have been maintained. There were several cases of leakage at non-resistant bolting connections and two supports that had a broken load collar.

11. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN

The non-resistant bolting at leaking locations was removed and further inspected, as required by relief request 15. While several bolts were replaced, the bolting maintained its pressure integrity. The support load collars were replaced. 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 Company.

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 10-15-07 SIGNED: ARIZONA PUBLIC SERVICE COMPANY BY

CERTIFICATE OF INSERVICE INSPECTION

I, THE UNDERSIGNED, HOLDING A VALID COMMISSION ISSUED BY THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS AND THE STATE OR PROVINCE OF ARIZONA EMPLOYED BY HSB CT OF HARTFORD, CONNECTICUT HAVE INSPECTED THE COMPONENTS DESCRIBED IN THIS OWNERS REPORT DURING THE PERIOD 12-25-05 TO 7-19-07, 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 COMMISSIONS NB 9685 "A, N, I, C" Az 264

NAT'L BOARD, STATE, PROVINCE

DATE 10-15-07

APPENDIX D

FORMS
NIS-2

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JCHNPSV0354
2.. Item Description: Crosby relief valve
3. N-5 Data Package Number: 1CH13-2 4. W.O. Number: 2739965
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove valve and install spare.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Not a ASME pressure boundary failure. Valve is being replaced to expidite work.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1976 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial DMG Date 7-11-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 7-11-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 7-11-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMG Date 7-11-05 17. 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.
1JCHNPSV0354	APN 45000471	N61175-00-0005	N/A	WO 2749800

18. Planner [signature] 7-11-05 Printed Name: David Goodlet
Signature Date

19. ISI [signature] 7/28/05 Printed Name: R.P. Indag Log Entry RPI
Signature Date

20. ANII [signature] 7-28-05 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: 6-4-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2739965

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)
Relief Valve	Crosby	N61175-00-0001	N/A	1JCHNPSV0354	1978	Replaced	YES
Relief Valve	Crosby	N61175-00-0005	N/A	1JCHNPSV0354	1986	Replacement	YES

7. Description of Work: Remove PSV and install tested spare. Test removed valve and rework & save as spare.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ Other Pressure 930 psi Test Temperature 102 °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# 2739965 for valve 1JCHNPSV0354. Removed existing PSV and installed tested spare. Test the removed valve and save as spare.

Pre-Pressured Test WO Review – ISI [signature] 6/22/07

ANII [signature] 6-22-07

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] Date: 7/4/07

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 7-28-05 to 7-4-07, 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: 7-4-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID ~~2803667~~ 1MCHBX07 RPI 8/24/06
2.. Item Description: Charging pump pulsation dampener
3. N-5 Data Package Number: 1CH04-1 4. W.O. Number: 2803667
5. Original Construction Code Edition: 1977 Edition, Winter 1977 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: PM activity for replacement of rubber parts such as bladder, o-rings and anti-extrusion ring.
8. ☐ ISI Flaw NDE Method of Flaw Detection: n/a
Report Number: n/a
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Not a failure of the ASME III pressure boundary. Parts replaced are approved spare parts for this component.
Replacement is a routine planned maintenance. RPIndap 8/24/06

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1977 Edition 1977 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial DMG Date 8-24-2006 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 8-24-2006 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 8-24-2006 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial DMG Date 8-24-2006 17. 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 & Poppet Assy	APN 00093298	14	n/a	MR 1132237
Bag & Gas Valve Assy	APN 45000617	1126-7	n/a	MR 1103473
Retaining Ring	APN 45150602	1356-04	n/a	MR 1103473

18. Planner [signature] 8-24-06 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI [signature] 8/24/06 Printed Name: R. P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 8-24-06 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: 8/24/2006

Sheet: 1 of 2

Unit: 1

Work Order Number 2803667

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 1977 Edition, Summer 1977 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 & Poppet	Greer	14	n/a	1MCHBX07	2006	Replacement	NO
Bag &Gas Valve Assy	Greer	1126-7	n/a	1MCHBX07	2006	Replacement	NO
Retaining Ring	Greer	1356-04	n/a	1MCHBX07	2006	Replacement	NO

7. Description of Work: Routine maint. for replacement of rubber parts; o-rings, bladder and extrusion ring.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 2803667 for pulsation dampener (1MCHBX07). This work order is a 5 year PM for replacement of rubber parts. The Bag & Gas Valve Assy has the valve stem as a pressure retaining part. The Plug & Poppet Assy has both the plug and the poppet as pressure retaining parts. The existing assembly was replaced due to scratches in the poppet.This assembly was obtained from WPPSS under PO# 500291254. The retaining ring was replaced because it is vulcanized to the rubber anti-extrusion ring

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: RP Hodgp, Sr. Consulting Engineer Date: 8/24/06
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 8-24-06 to 8-24-06, 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.

RJ Signature
Inspectors Signature

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

Date: 8-24-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JEWBLV0092
2.. Item Description: ECWS SURGE TANK B MAKEUP SOLENOID VALVE
3. N-5 Data Package Number: 1EW02-3 4. W.O. Number: 2860070
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: REWORK VALVE INTERNALS OR REPLACE VALVE INTERNALS TO ELIMINATE SEAT LEAKAGE , REPLACE BODY TO BONNET TACK WELD
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

NO FAILURE OF THE ASME PRESSURE BOUNDARY

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

Initial GEO Date 3-2-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial GEO Date 3-2-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial GEO Date 3-2-07 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial GEO Date 3-2-07 17. 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.
MAIN DISC	200931-1	* 30A	L1069	500236510
~~PILOT DISC~~	~~102175-1~~	~~*540~~		~~500252133~~

FGK 3/8/07

18. Planner G Osmundson 3-2-07 Printed Name: G. OSMUNDSON
Signature Date

19. ISI Fred Potteet 3/2/07 Printed Name: FRED POTEET Log Entry FP
Signature Date

20. ANII R.G. Houstrom 3-2-07 Printed Name: R.G. HOUSTROM
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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 02/15/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2860070

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 1EW-02-3

5. (a) Applicable Construction Code ASME Section III ND, Class 3 1974 Edition, Winter 1975 Addenda, N/A 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)
Main Disc	Target Rock	30A	N/A	1JEWWBLV0092	2001	Replacement	Yes

7. Description of Work: Rework/Replace valve internals to eliminate seat leakage.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

   Other ☐ Pressure N/A Test Temperature N/A °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 2860070

Pre-Pressured Test WO Review – ISI n/a

ANII n/a

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: ISI ENGINEER Date: 3-8-07

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 3-2-07 to 3-8-07, 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: 3-8-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 45060185
2.. Item Description: Bonnet, Arm and Disc Assembly
3. N-5 Data Package Number: 1RC01-1C 4. W.O. Number: 2860072
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace and weld a new stud in the disc
8. ☐ ISI Flaw N/A NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

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

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

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

Initial J.O Date 10-2-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.O Date 10-2-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial J.O. Date 10-2-06 17. 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.
Disc	76347	SN 2	1Q90	WO 2837012
Disc Stud	APN 00093014	Trace # CL70	N/A	MR 1015735

18. Planner [signature] 10-2-06 Printed Name: JAMES T. DAVIS
Signature Date

19. ISI [signature] 10/2/06 Printed Name: BILL LEHMAN Log Entry _____
Signature Date

20. ANII [signature] 10-2-06 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. (Name) Date 11/03/06

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

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

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 (Address) 2860072 (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 85354-7529 (Address) Expiration Date N/A

4. Identification of System NA

5. (a) Applicable Construction Code ASME Section III 19 74 Edition, W75 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 92 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	Borg-Warner	SN 2	NA	NA	1978	Repaired	Yes

7. Description of Work Note remarks in Section 9 on Page 2.

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 2860072 was utilized to replace the stud in the disc. This WO does not install the disc into a valve.

Pre-Pressure Test Review: ISI_____NA_____ ANII_____NA_____

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 D Bell - ENGR (Owner or Owner's Designee, Title) Date 11-3-06

CERTIFICATE 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 10-2-06 to 11-4-06, 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 Az 264 (National Board, State, Province, and Endorsements)

Date 11-4-06

ASME SECTION XI -- REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 45060185
2. Item Description: Bonnet, Arm and Disc Assembly (removed from 1PSIBV532)
3. N-5 Data Package Number: 1RC01-1C 4. W.O. Number: 2860073
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the disc stud and weld due damge to the stud during disassembly.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   No failure of the ASME pressure boundary. Like for like replacement to refurbish spare assembly.

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

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

15. 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 J.S Date 4-24-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial J.S Date 4-24-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
~~Disc Stud Weld~~ RPI	7/12/07 ~~N/A~~	~~N/A~~	~~N/A~~	~~WO 2860073~~
RPI 7/12/07				
DISC	00088601	27240-B	N/A	01191622-7

18. Planner [signature] 4-24-07 Printed Name: James I. Davis
    Signature Date
19. ISI [signature] 4/24/07 Printed Name: R.P. Indap Log Entry [signature]
    Signature Date
20. ANII [signature] 4-24-07 Printed Name: RG Houstrom
    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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 07-12-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2860073

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A 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, Disc & Arm Assembly	Borg Warner	5	N/A	APN 45060185	1977	Repaired	Yes
Disc	Flowserve	27240-6	N/A	1PSIBV532	2007	Replacement	Yes

7. Description of Work: Reworked the bonnet, disc & arm assembly for use as spare.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

   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)

1. W.O. 2860073 reworked the bonnet, disc & arm assembly removed from valve 1PSIBV532.

Pre-Pressure Test work order review - ISI : N/A

ANII : N/A

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: R Phillips, ISI Engineer Date: 7/12/07
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 4-24-07 to 7-12-07, 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: 7-12-07

COPY

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

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

Not to Exceed One Day's Production

1. Manufactured and certified by Flowserve Corporation 1900 S. Saunders St. Raleigh, NC 27603 (name and address of NPT Certificate Holder)
2. Manufactured for Pinnacle West Capital Corp/Disbursement Accounting, MS 95/P.O Box 53940, Phoenix, AZ 85072-3940 (name and address of purchaser)
3. Location of installation APS-PALO VERDE/Arizona Public Service Palo Verde Plant/P.O. Box 52034, Phoenix AZ 85072-2034 (name and address)
4. Type

(drawing no.)	(mat'l. spec. no.)	(tensile strength)	(CRN)	(year built)
77700, R/K	SA182 F316	N/A	N/A	2007

5. ASME Code, Section III, Division 1:

(edition)	(addenda date)	(class)	(Code Case no.)
1974	Winter 1975	1	N/A

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A
7. Remarks: Disc/Stud Assy for a 3" 1521# Swing Check Valve
8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 27240-3	N/A	(26)	
(2) 27240-4	N/A	(27)	
(3) 27240-5	N/A	(28)	
(4) 27240-6	N/A	(29)	
(5) 27240-7	N/A	(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure _____ psi. Temp. _____ °F. Hydro. test pressure _____ (when applicable) at temp. °F

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

(11/05)

COPY

FORM N-2 (Back — Pg. 2 of 2)

Certificate Holder's Serial Nos. 27240-3 through 27240-7

CERTIFICATION OF DESIGN

Design specifications certified by John C. Nunnery (when applicable) P.E. State Illinois Reg. no. 062-043270

Design report* certified by N/A (*when applicable) P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Parts conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires 11-26-09

Date 6/22/07 Name Flowserve Corporation (NPT Certificate Holder) Signed (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected these items described in this Data Report on 6/22/07, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 6/22/07 Signed (Authorized Nuclear Inspector) Commissions NC #1421 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 45060170
2. Item Description: Bonnet, Arm and Disc Assembly (removed from 1PSIEV247)
3. N-5 Data Package Number: 1RC01-1C 4. W.O. Number: 2860076
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the disc / stud assembly due to cracks found in the stellite area.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   No failure of the ASME pressure boundary. Like for like replacement to refurbish spare assembly.

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

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

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

Initial JA Date 4-6-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial N/A Date _____ 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial JA Date 4-6-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Disc and Stud Assembly	APN 45020875	193724	83334	MR 1209684

18. Planner [signature] 4-6-07 Printed Name: James I. Brave
    Signature Date
19. ISI [signature] 4/6/07 Printed Name: Bill Leihman Log Entry _____
    Signature Date
20. ANII [signature] 4-6-07 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. — Date: 04/05/2007

   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 2860076

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

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: Safety Injection

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)
Bonnet , Arm, Disc assembly	Borg-Warner	SN 6	N/A	45060185	1977	Repaired	YES
Disc	Borg-Warner	211972-1	N/A	RS211930-1	1991	Replaced	YES
Disc	Borg-Warner	193724	N/A	83334	1991	Replacement	YES

7. Description of Work: Replace the disc stud assembly in the spare bonnet / arm / disc assembly

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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 2860076 replaced the disc / stud assembly in the bonnet / arm / disc assembly removed from 1PSIEV247 by Work Order 2791139, which will be stored for future use.

Pre-Pressured Test WO Review – ISI N/A

ANII

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: RLB ISI ENG Date: 4-6-07

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 4-6-07 to 4-6-07, 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: 4-6-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIEV124
2. Item Description: HPSI/LPSI Header Loop Injection Check Valve
3. N-5 Data Package Number: 1RC01-5 4. W.O. Number: 2864182
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   Seat leakage - No ASME boundary failure
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

Initial J.S Date 10-4-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.S Date 10-4-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial J.S Date 10-4-06 17. 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.
Disc	PN076865	SN#1	2C14	2932001
Bonnet	PN076857	SN#5	2B63	2932001

18. Planner [signature] 10-4-06 Printed Name: JAMES I. DAVIS
    Signature Date
19. ISI [signature] 10/4/06 Printed Name: R.P. INDAP Log Entry RPI
    Signature Date
20. ANII [signature] 10-4-06 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

Owner: Arizona Public Service Company, et. al.

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

Date: 06-27-2007

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

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

Unit: 1

Work Order Number 2864182

3. Work Performed by: Arizona Public Service Co.

5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 2 1974 Edition, Winter 1975 Addenda, N/A 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)
12" Check Valve	Borg Warner	27605	744	1PSIEV124	1978	Repaired	Yes
Bonnet	Borg Warner	S/N 20	N/A	Ht # 3L97	N/A	Replaced	Yes
Disc	Borg Warner	S/N 12	N/A	Ht # 3L96	N/A	Replaced	Yes
Bonnet	Borg Warner	S/N 5	N/A	Ht # 2B63	N/A	Replacement	Yes
Disc	Borg Warner	S/N 1	N/A	Ht # 2C14	N/A	Replacement	Yes

7. Description of Work: Replaced the bonnet and disc assembly with a refurbished assembly.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-2 ☐

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. W.O. 2864182 replaced bonnet & disc assembly in valve 1PSIEV124, with refurbished bonnet & disc assembly that was removed from valve 1PSIEV134 during U1M13 under W.O. 2864185 and refurbished under W.O. 2932001.

Pre-Pressure Test work order review - ISI : RL B. 6/27/07

ANII : RD Hytrom 6-27-07

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: RL B ISI ENG Date: 6/29/07

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 10-4-06 to 6-29-07, 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.

RD Hytrom

Inspectors Signature

Commissions: **NB 9685 "N" "I" AZ264**

National Board, State, Province, and Endorsements

Date: 6-29-07

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 1PSIEV134
2. Item Description: HPSI/LPSI Header Loop Injection Check Valve
3. N-5 Data Package Number: 1RC01-5 4. W.O. Number: 2864185
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   Seat leakage - No ASME boundary failure

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

Initial J.D Date 10-4-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 10-4-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial J.D Date 10-4-06 17. 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	76857	20	3L97	2912180
DISC	76865	12	3L96	2912180

18. Planner [signature] 10-4-06 Printed Name: JAMES I. DAVIS
    Signature Date

19. ISI [signature] 10/4/06 Printed Name: R.P. INDAP Log Entry [signature]
    Signature Date

20. ANII [signature] 10-4-06 Printed Name: R.G. HOUSTROM
    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: 10/11/2006

Sheet: 1 of 2

Unit: 1

Work Order Number 2864185

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 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)
Valve	Borb Warner	27606	745	1PSIEV134	1978	Repaired	YES
Disc	Borg Warner	1	N/A	HT# 2C14	1978	Replaced	YES
Bonnet	Borg Warner	5	N/A	HT# 2B63	1978	Replaced	YES
Disc	Borg Warner	12	N/A	HT# 3L96	N/A	Replacement	YES
Bonnet	Borg Warner	20	N/A	HT# 3L97	N/A	Replacement	YES

7. Description of Work: Replaced the bonnet and disc assembly to correct seat leakage.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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# 2864185 replaced the bonnet and disc assembly originally installed in 3PSIEV542, removed by wo# 2824825 and refurbished by wo# 2912180.

Pre-Pressured Test WO Review – ISI RPtrdsgp 10/11/06

ANII RD Hytrom 10-11-06

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: RLB ISI ENG Date: 10-13-06

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 10-4-06 to 10-13-06, 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.

RD Hytrom

Inspectors Signature

Commissions: **NB 9685 "N" "I" AZ264**

National Board, State, Province, and Endorsements

Date: 10-13-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIBV1026
2. Item Description: 1" Vent Valve with blind flange.
3. N-5 Data Package Number: _____ 4. W.O. Number: 2864979 * 2865117 7 6-6-07
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Install a vent valve in line 1PSIBL193 iaw design change DM# 2824546.
8. ☐ ISI Flaw NDE Method of Flaw Detection: n/a
   Report Number: n/a
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   Not a failure of the ASME III pressure boundary. The 1" valve and piping are a new design change to add a vent to the existing system piping.
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition, 1976 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial KVS Date 10/28/2006 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial KVS Date 10/28/2006 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial KVS Date 10/28/2006 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial KVS Date 10/28/2006 17. 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.
Valve	APN 45000244	14BGG	N/A	MR 1143012
16"x1" Weldolet	APN 00098057	N/A	N041694-1-1	MR ~~1143016~~ 1143095 *
1" Pipe	APN 43510515	N/A	503173	MR ~~1143016~~ 1143095 *
1" SW Flange	APN 43580760	N/A	26545-5	MR 1143016
1" Blind Flange	APN 43580943	N/A	860756	MR 1143016
Studs - 7/8" dia.	APN 43115015	N/A	726516	MR 1143016
Nuts - 7/8"	APN 43127016	N/A	141	MR 1143016

18. Planner Karl V. Savage (Signature) 10/28/2006 (Date) Printed Name: Karl V. Savage
19. ISI RP Indap (Signature) 1/10/2007 (Date) Printed Name: R.P. INDAP Log Entry RPI
20. ANII RG Hogstrom (Signature) 1-10-07 (Date) Printed Name: RG 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: 10/28/2006

   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 2864979

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

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529 — Authorization No. N/A

   Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A 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	Flowserve	14BGG	N/A	1PSIBV1026	2006	Replacement	Yes
16" x 1" Weldolet	N/A	N/A	N/A	Ht: N041694-1-1	2007	Replacement	No
1" Pipe	N/A	N/A	N/A	Ht: 503173	2007	Replacement	No
1" Flange	N/A	N/A	N/A	Ht: 26545-5	2007	Replacement	No
1" Blind Flange	N/A	N/A	N/A	Ht: 860756	2007	Replacement	No
Studs - 7/8"	N/A	N/A	N/A	Ht: 726516	2007	Replacement	No
Nuts - 7/8"	N/A	N/A	N/A	Ht: 1Y1	2007	Replacement	No

7. Description of Work: Install new high point vent valve per EDC 2006-0081.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

   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# 2864979 installs a new 1" vent valve, 1PSIBV1026 iaw design mod DM# 2824546& EDC# 2006-00081. Weldolet and pipe nipple assembly was made under W.O. 2865117

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: 6-6-2007
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 1-10-07 to 6-6-07, 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: 6-6-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSGEL011
2.. Item Description: Pipe Spools S-004 and S-005
3. N-5 Data Package Number: 1SG02-1 4. W.O. Number: 2865102
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace erroded piping with new Stainless Steel pipe and fittings IAW DMWO 2865100.
8. ☐ ISI Flaw NDE Method of Flaw Detection: n/a
Report Number: n/a
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Not a failure of the ASME III pressure boundary. The subject pipe spools have been evaluated as erroded due to Flow Accelerated Corrosion. The Carbon Steel Piping is being replaced with Stainless Steel piping of the same wall thickness.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition, 1975 Summer/Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial KVS Date 2/21/2007 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial KVS Date 2/21/2007 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial KVS Date 2/21/2007 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial KVS Date 2/21/2007 17. 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.
8" Pipe - Sch 80	APN 00061187	N/A	~~D~~ D351008	MR 1092551
8" Elbow – 90 Degree	APN 00067691	N/A	MLJN-3 SN1	MR ~~1092551~~ 1225908
8" Pipe - Sch 80	APN 00061187		F328608	MR 1092551
8" Elbow - 90 Degree	APN 00067691		MDVS-3 #1	MR 1092551

18. Planner Karl V. Savage 2/21/2007 Printed Name: Karl V. Savage
Signature Date

19. ISI RP Fordap 2/21/2007 Printed Name: R.P. INDAP Log Entry RPF
Signature Date

20. ANII RG Hogstrom 2-21-07 Printed Name: Robert G. Hogstrom
Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSGEL011
2.. Item Description: 90 Degree Elbow
3. N-5 Data Package Number: 1SG02-1 4. W.O. Number: 2865102
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Perform Weld Build-up/Repair of the I.D. of the Elbow where counterbore end prep. violated Min. Wall.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Repair is to correct machining error. No service failure. RPI 5/4/07

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: RLB 5-4-07 ☒ YES ☒ NO *BUILD-UP WILL BECOME PART OF FINAL BUTT WELD

Initial KVS Date 5/4/07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial KVS Date 5/4/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial KVS Date 5/4/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial KVS Date 5/4/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
8" Elbow - 90 Degree	APN 000~~61187~~67691 KVS 5/8/07	N/A	MDVS-3 PC1	MR 1092551

18. Planner [signature] 5/4/07 Printed Name: KARL VAUGHN SAVAGE
Signature Date

19. ISI [signature] 5/4/07 Printed Name: R. P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 5-4-07 Printed Name: R.G. HOGSTROM
Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1SG011H004
2.. Item Description: PIPE SUPPORT
3. N-5 Data Package Number: _____ 4. W.O. Number: 2865102
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Relocate the spring can rear bracket and reset the spring can loading.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

The piping stress calculation was re-analysed after the U1R12 Steam Generator replacement. The reanalysis required that the rear bracket for the spring can be moved approximately 2 inches toward the Bio-wall and that the setting be adjusted, reference EDC# 2006-00153 to 13SG011H004. There was no failure of the pipe support.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial KOS Date 5/29/2007 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial KOS Date 5/29/2007 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial KOS Date 5/29/2007 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial KOS Date 5/29/2007 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.

18. Planner [signature] 5/29/2007 Printed Name: Karl V. Savage
Signature Date

19. ISI [signature] 5/29/07 Printed Name: R.P. INDAP Log Entry [signature]
Signature Date

20. ANII [signature] 5-29-07 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: 06/29/2007

   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 2865102

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: Steam Generating

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)
8" Pipe - Sch 80	N/A	N/A	N/A	PSGEL011	2007	Replacement	NO
8" Elbow - 90 D.	N/A	N/A	N/A	PSGEL011	2007	Replacement	NO

7. Description of Work: Replace Eroded Pipe with Stainless Steel, I.A.W. EDC 2006-00153

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐

   N-416-2 ☒ 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# 2865102 - 1. Replaced existing erroded Carbon Steel pipe and fittings with Stainless Steel IAW Design Mod DM# 2865100 & EDC# 2006-00153. 2. Performed Weld Build-up of inside of one of the replacement Stainless Steel Elbows that was damaged while performing machining for the weld end preparation. 3. Relocated the ASME NF Spring Can rear end bracket of support 1SG011H004 to place the support over the centerline of the reworked pipe.

Pre-Pressured Test WO Review – ISI RProdop 6/29/07

ANII RD Hyatt 7-2-07

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] ISI ENGINEER Date: 7-13-07

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 2-21-07 to 7-13-07, 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.

RD Hyatt

Inspectors Signature

Commissions: **NB 9685 "N" "I" AZ264**

National Board, State, Province, and Endorsements

Date: 7-13-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSGEL005 and 1PSGEL014
2. Item Description: FEEDWATER HEADER TO STEAM GENERATOR 1MRCEE01B
3. N-5 Data Package Number: 1SG02-1 4. W.O. Number: 2871246
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace spool S-001 of line 1PSGEL014, and a portion of spool S-010 of line 1PSGEL005 (24x16 reducer and pipe between reducer and 24" tee). Use DLBB material with a minimum of 0.1% chromium.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. 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.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☒ NO RLB 1/30/07

Initial [illegible] Date 1/29/07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 1/29/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 1/29/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 1/29/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
14" pipe SA 106 Gr. B	APN 00070175	N/A	94933	2871246
14" elbow SA~~240~~ 420 Gr. WPL6 RLB 3-23-07	APN 00070173	N/A	NPMY	2871246
14" x 16" reducer SA234 Gr. WPC	APN 00070172 RLB 6-6-7	N/A	NPMR	2871246
16" pipe SA106 Gr. C	APN 00070176	N/A	60670	2871246
16" x 24" reducer SA234 Gr. WPC	APN 00066490	N/A	1887B	2871246
24" Pipe SA106 Gr B	APN 00070177	N/A	183371	2871246

18. Planner [signature] 1/29/07 Printed Name: HERBERT L. GREEN
    Signature Date
19. ISI [signature] 3-23-07 Printed Name: WILEY AHLSTROM Log Entry NJA
    Signature Date
20. ANII [signature] 3-23-07 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

Date: 01/29/2007

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

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

Unit: 1

Work Order Number 2871246

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: FEEDWATER HEADER TO STEAM GENERATOR 1MRCEE01B

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Summer 1975 Addenda, N416-2 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 Line SGEL014, Pipe Spool S-001	N/A	N/A	N/A	1PSGEL014	2007	Replacement	NO
SG Feedwater Line SGEL005, Pipe Spool S-010. (24" x 16" red. and pipe between red and 24" Tee only)	N/A	N/A	N/A	1PSGEL005	2007	Repaired	NO

7. Description of Work: Replace spool S-001 of line 1PSGEL014, and a portion of spool S-010 of line 1PSGEL005 (24x16 reducer and pipe between reducer and 24" tee). Use DLBB material with a minimum of 0.1% chromium.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐

N-416-2 ☒ 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 2871246. Replace spool S-001 of line 1PSGEL014, and a portion of spool S-010 of line 1PSGEL005 (24x16 reducer and pipe between reducer and 24" tee). Use DLBB material with a minimum of 0.1% chromium.

Pre-Pressured Test WO Review – ISI RLB 6/29/07 RCB 6/28/07 RLB 6/30/07

ANII RB 6-30-07

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: ISI ENGINEER Date: 7-13-07

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 3-23-07 to 7-13-07, 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.

RB

Inspectors Signature

Commissions: **NB 9685 "N" "I" AZ264**

National Board, State, Province, and Endorsements

Date: 7-13-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSIAUV0651
2. Item Description: Piping and Support Modification associated with relocating valve 1JSIAUV0651.
3. N-5 Data Package Number: 4. W.O. Number: 2882735
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Modification of lines 1RC-A-051-BCAA-16", 1SI-A-240-BCAA-16", 1SI-A-248-BCAA-3", (cont. blk. 9)
8. ☐ ISI Flaw N/A NDE Method of Flaw Detection: N/A
   Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Work Description continued: 1SI-A-510-BCAA -3/4", supports IRC051H005, 1SI240H-014, 1SI-248-H-018, 1SI-248-H-032, 1SI-248-H-034, 1-SI-248-H-035 In accordance with WP&IR's P-SI1-1010, P-SI1-1011, P-SI1-1012, P-SI1-1013, P-SI1-1014, & P-SI1-1015.

10. Repair/Replacement Work Organization: Bechtel Construction CLI DBH 4-27-06
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl~~2~~, 1974 Edition, Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl~~2~~, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial DBH Date 4-27-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DSP Date 4/27/06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DSP Date 4/27/06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DSP Date 4/27/06 17. 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.
1PRCL051				
1PSIAL240				
1JSIAUV0651				
1PSIAL248				
1RC051H005				
1SI240H014				
1SI248H018				
1SI248H032				

18. Planner Dale S. Preslar 4/27/06 Printed Name: Dale Preslar
    Signature Date
19. ISI DBH 4-27-06 Printed Name: D B Hansen Log Entry DBH
    Signature Date
20. ANII RG Hogstrom 4-27-06 Printed Name: R.G. Hogstrom
    Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

WO 2882735

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1SI248H034				
1SI248H035				

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 06/02/06

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) 2882735 (Work Order Number)

3. Work Performed by Bechtel Construction (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 Safety Injection

5. (a) Applicable Construction Code ASME Section III 19 74 Edition, W 75 Addenda, *N-249 Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 92 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)
Reactor Coolant	NA	NA	NA	1PRCEL051	NA	Replacement	No
Safety Injection	NA	NA	NA	1PSIAL240	NA	Replacement	No
Safety Injection	ANVIL	2006-53	NA	1SI240H014	2006	Replacement	Yes
Safety Injection	ANVIL	*2006-56	NA	1SI240H017	2006	Replacement	Yes
Reactor Coolant	NA	NA	NA	1RC051H005	NA	REMOVED	No

7. Description of Work See remarks on sheet 2. (* indicates that the NF-1 references the above code case)

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-2 ☑

Other ☐ Pressure 2240 psi Test Temp. 560 °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 The work included moving 1ISIAUV0651 (with approximately 6" of pipe on each end) and the existing 16" pipe with the 3" 1SIAL248 branch connection to a location closer to the reactor coolant hot leg. Two new supports were added and 1RC051H005 was removed. This work was performed per DIWO 2882735.

DFWO 2882666
WP&IR P - SI1 - 1013

Pre-Pressure Test Review: ISI [illegible] 6-2-06 ANII [illegible] 6-6-06

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] ENGR (Owner or Owner's Designee, Title) Date 7-1-06

CERTIFICATE 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 4-27-06 to 7-1-06, 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 "A,N,I,C" Az 264 (National Board, State, Province, and Endorsements)

Date 7-1-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSIAUV0651
2.. Item Description: Piping and Support Modification associated with relocating valve 1JSIAUV0651.
3. N-5 Data Package Number: 1SI07-5 4. W.O. Number: 2882735
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Modification of lines 1RC-A-051-BCAA-16", 1SI-A-240-BCAA-16", 1SI-A-248-BCAA-3", (cont. blk. 9)
8. ☐ ISI Flaw N/A NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA- 4150:

Work Description continued: 1SI-A-510-BCAA -3/4", supports IRC051H005, 1SI240H-014, 1SI-248-H-018, 1SI-248-H-032, 1SI-248-H-034, 1-SI-248-H-035 In accordance with WP&IR's P-SI1-1010, P-SI1-1011, P-SI1-1013, P-SI1-1014, P-SI1-1015, and NCR-25030-820-001 issued to resolve an existing out of plumb condition.

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

Initial DBH Date 5-6-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DSP Date 5-5-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DSP Date 5-05-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DSP Date 5-5-06 17. 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.
1PRCL051				
1PSIAL240				
1JSIAUV0651				
1PSIAL248				
1RC051H005				
1SI240H014				
1SI248H018				
1SI248H032				

18. Planner Dale S. Preslar 5-5-06 Printed Name: Dale Preslar
Signature Date

19. ISI DBH 5-6-06 Printed Name: D. B. Hansen Log Entry DBH
Signature Date

20. ANII RG Lystrom 5-6-06 Printed Name: R.G. Lystrom
Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1SI248H034				
1SI248H035				

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 06/02/06

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) 2882735 (Work Order Number)

3. Work Performed by Bechtel Construction (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 Safety Injection

5. (a) Applicable Construction Code ASME Section III 19 74 Edition, W 75 Addenda, * or ** Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 92 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 Injection	NA	NA	NA	1PSIL248	NA	Replacement	No
Safety Injection	ANVIL	*2006-54	NA	1SI248H018	2006	Replacement	Yes
Safety Injection	ANVIL	*2006-48	NA	1SI248H032	2006	Replacement	Yes
Safety Injection	ANVIL	*2006-49 & 50	NA	1SI248H034	2006	Replacement	Yes
Safety Injection	ANVIL	** 2006-51	NA	1SI248H035	2006	Replacement	Yes

7. Description of Work See remarks on sht 2. (* indicates that the NF-1 references N249; ** indicates N-71)

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-2 ☑

Other ☐ Pressure 2240 psi Test Temp. 560 °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 The work included rerouting 1JSIAL248 in conjunction with valve 1JSIAUV0651 being moved. Three new supports were added and the pipe clamp installed on 1SI248H018 to support APS installation of a snubber. This work was performed per DIWO 2882735.

DFWO 2882666
WP&IR P - SI1 - 1010, 1011, 1014

Pre-Pressure Test Review: ISI 6-2-06 ANII 6-6-06

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] ENGR (Owner or Owner's Designee, Title) Date 7-1-06

CERTIFICATE 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 5-6-06 to 7-1-06, 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 "A,N,I,C" Az 264 (National Board, State, Province, and Endorsements)

Date 7-1-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSIAUV0651
2.. Item Description: Piping and Support Modification associated with relocating valve 1JSIAUV0651.
3. N-5 Data Package Number: 1SI07-5 4. W.O. Number: 2882735
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Modification of lines 1RC-A-051-BCAA-16", 1SI-A-240-BCAA-16", 1SI-A-248-BCAA-3", (cont. blk. 9)
8. ☐ ISI Flaw N/A NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Work Description continued: 1SI-A-510-BCAA -3/4", supports IRC051H005, 1SI240H-014, 1SI-248-H-018, 1SI-248-H-032, 1SI-248-H-034, 1-SI-248-H-035 In accordance with WP&IR's P-SI1-1010, P-SI1-1011, P-SI1-1013, P-SI1-1014, P-SI1-1015, and NCR-25030-820-001 issued to resolve an existing out of plumb condition.

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

Initial DBH Date 5-6-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DEP Date 5-5-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DEP Date 5-05-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DEP Date 5-5-06 17. 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.
1PRCL051				
1PSIAL240				
1JSIAUV0651				
1PSIAL248				
1RC051H005				
1SI240H014				
1SI248H018				
1SI248H032				

18. Planner Dale S. Preslar 5-5-06 Printed Name: Dale Preslar
Signature Date

19. ISI D.B. Hansen 5-6-06 Printed Name: D.B. Hansen Log Entry DBH
Signature Date

20. ANII R.G. Hogstrom 5-6-06 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: Bechtel Construction

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

Date: 5/19/06

Sheet: 1 of 2

Unit: 1

Work Order Number 2882735

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SI & RC

5. (a) Applicable Construction Code ASME Section III ~~NC, Class 2~~ NF OBH 5-23-06 1974 Edition, Winter 1975 Addenda, N/A 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)
01-RC-051-H-004	N/A	N/A	N/A	Pipe Support	N/A	Permanently Removed	NO
01-RC-070-H-00A	N/A	N/A	N/A	Pipe Support	N/A	Permanently Removed	NO
01-RC-051-H-001	N/A	N/A	N/A	Pipe Support	N/A	Permanently Removed	NO
01-CH-008-H-0AG	N/A	N/A	N/A	Pipe Support	N/A	Permanently Removed	NO
01-RC-051-H-822	N/A	N/A	N/A	Whip Restraint	N/A	Permanently Removed	NO
01SI-240-H-823	N/A	N/A	N/A	Whip Restraint	N/A	Permanently Removed	NO

7. Description of Work: Piping design modification associated with the relocation of valve 1JSIAUVO651, lines # 1RC-A-051-BCAA-16" and # 1SI-A-240-BCAA-16" and associated supports in accordance WPIR P- SI1-1014.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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 is to be performed in accordance with DFWO 2882666, DIWO 2882735 and WPIR P-SI1-1012

Pre-Pressured Test WO Review – ISI NA

ANII NA

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] ENGR Date: 5-23-06
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 5-6-06 to 5-26-06, 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 "A,N,I,C" Az 264
National Board, State, Province, and Endorsements

Date: 5-26-06

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: Bechtel Construction

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

Date: 5/19/06

Sheet: 1 of 2

Unit: 1

Work Order Number 2882735

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SI & RC

5. (a) Applicable Construction Code ASME Section III ~~NC, Class 2~~ NF OBH 5-23-06 1974 Edition, Winter 1975 Addenda, N/A 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)
01-RC-051-H-004	N/A	N/A	N/A	Pipe Support	N/A	Permanently Removed	NO
01-RC-070-H-00A	N/A	N/A	N/A	Pipe Support	N/A	Permanently Removed	NO
01-RC-051-H-001	N/A	N/A	N/A	Pipe Support	N/A	Permanently Removed	NO
01-CH-008-H-0AG	N/A	N/A	N/A	Pipe Support	N/A	Permanently Removed	NO
01-RC-051-H-822	N/A	N/A	N/A	Whip Restraint	N/A	Permanently Removed	NO
01SI-240-H-823	N/A	N/A	N/A	Whip Restraint	N/A	Permanently Removed	NO

7. Description of Work: Piping design modification associated with the relocation of valve 1JSIAUVO651, lines # 1RC-A-051-BCAA-16" and # 1SI-A-240-BCAA-16" and associated supports in accordance WPIR P- SI1-1014.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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 is to be performed in accordance with DFWO 2882666, DIWO 2882735 and WPIR P-SI1-1012

Pre-Pressured Test WO Review – ISI NA

ANII NA

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] ENGR Date: 5-23-06
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 5-6-06 to 5-26-06, 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 "A,N,I,C" Az 264
National Board, State, Province, and Endorsements

Date: 5-26-06

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 06/02/06

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) — 2882735 (Work Order Number)

3. Work Performed by Bechtel Construction (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 Safety Injection

5. (a) Applicable Construction Code ASME Section III 19 74 Edition, W 75 Addenda, *N-249 Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 92 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)
Reactor Coolant	NA	NA	NA	1PRCEL051	NA	Replacement	No
Safety Injection	NA	NA	NA	1PSIAL240	NA	Replacement	No
Safety Injection	ANVIL	2006-53	NA	1SI240H014	2006	Replacement	Yes
Safety Injection	ANVIL	*2006-56	NA	1SI240H017	2006	Replacement	Yes
Reactor Coolant	NA	NA	NA	1RC051H005	NA	REMOVED	No

7. Description of Work See remarks on sheet 2. (* indicates that the NF-1 references the above code case)

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-2 ☑

Other ☐ Pressure 2240 psi Test Temp. 560 °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 The work included moving 1ISIAUV0651 (with approximately 6" of pipe on each end) and the existing 16" pipe with the 3" 1SIAL248 branch connection to a location closer to the reactor coolant hot leg. Two new supports were added and 1RC051H005 was removed. This work was performed per DIWO 2882735.

DFWO 2882666
WP&IR P - SI1 - 1013

Pre-Pressure Test Review: ISI 7-6-06 ANII 6-6-06

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] ENGR (Owner or Owner's Designee, Title) Date 7-1-06

CERTIFICATE 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 4-27-06 to 7-1-06, 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 "A,N,I,C" Az 264 (National Board, State, Province, and Endorsements)

Date 7-1-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID Removal of Hanger Components
2.. Item Description: Support Removal associated with relocating valve 1JSIAUV0651.
3. N-5 Data Package Number: 1SI07-5 4. W.O. Number: 2882735
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Modification of deactivated supports, (cont. blk. 9)
8. ☐ ISI Flaw N/A NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Work Description continued: supports ISI240H012, (2) pipe clamps, 1RC051-H-004 (1) Rear bracket and pipe clamp, 1CH-008-H-0AG (1) Rear bracket and pipe clamp, 1RC-070-H-00A (1) Rear bracket, IRC-051-H-001 (1) Rear bracket and pipe clamp, 1RC062H020 (2) Rear brackets, 1RC071H-00E (1) Rear bracket, In accordance with WP&IR P-SI1-1012.

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

Initial DBH Date 5-5-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DSP Date 5-5-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DSP Date 5-5-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DSP Date 5-5-06 17. 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.
1SI240H012				
1RC051H004				
1CH008HOAG				
1RC070H00A				
1RC051H001				
1RC062H020				
1RC071H00E				

18. Planner Dale S. Preslar 5-5-06 Printed Name: Dale Preslar
Signature Date

19. ISI DBH 5-5-06 Printed Name: D B Hansen Log Entry DBH
Signature Date

20. ANII RG Hogstron 5-6-06 Printed Name: R.G. Hogstron
Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1SI248H034				
1SI248H035				

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSIBUV0652
2.. Item Description: Shutdown Cooling from Loop 2 Isolation Valve
3. N-5 Data Package Number: 1SI07-5 4. W.O. Number: 2885960
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the valve components as required to correct leakage
8. ☐ ISI Flaw N/A NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Like for Like Replacement

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

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

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

Initial J.D Date 4-22-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 4-22-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D Date 4-22-06 17. 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.
43550612 (Cap)	43550612	NA	1492NA	1093711-2
45060309 (Bonnet)	45060309	215873-2	215873-2	1093711-1

18. Planner [signature] 4-22-06 Printed Name: James I. Davis
Signature Date

19. ISI [signature] 4-22-06 Printed Name: RL Brooking Log Entry RB
Signature Date

20. ANII [signature] 4-22-06 Printed Name: R.G. Hoastron
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: 05/04/2006

Sheet: 1 of 2

Unit: 1

Work Order Number 2885960

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, NA 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	Borg-Warner	26234	719	1JSIBUV0652	1978	Repaired	YES
Bonnet	Borg-Warner	215873-2	N/A	1JSIBUV0652	2006	Replaced	YES
Cap	N/A	Ht# 149ZNA	N/A	1JSIBUV0652	2006	Replaced	NO

7. Description of Work: Replace the bonnet assembly

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ Other Pressure 2240 psi Test Temperature 560 °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 2885960 replaced the bonnet assembly due to damage found when the valve was disassembled. A cap was installed in the bonnet leakoff port per the requirements of Specification 13-PN-204.

Pre-Pressured Test WO Review – ISI NA

ANII NA

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: D Bth - ENGR Date: 7-1-06

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 4-22-06 to 7-1-06, 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.

RB Lytton

Inspectors Signature

Commissions: **NB 9685 "N" "I" AZ264**

National Board, State, Province, and Endorsements

Date: 7-1-06

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by BW/IP INTERNATIONAL INC. PUMP DIV. LOS ANGELES OPERATIONS 2300 E. VERNON AVE. VERNON, CA 90058
(name and address of NPT Certificate Holder)

2. Manufactured for ARIZONA PUBLIC SERVICE 4 MILES SOUTH OF WINTERSBURG, WINTERSBURG, ARIZONA 85343
(name and address of Purchaser)

Location of Installation ARIZONA PUBLIC SERVICE 4 MILES SOUTH OF WINTERSBURG, WINTERSBURG, ARIZONA 85343
(name and address)

Type: 76933 REV.A (drawing no.) SA-182 F316 (mat'l. spec. no.) 75,000 PSI (tensile strength) N/A (CRN) 1991 (year built)

ASME Code, Section III, Division 1: 1974 (edition) WINTER 1975 (addenda date) 1 (class) N/A (Code Case no.)

Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

Remarks: BW/IP JOB NO. 901-L-2127 PART NAME— BONNET P.O. No. 60203788

QUALITY DOCUMENTS
PAGE 26 of 208

HYDROSTATIC TESTING NOT PERFORMED.

Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A

When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 215873-1	N/A	(26)	
(2) 215873-2	N/A	(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 1485-3780 psi. Temp. 650-100 °F. Hydro. test pressure N/A (when applicable) at temp. °F

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

(12/88) This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM N-2 (Back — Pg. 2 of 2)

Certificate Holder's Serial Nos. 215873-1 through 215873-2

CERTIFICATION OF DESIGN

Design specifications certified by N/A (when applicable) P.E. State N/A Reg. no. N/A

Design report* certified by N/A (when applicable) P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that ~~this~~ XX (these) BONNET conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1131 Expires JUNE 10, 1993

Date 8-29-91 Name BW/IP INTERNATIONAL INC. (NPT Certificate Holder) Signed [signature] (Authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by ARKWRIGHT MUTUAL INS. CO. FACTORY MUTUAL SYSTEM, of NORWOOD, MASS. have inspected these items described in this Data Report on AUG. 29, 1991, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 8/29/91 Signed [signature] (Authorized inspector) Commissions 1275 CA. (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

P.O. No. 600203788
QUALITY DOCUMENTS
PAGE 27 of 286

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSIAUV0651
2.. Item Description: Shutdown Cooling from Loop 1 Isolation Valve
3. N-5 Data Package Number: 1SI07-5 4. W.O. Number: 2886503
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the valve components as required to correct leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Replacement of the gate to correct seat leakage - No failure of the pressure retaining part.

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

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

15. ASME Section XI Pressure Test Required: ~~☒ YES~~ RRJ 6/29/06 ☐ NO

Initial J.W Date 4-22-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.W Date 4-22-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.W Date 4-22-06 17. 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.
~~GATE~~	~~APN# 45D40092~~	~~19~~	~~N/A~~	~~MR# 1092733~~
GATE	APN# 45D40092 OK 6/30/06	19	N/A	MR# 1092733

18. Planner [signature] 4-22-06 Printed Name: James I. Davis
Signature Date

19. ISI [signature] 4/22/06 Printed Name: R.L. Brouwink Log Entry [signature]
Signature Date

20. ANII [signature] 4-22-06 Printed Name: R.G. Hoogstrom
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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 06/30/2006

Sheet: 1 of 2

Unit: 1

Work Order Number 2886503

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection System (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A 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	Borg-Warner	26233	675	1JSIAUV0651	1978	Repaired	Yes
Gate	Borg-Warner	19	N/A	1JSIAUV0651	2006	Replacement	Yes

7. Description of Work: Replaced valve disc.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

   Other ☐ Pressure N/A psi Test Temperature N/A °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. W.O. 2886503 replaced gate in valve 1JSIAUV651.

Pre-Pressure Test W.O. Review - ISI : N/A

ANII : _____

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: D.L. Browning 15/SM Date: 7-1-06

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 4-22-06 to 7-1-06, 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 "A,N,I,C" AZ264**
National Board, State, Province, and Endorsements

Date: 7-1-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1SG036H011
2.. Item Description: Steam Generator 1 Main Steam Line 2 Constant Spring Hanger
3. N-5 Data Package Number: 1SG01-1 4. W.O. Number: 2888427
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the load coupling and anti-friction collar removed for installation into 3SG036H011.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Not a failure of the ASME pressure boundary. Parts are being replaced that were previously removed to support work in another unit. Root Cause of unit 3 failure is being investigated under CRDR #2887685 RPindap 5/31/06

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial DMG Date 5-3-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 5-3-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 5-3-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMG Date 5-3-06 17. 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.
Load coupling	APN 00095949	# 41-74722	N/A	MR 1095118
Anti Friction Collar	APN 00095950	N/A	1420296	MR 1095118
		# ID "2006-95		

18. Planner David Goodlet 5-3-2006 Printed Name: David Goodlet
Signature Date

19. ISI RPindap 5/31/06 Printed Name: R. P. INDAP Log Entry RPI
Signature Date

20. ANII RG Hogstrom 5-31-06 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: 6/13/2006

Sheet: 1 of 2

Unit: 1

Work Order Number 2888427

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 NF, Class 2 1974 Edition, Winter 1975 Addenda, N/A 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)
Spring Support	ITT Grinnell	G2502	N/A	1SG036H011	1982	Repaired	YES
Load Coupling	Anvil	41-74722	N/A	1SG036H011	2006	Replacement	YES
Anti-friction Collar	Anvil	N/A	N/A	1SG036H011	2006	Replacement	NO

7. Description of Work: Replaced the load coupling and anti-friction collar.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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: The existing load coupler and anti-friction collar was removed from unit-1 and installed in unit-3 under wo# 2888460. Work order 2901355 (shop work) weld replaced a new adjuster nut on the new purchased load coupler with one that has 4.5 threads per inch. WO# 2888427 installed the new load coupling assembly in unit-1 at spring support 1SG036H011.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: RPhadap. Sr. Consulting Engineer Date: 6/13/06
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 5-31-06 to 6-13-06, 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: 6-13-06

FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured by Anvil International, Inc. - 160 Frenchtown Rd. No.Kingstown, RI 02852
(name and address of NPT Certificate Holder)

2. Manufactured for Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address of Purchaser)

3. Location of installation Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address)

4. Type: C.S.S. (describe) | DRS 80 Rev.0 (Design Report or Load Capacity Data Sheet) | 2006 (year built)

5. ASME Code, Section III, Division 1: 1974 (edition) | Winter 1975 (addenda date) | 2 (class) | N/A (Code Case no.)

6. Identification

	(a) Component Support I.D. No.	(b) Material Specification No.	(c.) Canadian Registration No.	(d) Applicable Drawings With Last Rev. & Date	(e) National Board No.
(1)	2006- 94	Note 1	N/A	BH1586/A 2/3/05	N/A
(2)	2006- 95	Note 1	N/A	BH1586/A 2/3/05	N/A
(3)					
(4)					
(5)					
(6)					
(7)					
(8)					
(9)					
(10)					

7. Remarks:

Note 1: SA36, SA106 GR.B

Note 2: Material Supplied to ASME Section II, 1992 Edition, 1993 Addenda

PO#: 500299678
SO#: 41-74722

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data 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.

(12/88) This form (E00075) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Component Support I.D. Nos. 2006-94 through 2006-95

CERTIFICATE OF DESIGN

Design Specification certified by H. R. Sonderegger P.E. State R.I. Reg. no 3537

Design Report certified by Ronald T Wisniewski P.E. State R.I. Reg. no 4108

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2802 Expires 9/29/2007

Date 6-2-06 Name Anvil International, Inc. (NPT Certificate Holder) Signed [illegible]

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Rhode Island and employed by H.S.B. C.T. of Hartford, C.T. have inspected the component supports described in this Data Report on 6/2/06, and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports in accordance with the ASME Code, Section III, Division 1.

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

Date 6/2/06 Signed [illegible] (Authorized Inspection) Commissions RI 862 ABNI (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1SI248H018 2. Code Class SECTION III Subsection "NF"

3. Item Description 1 KIP SNUBBER

4. N-5 Package Number 1RC01-1C 5. W.O. Number 2889018

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 Install Snubber to support SI-651 mod per DFWO #2882666

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 is a like for like replacement, snubber was removed during snubber reduction and is being reinstalled per 2889018. This snubber S/N 23895 came from Hanger 3SI307H004 Bottom

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

S. E. (Initial) 5/22/06 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

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

S. E. (Initial) 5/22/06 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

S. E. (Initial) 5/22/06 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

S. E. (Initial) 5/22/06 (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.
1SI248H018	1801102-05	23895	N/A	N/A

19. Planner Steven Eich (Signature) 5/22/06 (Date) Print Name Steven Eich

20. ISI Engineer Doug Hansen Per Telecon w/Steven Eich (Signature) 5-22-06 5/22/06 (Date) Print Name Doug B. Hansen Logged

21. ANII Robert Hogstrom Per Telecon w/Steven Eich (Signature) 5/22/06 (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 05/22/06

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) — 2889018 (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 "SI" Safety Injection

5. (a) Applicable Construction Code Subsection "NF" 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)
1 Kip Snubber	Pacific Scientific	23895	N/A	1SI248H018	1983	Replacement	Yes

7. Description of Work Snubber installation per DFWO #2882666 (No Welding).

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

Other ☐ Pressure N/A psi Test Temp. N/A °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#2889018 installs snubber Serial number 23895 for SI-651 vibration mod outlined in DFWO #2882666

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 NA

Certificate of Authorization No. NA Expiration Date NA

Signed DBH ENGR (Owner or Owner's Designee, Title) Date 5-27-06

CERTIFICATE 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 5-22-06 to 5-29-06, 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.

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

Date 5-29-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1MRCEA05 2. Code Class ASME Section III Class 1
3. Item Description: Reactor Coolant system Pressurizer Backup Heater
4. N-5 Data Package Number: 1RC01-4 5. W.O. Number: 2892613
6. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Replace Pressurizer Heater
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:
Replace pressurizer heater on a like for like basis. The heater installed has failed electrically and has been "jumpered out" of the electrical circuit, there is no failure of the code boundry.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1971 Edition 1973 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 KWS Date 5/11/06 If required, include a step in the W.O. to perform Preservice Inspection
16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO
Initial KWS Date 5/11/06 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial KWS Date 5/11/06 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial KWS Date 5/11/06 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.
Pressurizer Heater	APN 44450049	RP2090-79	Sheath HT 32392	MR 1097661

19. Planner Karl D Savage 5/11/2006 Printed Name: Karl V. Savage
Signature Date
20. ISI Fred Potter 5/11/06 Printed Name: FRED POTEET LOG ENTRY: FP
Signature Date
21. ANII R G Hackstrom 5-11-06 Printed Name: R.G. HACKSTROM
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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 05/18/2006

Sheet: 1 of 2

Unit: 1

Work Order Number 2892613

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant System (RC)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1971 Edition, Winter 1973 Addenda, N/A 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)
Pressurizer Heater	Ionics	RP-2090-79	N/A	1MRCEA05	2005	Replaced	Yes

7. Description of Work: Remove failed Pressurizer heater and install a replacement heater

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

   Other ☐ Pressure N/A psi Test Temperature N/A °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 2892613 Remove failed Pressurizer heater 1MRCEA05 and install a new replacement Pressurizer heater

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: Owner or Owner's Designee, Title Date: 5/18/06

CERTIFICATE 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 5-11-06 to 5-18-06, 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: 5-18-06

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

As Required by the provisions of the ASME Code, Section III
Not to Exceed One day's production

1. Manufactured and certified by Ionics, Incorporated, Bridgeville Division, 30 Curry Road Canonsburg, Pennsylvania, 15137
(name and address of NPT Certificate Holder)

2. Manufactured for Westinghouse Electric Co. LLC 1000 Westinghouse Drive New Stanton PA 15672
(name and address of purchaser)

3. Location of installation Arizona Public Service 5801 South Wintersburg Road Tonopah, Arizona 85354
(name and address)

4. Type WDC-3580-1530 Rev. 3 (drawing number) — Tubing: SA-213 TP 316/316L / End Plug: SA-479 TP 316/316L (mat'l. spec no.) — 81,000 Psi / 81,400 Psi (tensile strength) — N/A (CRN) — 2005 (year built)

5. ASME Code, Section III, Division 1: 1971 Edition. (edition) — Winter 1973 Add. (addenda date) — 1 (class) — N/A (Code case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7. Remarks Heater Assembly comprised of tubing welded to an end plug
Manufactured on Ionics Contract 1539
Supplied on Westinghouse P.O. # 4500169118
**.180" min Wall (Tubing)

8. Nom. Thickness (in.) 0.500" +/- 0.005" End Plug in. design thickness (in.) Same ** Dia. OD (ft & in.) 0' 1.252" Length overall (ft & in.) 8' 0.625" Min.

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

	Part or Appurtenance Serial Number	National Board No. in Numerical order		Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	RP-2090-76	—	(26)		
(2)	RP-2090-77	—	(27)		
(3)	RP-2090-78	—	(28)		
(4)	RP-2090-79	—	(29)		
(5)	RP-2090-80	—	(30)		
(6)	RP-2090-81	—	(31)		
(7)	RP-2090-82	—	(32)		
(8)	RP-2090-83	—	(33)		
(9)	RP-2090-84	—	(34)		
(10)	RP-2090-85	—	(35)		
(11)	RP-2090-86	—	(36)		
(12)	RP-2090-87	—	(37)		
(13)			(38)		
(14)			(39)		
(15)			(40)		
(16)			(41)		
(17)			(42)		
(18)			(43)		
(19)			(44)		
(20)			(45)		
(21)			(46)		
(22)			(47)		
(23)			(48)		
(24)			(49)		
(25)			(50)		

0. Design pressure 2500 psi. Temp. 800 °F. Hydro. Test pressure 3200 PSIG (when applicable) at temp. 78°F

Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ x 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

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

Certificate Holder's Serial Nos. RP-2090-76 through RP-2090-87

CERTIFICATION OF DESIGN

Design specifications certified by KH Haslinger (when applicable) P.E. State Connecticut Reg. No. 10990

Design report* certified by N/A (when applicable) P.E. State N/A Reg. No. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Heater Pressurizer Assembly Conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2974 Expires March 26, 2008

Date 2-24-06 Name Ionics, Incorporated – Bridgeville Division (NPT Certificate Holder) Signed (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State and Province of Pennsylvania and employed by One Beacon America Insurance Co. of Boston, Mass. have inspected these items described in this Data Report on 2/24/06, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 2/24/06 Signed (Authorized Nuclear Inspector) Commissions PA 3266 N [Nat'l. Bd. (incl. endorsements) and state or prov. and no]

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JRCEPSV0200
2.. Item Description: Presurizer safety relief valve
3. N-5 Data Package Number: 1RC03-2 4. W.O. Number: 2894340
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the Presurizer Safety Valve with a reconditioned spare
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No failure of the ASME III presure boundary. The spare replacement valve, which was reworked and tested at NWS Technology, is being installed to minimize time system is out of service.

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

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

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

Initial DMG Date 6-17-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 6-17-07 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial DMG Date 6-17-07 17. 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.
Spare Valve	APN # 45003560	BS- 08590	N/A	MR 1149573

18. Planner [signature] 6-17-07 Printed Name: DAVID M. GOODWIN
Signature Date

19. ISI per telcon DMG 6-17-07 Printed Name: R. INDAP Log Entry RPR
Signature Date

20. ANII per telcon DMG 6-17-07 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: 06/17/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2894340

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC Reactor Coolant System

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1975 Addenda, N/A 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)
PSV	Dresser	BS-08615	N/A	1JRCEPSV0200	1981	Replaced	YES
PSV	Dresser	BS-08590	N/A	1JRCEPSV0200	1979	Replacement	YES

7. Description of Work: Valve to be replaced with a reconditioned and tested spare.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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: WM 2894340 to replace 1JRCEPSV0200 with a reconditioned and tested spare.

Pre-Pressured Test WO Review – ISI RPtrolap 6/27/07

ANII [signature] 6-27-07

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] ISI ENG Date: 7-4-07
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 6-17-07 to 7-4-07, 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: 7-4-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JRCEPSV0201
2.. Item Description: Presurizer safety relief valve
3. N-5 Data Package Number: 1RC03-2 4. W.O. Number: 2894341
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the Presurizer Safety Valve with a reconditioned spare
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No failure of the ASME III presure boundary. The spare replacement valve, which was reworked and tested at NWS Technology, is being installed to minimize time system is out of service.

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

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

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

Initial DMG Date 6-17-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 6-17-07 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial DMG Date 6-17-07 17. 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.
Spare Valve	APN # 45003560	BS- 68566	N/A	MR 1149573

18. Planner [signature] 6-17-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI per telecon DMG 6-17-07 Printed Name: R. INDAP Log Entry RRF
Signature Date

20. ANII per TELECON DMG 6-17-07 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: 06/17/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2894341

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC Reactor Coolant System

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1975 Addenda, N/A 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)
PSV	Dresser	BS-08591	N/A	1JRCEPSV0201	1979	Replaced	YES
PSV	Dresser	BS-08566	N/A	1JRCEPSV0201	1978	Replacement	YES

7. Description of Work: Valve to be replaced with a reconditioned and tested spare.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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: WM 2894341 to replace 1JRCEPSV0201 with a reconditioned and tested spare.

Pre-Pressured Test WO Review – ISI RLB 6/27/07

ANII RB Hyatt 6-27-07

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: RLB ISI-ENG Date: 7-4-07

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 6-17-07 to 7-4-07, 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.

RB Hyatt

Inspectors Signature

Commissions: **NB 9685 "N" "I" AZ264**

National Board, State, Province, and Endorsements

Date: 7-4-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JRCEPSV0202
2.. Item Description: Presurizer safety relief valve
3. N-5 Data Package Number: 1RC03-2 4. W.O. Number: 2894342
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the Presurizer Safety Valve with a reconditioned spare
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No failure of the ASME III presure boundary. The spare replacement valve, which was reworked and tested at NWS Technology, is being installed to minimize time system is out of service.

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

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

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

Initial [illegible] Date 6-17-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 6-17-07 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial [illegible] Date 6-17-07 17. 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.
Spare Valve	APN # 45003560	BS- 08592	N/A	MR 1149573

18. Planner [signature] 6-17-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI per telecon [illegible] 6-17-07 Printed Name: R. INDAP Log Entry RPR
Signature Date

20. ANII per telecon [illegible] 6-17-07 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: 06/17/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2894342

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC Reactor Coolant System

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1975 Addenda, N/A 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)
PSV	Dresser	BS-08617	N/A	1JRCEPSV0202	1981	Replaced	YES
PSV	Dresser	BS-08592	N/A	1JRCEPSV0202	1979	Replacement	YES

7. Description of Work: Valve to be replaced with a reconditioned and tested spare.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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: WM 2894342 to replace 1JRCEPSV0202 with a reconditioned and tested spare.

Pre-Pressured Test WO Review – ISI RPhnday 6/27/07

ANII [signature] 6-27-07

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] ISI ENG Date: 7-4-07

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 6-17-07 to 7-4-07, 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: 7-4-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JRCEPSV0203
2. Item Description: Presurizer safety relief valve
3. N-5 Data Package Number: 1RC03-2 4. W.O. Number: 2894343
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the Presurizer Safety Valve with a reconditioned spare
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
   Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   No failure of the ASME III presure boundary. The spare replacement valve, which was reworked and tested at NWS Technology, is being installed to minimize time system is out of service.
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec.III Cl 1, 1974 Edition 1975 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

Initial [illegible] Date 6-17-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 6-17-07 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial [illegible] Date 6-17-07 17. 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.
Spare Valve	APN # 45003560	BS- 08568	N/A	MR 1149573
DISC	APN# 45020245	ADU 35	N/A	MR 1111077

18. Planner [illegible] 6-17-07 Printed Name: DAVID M. GOODLOT
    Signature Date
19. ISI per telecon [illegible] 6-17-07 Printed Name: R. INDAS Log Entry [illegible]
    Signature Date
20. ANII per telecon [illegible] 6-17-07 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: 06/17/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2894343

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC Reactor Coolant System

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1975 Addenda, N/A 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)
PSV	Dresser	BS-08593	N/A	1JRCEPSV0203	1979	Replaced	YES
PSV	Dresser	BS-08568	N/A	1JRCEPSV0203	1978	Replacement	YES
Disc	Dresser	ADV35	N/A	1JRCEPSV0203	2005	Replacement	YES

7. Description of Work: Valve to be replaced with a reconditioned and tested spare.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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: WM 2894343 to replace 1JRCEPSV0203 with a reconditioned and tested spare.

Pre-Pressured Test WO Review – ISI RPhndap 6/27/07

ANII RS Lytton 6-27-07

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: RLB ISI ENG Date: 7-4-07
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 6-17-07 to 7-4-07, 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.

RS Lytton
Inspectors Signature

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

Date: 7-4-07

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

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

Not to Exceed One Day's Production

1. Manufactured and certified by Dresser Flow Control, Dresser Inc. La. Hwy 3225 @ US Hwy 167 N P. O. Box 1430 Alexandria, Louisiana 71309-1430
(name and address of NPT Certificate Holder)

2. Manufactured for Arizona Public Service Company P.O. Box 53940 Phoenix, Arizona 85072-3940
(name and address of purchaser)

3. Location of installation Arizona Public Service Co Palo Verde Nucl Generation 5801 S Wintersburg Rd. Tonopah, Arizona 85354
(name and address)

4. Type OS413 (drawing no.) ASME SB637 INCONEL X750 (mat'l spec. no.) 170 KSI (tensile strength) N/A (CRN) 2005 (year built)

5. ASME Code Section III, Division 1: 1974 (edition) WINTER 1975 (addenda date) 1 (class) N/A (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no) Revision N/A Date N/A

7. Remarks :

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

	Part or Appurtenance Serial Number	National Board No. in Numerical Order		Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	ADV34		(26)		
(2)	ADV35 BSO 856P		(27)		
(3)			(28)		
(4)			(29)		
(5)			(30)		
(6)			(31)		
(7)			(32)		
(8)			(33)		
(9)			(34)		
(10)			(35)		
(11)			(36)		
(12)			(37)		
(13)			(38)		
(14)			(39)		
(15)			(40)		
(16)			(41)		
(17)			(42)		
(18)			(43)		
(19)			(44)		
(20)			(45)		
(21)			(46)		
(22)			(47)		
(23)			(48)		
(24)			(49)		
(25)			(50)		

Design pressure N/A psi Temp. N/A °F. Hydro. Test pressure 4500 PSIG (when applicable) at temp. °F

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

Certificate Holder's Serial Nos. ADV34 AND ADV35

CERTIFICATION OF DESIGN

Design specifications certified by N/A (when applicable) P.E. State N/A Reg. No. N/A

Design report* certified by N/A (when applicable) P.E. State N/A Reg. No. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) DISC conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2434 Expires 5/20/2007

Date 8/24/05 Name SEE LINE 1 (NPT Certificate Holder) Signed [signature] (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State or Province of LOUISIANA and employed by HSB CT HARTFORD, CT. have inspected these items described in this Data Report on 8/26/05 and state that to the of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 8/26/05 Signed [signature] (Authorized Nuclear Inspector) Commissions LA604 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1MRCEP01B
2.. Item Description: Reactor Coolant Pump 1B
3. N-5 Data Package Number: 1RC02-3 4. W.O. Number: 2894427
5. Original Construction Code Edition: 1974 Edition
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the mechanical seals.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

No failure of ASME III pressure boundary. Mechanical seal replacement as a part of normal maintenance.

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

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

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

Initial J.D Date 6-27-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 6-27-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial J.D Date 6-27-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
3rd Stage Seal Retainer	APN 45110762	Q95-1876 SN2A	N/A	WO 2960457

18. Planner [signature] 6-27-07 Printed Name: James I. Davis
Signature Date

19. ISI [signature] 6/28/07 Printed Name: R.L. Browning Log Entry RLB
Signature Date

20. ANII [signature] 6-28-07 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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 06-28-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2894427

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, _____ Addenda, N/A 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)
Reactor Coolant Pump 1B	Combustion Engineering	1109-1B	23440	1MRCEP01B	1983	Repaired	Yes
3rd Stage Seal Retainer	Sultzer	Q95-1876 SN2A	N/A	1MRCEP01B	2007	Replacement	No

7. Description of Work: Mechanical Seal Replacement

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-2 ☐

   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: 2894427 replaced the mechanical seal in 1MRCEP01B. Mechanical seal replacement is part of normal maintenance. Replacement seal was rebuilt by WO 2960457.

Pre-Pressured Test WO Review – ISI NDA 6-28-07

ANII RS Lytton 6-28-07

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: RLB ISI ENG Date: 7-4-07
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 6-28-07 to 7-4-07, 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.

RS Lytton
Inspectors Signature

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

Date: 7-4-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID: 1MRCEP01C
2. Item Description: Reactor Coolant Pump 2A
3. N-5 Data Package Number: 1RC02-3
4. W.O. Number: 2894428
5. Original Construction Code Edition: 1974 Edition
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the mechanical seals.
8. ☐ ISI Flaw — NDE Method of Flaw Detection: — Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   No failure of ASME III pressure boundary. Mechanical seal replacement as a part of normal maintenance.

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

    Initial N/A Date _____ If required, include a step in the W.O. to perform Preservice Inspection
15. ASME Section XI Pressure Test Required: ☒ YES ☐ NO

    Initial J.D Date 6-27-07 If required, include a step in the W.O. for ISI & ANII Inspection.

    Initial J.D Date 6-27-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

    Initial J.D. Date 6-27-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
3rd Stage Seal Retainer	APN 45110762	Q96-574 SN19	N/A	WO 2960472

18. Planner [signature] 6-27-07 Printed Name: JAMES I. DAVIS
    Signature Date
19. ISI [signature] 6/28/07 Printed Name: R.L. Browning Log Entry [signature]
    Signature Date
20. ANII [signature] 6-28-07 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: 06/27/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2894428

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, _____ 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)
Reactor Coolant Pump 2A	Combustion Engineering	1109-2A	23441	1MRCEP01C	1983	Repaired	YES
3rd Stage Seal Retainer	Sultzer	Q96-574 SN19	N/A	1MRCEP01C	2007	Replacement	NO

7. Description of Work: Mechanical Seal Replacement

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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: 2894428 replaced the mechanical seal in 1MRCEP01C. Mechanical seal replacement is part of normal maintenance. Replacement seal was rebuilt by WO 2960472.

Pre-Pressured Test WO Review – ISI WJA 6-28-07

ANII RB Lytton 6-28-07

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: RLB ISI Eng Date: 7-4-07
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 6-28-07 to 7-4-07, 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.

RB Lytton
Inspectors Signature

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

Date: 7-4-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1MRCEP01D
2.. Item Description: Reactor Coolant Pump 2B
3. N-5 Data Package Number: 1RC02-3 4. W.O. Number: 2894429
5. Original Construction Code Edition: 1974 Edition
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the mechanical seals.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

No failure of ASME III pressure boundary. Mechanical seal replacement as a part of normal maintenance.

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

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

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

Initial J.D Date 6-27-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 6-27-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial J.D Date 6-27-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
3rd Stage Seal Retainer	APN 45110762	Q96-574 SN10	N/A	WO 2960474

18. Planner [signature] 6-27-07 Printed Name: JAMES I. DAVIS
Signature Date

19. ISI [signature] 6-27-07 Printed Name: R.L. Browning Log Entry RLB
Signature Date

20. ANII [signature] 6-27-07 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: 06/27/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2894429

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, _____ 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)
Reactor Coolant Pump 2B	Combustion Engineering	1109-2B	23442	1MRCEP01D	1983	Repaired	YES
3rd Stage Seal Retainer	Sultzer	Q96-574 SN10	N/A	1MRCEP01D	2007	Replacement	NO

7. Description of Work: Mechanical Seal Replacement

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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: 2894429 replaced the mechanical seal in 1MRCEP01D. Mechanical seal replacement is part of normal maintenance. Replacement seal was rebuilt by WO 2960474.

Pre-Pressured Test WO Review – ISI WJA 6-28-07

ANII RB Hytron 6-28-07

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: RLB ISI ENG Date: 7-4-07

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 6-27-07 to 7-4-07, 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.

RB Hytron

Inspectors Signature

Commissions: **NB 9685 "N" "I" AZ264**

National Board, State, Province, and Endorsements

Date: 7-4-07

ASME SECTION XI – REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 1JSIAUV0651
2.. Item Description: Shutdown Cooling from Loop 1 Isolation Valve
3. N-5 Data Package Number: 1SI07-5 4. W.O. Number: 2894693
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Machine the valve bonnet per DFWO 2894586
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Minor machining to improve clearance. No failure involved. RPIndap 5/19/06

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

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

15. 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 J.D Date 5-18-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D Date 5-18-06 17. 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	76933	Code# 2B58		

18. Planner [signature] 5-18-06 Printed Name: James I. Davis
Signature Date

19. ISI [signature] 5-19-06 Printed Name: R. P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 5-19-06 Printed Name: RCx 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: 8-26-00

Sheet: 1 of 2

Unit: 1

Work Order Number 2894693

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

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)
Valve	Borg-Warner	26233	675	1JSIAUV0651	1978	Repaired	YES
Bonnet	Borg-Warner	Code # 2B58	N/A	1JSIAUV0651	1978	Repaired	YES

7. Description of Work: Machine the bonnet stem bore per DFWO 2894586.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ Other Pressure N/A psi Test Temperature N/A °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 2894693 machined the bonnet assembly to provide additional clearance for the stem per DFWO 2894586. APPROX, 0.020" WILL BE THE I.D. INCREASE.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: [signature] Date: 5/25/06

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 5-19-06 to 5-26-06, 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: 5-26-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1MDGAE05
2.. Item Description: JACKET WATER COOLER
3. N-5 Data Package Number: 1DG01-2 4. W.O. Number: 2894807
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: REPAIR BASE METAL WITH WELD BUILD UP
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
ROUTINE WELD BUILD UP TO CORRECT CORRODED AREAS DUE TO COATING FAILURE.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 3, 1974 Edition 1976 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 3, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO
Initial MAK Date 6-11-07 If required, include a step in the W.O. to perform Preservice Inspection
15. ASME Section XI Pressure Test Required: ☒ YES ☐ NO
Initial MAK Date 6-11-07 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial MAK Date 6-11-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.
Initial MAK Date 6-11-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1MDGAE05 rev spool	4-321-19-815-007	9-20016-01-1	N/A	WO 2894807

18. Planner [signature] 6-11-07 Printed Name: Martin Sullivan
Signature Date
19. ISI [signature] 6-11-07 Printed Name: WILEY AHLSTROM Log Entry WA2
Signature Date
20. ANII [signature] 6-11-07 Printed Name: RG HOGESTROM
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: 6/11/07

Sheet: 1 of 2

Unit: 1

Work Order Number 2894807

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 1MDGAE05

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)
Jacket water cooler	American standard	9-20016-01-1	31978	1MDGAE05	1978	Repaired	YES

7. Description of Work: Weld build up of corroded area on the reversing spool flange. W.O. 2894807

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ Other Pressure 41 psi Test Temperature 72 °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: Weld build up of corroded area on the reversing spool flange. W.O. 2894807

Pre-Pressured Test WO Review – ISI WOX

ANII 6-18-07

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: ISI ENGINEER Date: 6-18-07

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 6-11-07 to 6-18-07, 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: 6-18-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1MDGBE05 2. Code Class ASME Section III Class 3
3. Item Description: JACKET WATER COOLER
4. N-5 Data Package Number: 1DG02-8 5. W.O. Number: 2894808
6. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: REPAIR BASE METAL WITH WELD BUILD-UP
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 WELD BUILD-UP OF BASE MATERIAL REQUIRED FOR MINIMUM WALL THICKNESS. REPAIRED AREAS TO BE COVERED/PROTECTED WITH COATING
11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 3, 1974 Edition 1976 Summer 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 MNL Date 5-27-07 If required, include a step in the W.O. to perform Preservice Inspection
16. ASME Section XI Pressure Test Required: ☒ YES ☐ NO
Initial MNL Date 5-27-07 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial MNL Date 5-27-07 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial MNL Date 5-27-07 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.
1MDGBE05 SPOOL	4-321-19-815-007	9-20016-01-3	N/A	W.O.# 2894808

19. Planner [signature] 5/26/07 Printed Name: GORDON QUINN
Signature Date
20. ISI [signature] 5/26/07 Printed Name: BILL LEHMAN
Signature Date
21. ANII R. Hogstrom per tele con MNL 5-27-07 Printed Name: R. Hogstrom / Martin Sullivan
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: 05/26/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2894808

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 1MDGBE05

5. (a) Applicable Construction Code ASME Section III ~~NF~~ ND NA-3521.1, Class 3 1974 Edition, Winter 1975 Addenda, N/A 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)
DG "B" J.W. COOLER	American standard	9-20016-01-3	33116	1MDGBE05	1979	Repaired	YES

7. Description of Work: Weld build up of cooler flange & pipe area. W.O. 2894808

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: Weld build up of Jacket water cooler reversing spool flange & pipe area. W.O. 2894808

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: ISI ENGINEER Date: 6-9-07

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 5-27-07 to 6-9-07, 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: 6-9-07

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 1MDGBE04
2.. Item Description: LUBE OIL COOLER
3. N-5 Data Package Number: 1DG02-10 4. W.O. Number: 2894808 12 5-24-07
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: REPAIR BASE METAL WITH WELD BUILD UP
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

WELD BUILD UP OF BASE MATERIAL REQUIRED DUE TO EXCEEDING MINIMUM WALL THICKNESS, REPAIRED AREAS TO BE PROTECTED WITH COATINGS. Routine weld build up to correct corroded areas due coating failures. RPR 5/24/07

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 3, 1974 Edition 1976 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 3, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial MJK Date 5-24-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MJK Date 5-24-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MJK Date 5-24-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial MJK Date 5-24-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1MDGBE04 INLET	4-305-19-215-019	9-20016-02-4	N/A	WO 2894808 12 5-24-07
1MDGBE04 REVERSING	4-305-19-215-019	9-20016-02-4	N/A	WO 2894808 12 5-24-07
1MDGBE04 cover Inlet/outlet	4-305-19-215-019	9-20016-02-4	N/A	EW-0-2894812

18. Planner [signature] 5-24-07 Printed Name: Martin J. Sullivan
Signature Date

19. ISI [signature] 5/24/07 Printed Name: R.P. INPAP Log Entry RPR
Signature Date

20. ANII [signature] 5-24-07 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

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: 05/24/07

Sheet: 1 of 2

Unit: 1

Work Order Number 2894812

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 1MDGAE04

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)
Lube oil cooler	American standard	9D2703	33119	1MDGBE04	1979	Repaired	YES

7. Description of Work: Weld build up of corroded area on the inlet outlet spool and reversing channel. W.O. 2894812

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐

   N-416-2 ☐ 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: Weld build up of corroded area on the inlet outlet spool and reversing channel. Area to be coated to protect against corrosion. w.o.2894812

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: ISI ENGINEER Date: 6-9-07

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 5-24-07 to 6-9-07, 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: 6-9-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSGEPSV0694
2.. Item Description: Main Steam Safety Valve; Dresser 6"- 3707RAX-RT-25; 1315 PSIG
3. N-5 Data Package Number: 1SG02-6 4. W.O. Number: 2894829
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replacement of Main Steam Safety Valve with a reconditioned and tested spare.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a failure of the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon in service pressure testing (trevitesting).

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

Initial [illegible] Date 5-25-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 5-25-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 5-25-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Safety Valve	APN 45003638	BT-01679	N/A	MR 1234526

18. Planner [illegible] 5-25-07 Printed Name: DAVID M. GODDLET
Signature Date

19. ISI [illegible] 5/25/07 Printed Name: R.P. INDAP Log Entry RPI
Signature Date

20. ANII [illegible] 5-25-07 Printed Name: R.G. HOGSTROM
Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSGEPSV0557
2.. Item Description: Main Steam Safety Valve; Dresser 6"- 3707RAX-RT-25; 1315 PSIG
3. N-5 Data Package Number: 1SG02-6 4. W.O. Number: 2894829
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replacement of Main Steam Safety Valve with a reconditioned and tested spare.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a failure of the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon in service pressure testing (trevitesting).

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

Initial DMG Date 5-25-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 5-25-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMG Date 5-25-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Safety Valve	APN 45003638	BS-08602	N/A	MR 1234528

18. Planner [signature] 5-25-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI [signature] 5/25/07 Printed Name: R.P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 5-25-07 Printed Name: R.G. HOGSTROM
Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSGEPSV0692575 DMG 5-25-07
2.. Item Description: Main Steam Safety Valve; Dresser 6"- 3707RAX-RT-25; 1315 PSIG
3. N-5 Data Package Number: 1SG01-6 4. W.O. Number: 2894829
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replacement of Main Steam Safety Valve with a reconditioned and tested spare.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a failure of the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon in service pressure testing (trevitesting).

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

Initial DMG Date 5-25-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 5-25-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMG Date 5-25-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Valve	APN 45003638	BS-08604 3 DMG 5-25-07	N/A	MR 12345 29

18. Planner [signature] 5-25-07 Printed Name: DAVID M. GODDLET
Signature Date

19. ISI [signature] 5/25/07 Printed Name: R.P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 5-25-07 Printed Name: R.G. HOGSTROM
Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSGEPSV0692
2.. Item Description: Main Steam Safety Valve; Dresser 6"- 3707RAX-RT-25; 1315 PSIG
3. N-5 Data Package Number: 1SG01-6 4. W.O. Number: 2894829
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replacement of Main Steam Safety Valve with a reconditioned and tested spare.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a failure of the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon in service pressure testing (trevitesting).

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

Initial [illegible] Date 5-25-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 5-25-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 5-25-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Safety Valve	APN 45003638	BS-08604	N/A	MR 1234524

18. Planner [signature] 5-25-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI [signature] 5/25/07 Printed Name: R.P. Indap Log Entry RPI
Signature Date

20. ANII [signature] 5-25-07 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: 6/21/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2894829

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG: Main Steam 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)
Safety Valve	Dresser	BT-01679	N/A	1JSGEPSV0694	1979	Replacement	YES
Safety Valve	Dresser	BS-08602	N/A	1JSGEPSV0557	1980	Replacement	YES
Safety Valve	Dresser	BS-08603	N/A	1JSGEPSV0575	1980	Replacement	YES
Safety Valve	Dresser	BS-08604	N/A	1JSGEPSV0692	1980	Replacement	YES

7. Description of Work: Replace four (4) main steam safety valves with a reconditioned & tested spares.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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# 2894829 will be used to replace Main Steam Safety Valves 1JSGEPSV0557, 575, 692 & 694 with reconditioned and tested spares during 1R13.

Pre-Pressured Test WO Review – ISI _____ 6/22/07

ANII _____ 6-23-07

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: _____ ISI ENGINEER Date: 7-13-07

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 5-25-07 to 7-13-07, 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.

_____ Commissions: **NB 9685 "N" "I" AZ264**

Inspectors Signature — National Board, State, Province, and Endorsements

Date: 7-13-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIAL248
2.. Item Description: Spool piece Downstream of 1PSIAV056
3. N-5 Data Package Number: 1RC01-1C 4. W.O. Number: 2895711
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Reinstall the blind flange removed by 2895705 to restore T-Mod 2886678
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Restoration of Temporary Modification, no ASME Code failure

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

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

15. 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 J.D. Date 7-6-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D. Date 7-6-06 17. 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.
Blind Flange	N/A	N/A	~~N/A~~ J.D. 8-3-06	WO 2895705
			D 3485	

18. Planner [signature] 7-6-06 Printed Name: James I. Davis
Signature Date

19. ISI [signature] 7-19-06 Printed Name: R.L. Browning Log Entry RLB
Signature Date

20. ANII [signature] 7-19-06 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: 9-22-06

Sheet: 1 of 2

Unit: 1

Work Order Number 2895711

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, n/a 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)
Pipe Spool	Pullman Power	1SI248N001	N/A	1PSIAL248	1983	Repaired	NO
Flange	N/A	N5542-3-6	N/A	1PSIAL248	2006	Replaced	NO
Orifice	N/A	Ht# U7052	N/A	1PSIAL248	2006	Replaced	NO
Blind Flange	N/A	Ht# D3485	N/A	1PSIAL248	1983	Replacement	NO

7. Description of Work: Restore T-mod 2886678 on 1PSIAL248, downstream of 1PSIAV056

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ Other Pressure n/a psi Test Temperature n/a °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 2895711restored Temporary Modification 2886678 on 1PSIAL248, downstream of 1PSIAV056 by removing the orificed flange and valve assembly, previously installed by Work Order 2895705, and reinstalling the original blind flange.

Pre-Pressured Test WO Review – ISI N/A

ANII

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: SR. ISI ENGINEER Date: 9/22/06
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 7-19-06 to 9-22-06, 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: 9-22-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIBL199
2.. Item Description: Spool piece Downstream of 1PSIBV057
3. N-5 Data Package Number: 1RC01-1C 4. W.O. Number: 2895713
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Reinstall the blind flange removed by 2895708 to restore T-Mod 2886678
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Restoration of Temporary Modification, no ASME Code failure

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

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

15. 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 J.D Date 7-6-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D Date 7-6-06 17. 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.
Blind Flange	N/A	N/A	~~N/A~~ J.D 9-22-06	WO 2895708
			D 3485	

18. Planner [signature] 7-6-06 Printed Name: James I. Davis
Signature Date

19. ISI [signature] 7-19-06 Printed Name: R.L. Browning Log Entry RLB
Signature Date

20. ANII [signature] 7-19-06 Printed Name: R. G. Hockstrom
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: 9-22-06

Sheet: 1 of 2

Unit: 1

Work Order Number 2895713

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, n/a 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)
Pipe Spool	Pullman Power	1SI199N00J	N/A	1PSIBL199	1983	Repaired	NO
Flange	N/A	N5542-3-5	N/A	1PSIBL199	2006	Replaced	NO
Orifice	N/A	Ht# U7052	N/A	1PSIBL199	2006	Replaced	NO
Blind Flange	N/A	Ht# D3485	N/A	1PSIBL199	1983	Replacement	NO

7. Description of Work: Restore T-mod 2886678 on 1PSIBL199, downstream of 1PSIBV057

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ Other Pressure n/a psi Test Temperature n/a °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 2895713 restored Temporary Modification 2886678 on 1PSIBL199, downstream of 1PSIBV057 by removing the orificed flange and valve assembly, previously installed by Work Order 2895708, and reinstalling the original blind flange.

Pre-Pressured Test WO Review – ISI N/A

ANII

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: SR. ISI ENGINEER Date: 9/22/06

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 7-19-06 to 9-22-06, 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: 9-22-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1MCHAX05
2.. Item Description: Greer Hydraulics Suction Stabilizer
3. N-5 Data Package Number: 1CH04-3 4. W.O. Number: 2897217
5. Original Construction Code Edition: 1977 Edition, Winter 1977 Addenda
6. Original Installation Code Edition: 1974 Edition; Winter 1975 Addenda
7. Work Description: Disassembly of charging pump suction stabilizer for 5 year annual bladder replacement.
8. ☐ ISI Flaw N/A NDE Method of Flaw Detection: n/a
Report Number: n/a
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Not a failure of the ASME III pressure boundary. The valve stem is a code part that is part of the bladder.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec III Cl 2, 1977 Edition 1977 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial DMG Date 11-3-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 11-3-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 11-3-06 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMG Date 11-3-06 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Suction Stabilizer	N/A	6117	N/A	N/A
Valve Stem	APN 45004042	1208A-20	56110	MR ~~1160517~~ 1170819

18. Planner [signature] 11-3-06 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI [signature] 11-5-06 Printed Name: D.BH. Log Entry DBH
Signature Date

20. ANII [signature] 11-8-06 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: 12/13/2006

Sheet: 1 of 2

Unit: 1

Work Order Number 2897217

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 NC, Class 2 1977 Edition, Winter 1977 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)
Suction Stabilizer	Greer Hydraulics	6117	N/A	1MCHAX05	1980	Repaired	YES
Valve Stem	Westinghouse	1208A-20	N/A	1MCHAX05	2003	Replacement	NO

7. Description of Work: Disassemble the suction stabilizer for 5 year annual bladder replacement.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 2897217 for suction stabilizer 1MCHAX05. The 5 year annual bladder replacement includes the stem as a code pressure retaining part.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: RRMdsp, ISI Engineer Date: 12-13-2006

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 11-8-06 to 12-19-06, 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: 12-19-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1MDGAE01A
2. Item Description: DG Intercooler
3. N-5 Data Package Number: 1DG01-2 4. W.O. Number: 2899057
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Fastener replacement
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   Replacing the top plate fasteners on a as needed basis due to minor corrosion of the studs. Fasteners are not being replaced due to failure. This is part of routine maintenance RPindap 6/12/07

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 3, 1974 Edition 1976 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 3, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial MJK Date 6-12-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MJK Date 6-12-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MJK Date 6-12-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial MJK Date 6-12-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1MDGAE01A&B	APN 43110010	8B1602	230113	MR 1235277

18. Planner [signature] 6-12-07 Printed Name: Martin J. Sullivan
    Signature Date
19. ISI RPindap 6-12-07 Printed Name: R.P. INDAP Log Entry [signature]
    Signature Date
20. ANII [signature] 6-12-07 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: 06/12/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2899057

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 1MDGAE01A&B

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)
E.D.G. intercoolers	Cooper Energy	8B1602	N/A	1MDGAE01A&B	1978	Repaired	YES
Cover studs	N/A	N/A	N/A	N/A	2006	Replacement	NO

7. Description of Work: Replacement of cover fasteners due to minor corrosion. Not replaced due to failure. 2899057

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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: Replacement of cover fasteners due to minor corrosion. Not replaced due to failure. W.O. #2899057
Replaced 1 stud on 1MDGAE01A
Replaced 6 studs on 1MDGAE01B

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: ISI ENGINEER Date: 6-13-07
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 6-12-07 to 6-19-07, 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: 6-19-07

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 1PSPAL067
2.. Item Description: 18" "A" train Sray Pond cooling water line to EWAE01.
3. N-5 Data Package Number: 1SP02-4 4. W.O. Number: 2899455
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the carbon steel fasteners (studs & nuts) with stainless equivalent.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Not a failure of the ASME III pressure boundary. Replacement being done due to the appearance of rust.
This is a preventive replacement with a material resistant to general corrosion. RPP 12/7/06

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

Initial [illegible] Date 12-5-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 12-5-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 12-5-06 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 12-5-06 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Studs 1-1/8"-8 x 6.5"lg (Approx)	APN 43140308	N/A	MYM & D6	MR 1170630 (1234601 &)
Nuts	APN 43120595	N/A	K280	MR 1170630

18. Planner [signature] 12-5-06 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI [signature] 12-7-06 Printed Name: R. P. INDAP Log Entry RPP
Signature Date

20. ANII [signature] 12-19-06 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: 6/12/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2899455

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SP: Spray Pond System

5. (a) Applicable Construction Code ASME Section III ND, Class 3 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)
Studs - 10	Cardinal	N/A	N/A	1PSPAL067	1991	Replacement	NO
Nuts	Nova	N/A	N/A	1PSPAL067	2004	Replacement	NO
Studs - 22	Dubose Steel	N/A	N/A	1PSPAL067	1991	Replacement	NO

7. Description of Work: Replace the carbon steel fasteners with the stainless equivalent, minor rusting.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 2899455 on line 1PSPAL067. Will replace the 1-1/8"-8 x approx. 6.5" long studs and nuts. The existing fasteners are carbon and have minor rusting. Will install the stainless equivalent (SA564 Gr. 630 H1100) on two 18" flanges joints.

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: 6/14/07
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 12-19-06 to 6-15-07, 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: 6-15-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSPBL025
2. Item Description: DISCHARGE FLOW INDICATOR S.P.
3. N-5 Data Package Number: 1SP02-3 4. W.O. Number: 2899597
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: To remove the annubar for engineering inspection, during this evolution the flange fasteners will be removed and replaced due to corrosion of the fasteners for ease of re-installation.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   This annubar is being removed for an engineering inspection. Fastener replacement is periodic maintenance to mitigate minor corrosion.
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 3, 1974 Edition 1975 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 3, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial N/A Date 6-2-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial N/A Date 6-2-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MJS Date 6-2-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial MJS Date 6-2-06 17. 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.
STUDS	APN 43110014	N/A	T010J B7	01105262
NUTS	APN 43122013	N/A	LVH / DJQ	01105262

18. Planner [signature] 6-2-06 Printed Name: Martin J Sullivan
    Signature Date
19. ISI [signature] 6/2/06 Printed Name: R.P. INDAP Log Entry RPR
    Signature Date
20. ANII [signature] 6-2-06 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. (Name) — Date 06/21/06

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) — 2899597 (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 Spray Pond

5. (a) Applicable Construction Code ASME Section III 19 74 Edition, W 75 Addenda, NA Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 92 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)
Spray Pond	NA	NA	NA	1PSPBL025	NA	Replacement	No

7. Description of Work See remarks on sheet 2.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ N-416-2 ☐

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 The work included replacing the flange studs and nuts on 1PSPBL025 to the 1JSPBFF0008 annubar.

Pre-Pressure Test Review: ISI NA ANII NA

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 D Bell ENGR (Owner or Owner's Designee, Title) Date 6-21-06

CERTIFICATE 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 Az and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-2-06 to 6-21-06, 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.

RG Gutierrez (Inspector's Signature) Commissions NB 9685 "A,N,I,C" (National Board, State, Province, and Endorsements)

Date 6-21-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1SG036H011
2.. Item Description: Steam generator 1 main steam Line 2 Constant Spring Hanger
3. N-5 Data Package Number: 1SG01-1 4. W.O. Number: 2901355
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: weld replace the nut on the load coupler with one that has the correct threads.
8. ☐ ISI Flaw NDE Method of Flaw Detection: n/a
Report Number: n/a
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a ASME pressure boundary failure. Rod coupler was ordered with the incorrect threads and is being reworked to correct.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial DMS Date 6-9-06 If required, include a step in the W.O. to perform Preservice Inspection.

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

Initial DMS Date 6-9-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMS Date 6-9-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMS Date 6-9-06 17. 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.
1SG036H011	APN 00096419	N/A	B-495	MR 1108368

18. Planner [signature] 6-9-06 Printed Name: David Goodlet
Signature Date

19. ISI R. INDAP PER TELECON 6-9-06 Printed Name: RAMAKANT INDAP Log Entry [signature] 6-9-06
Signature Date

20. ANII R. HOGSTROM PER TELECON 6-9-06 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: 6/13/2006

Sheet: 1 of 2

Unit: 1

Work Order Number 2901355

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 NF, Class 2 1974 Edition, Winter 1975 Addenda, N/A 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)
Spring Support	ITT Grinnell	G2502	N/A	1SG036H011	1982	Repaired	YES
Load Coupling	Anvil	41-74722	N/A	1SG036H011	2006	Repaired	YES
Adjuster Nut	Anvil	n/a	N/A	1SG036H011	2006	Replacement	YES

7. Description of Work: Reworked the load coupling by replacing the adjusting nut with one with 4.5 threads per inch.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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 2901355 (shop work) will weld replaced the adjuster nut on the load coupler with one that has 4.5 threads per inch. WO# 2888427 will install in unit-1

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: RPhaley, Sr. Consulting Engineer Date: 6/13/06
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 6-9-06 to 6-13-06, 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: 6-13-06

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID BS-~~08604~~ 08623
2.. Item Description: Main Steam Safety Valve; Dresser - 6" 3707RAX-RT-25 ~~1315~~ 1290 psig
3. N-5 Data Package Number: n/a
4. W.O. Number: 2901738
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Maintenance overhaul and testing of spare valve. Code part replacement from other spare valves or from approved purchased spare parts based upon inspection results.
8. ☐ ISI Flaw — NDE Method of Flaw Detection: n/a — Report Number: n/a
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   No failure of the ASME III boundary. The disc will be replaced with preoxidized ASME SB637 or ASTM B637 Inconel X-750 material to enhance performance. Other parts will be replaced on a as needed basis.

10. Repair/Replacement Work Organization: NWS Technologies
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial [illegible] Date 6-27-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 6-27-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 6-27-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial [illegible] Date 6-27-06 17. 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.
Disc	APN 00064290	ADG60	N/A	MR ~~1113901~~ 9439383

18. Planner [signature] 6-27-06 Printed Name: DAVID GOODLET
    Signature Date
19. ISI [signature] 6/29/06 Printed Name: R.P. INDAP Log Entry [illegible]
    Signature Date
20. ANII [signature] 6-29-06 Printed Name: RC HOLSTROM
    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: NWS Technologies

Date: 9/22/2006

Sheet: 1 of 2

Unit: 2

Work Order Number 2901738

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)
Disc	Dresser	ADG60	N/A	BS-08623	2001	Replacement	NO

7. Description of Work: Overhaul and test spare Main Steam Safety Valve.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ Other Pressure n/a psi Test Temperature n/a °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 #2901738 for off-site disassembly; reconditioning and testing of a spare Main Steam Safety Valve; s/n BS-08623. The new type (material) disc was installed.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: RJ Indap, ISI Engineer Date: 10-3-2006

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 10-4-06 6-29-06 to 10-14-06, 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.

RA Fontaine

Inspectors Signature

Commissions: **NB 9685 "N" "I" AZ264**

National Board, State, Province, and Endorsements

Date: 10-4-06

B508623

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

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

1. Manufactured and certified by Dresser Valve Division; Dresser Equipment Group, Inc. Intersection Hwy. 167 @ 3225 North, Alexandria, Louisiana 71309 (name and address of NPT Certificate Holder)
2. Manufactured for Arizona Public Service Company P.O. Box 53940 Phoenix, Arizona 85072-3940 (name and address of purchaser)
3. Location of installation Arizona Public Service Co Palo Verde Nucl Generation 5801 S Wintersburg Rd. Tonopah, Arizona 85354 (name and address)
4. Type OS414 (drawing no.) SB637 (Inconel X-750) (mat'l spec. no.) N/A (tensile strength) N/A (CRN) 2001 (year built)
5. ASME Code Section III, Division 1: 1974 (edition) Summer 1975 (addenda date) 2 (class) N/A (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no) Revision N/A Date N/A
7. Remarks: Serial Numbers Are Used In Lieu Of NPT Stamping.

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

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	ADG60	B508623
(2)	ADG61	
(3)	ADG62	
(4)	ADG64	
(5)	ADG65	
(6)		
(7)		
(8)		
(9)		
(10)		
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
(36)		
(37)		
(38)		
(39)		
(40)		
(41)		
(42)		
(43)		
(44)		
(45)		
(46)		
(47)		
(48)		
(49)		
(50)		

Design pressure N/A psi Temp. N/A °F. Hydro. Test pressure 2250 PSIG at temp. °F (when applicable)

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

3503623

FORM N-2 (Back — Pg. 2 of 2)

Certificate Holder's Serial Nos. ADG60,61,62,64 through ADG65

CERTIFICATION OF DESIGN

Design specifications certified by N/A (when applicable) P.E. State N/A Reg. No. N/A

Design report* certified by N/A (when applicable) P.E. State N/A Reg. No. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Disc conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2434 Expires 5/20/2004

Date 8-6-01 Name SEE LINE 1 (NPT Certificate Holder) Signed V J Beaver (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel inspectors and the State or Province of LOUISIANA and employed by H. S. B. I. & I. Co. HARTFORD, CT. have inspected these items described in this Data Report on 8/6/01, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 8/6/01 Signed [illegible] (Authorized Nuclear Inspector) Commissions LA864 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1MEWBE01
2.. Item Description: ESSENTIAL COOLING WATER HEAT EXCHANGER
3. N-5 Data Package Number: 1EW02-1 4. W.O. Number: 2904130
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Perform base material weld repairs on the Channel Heads and Channel Head Covers of the Essential Cooling Water (EW) Heat exchanger, as identified by Engineering.
8. ☐ ISI Flaw N/A NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

ENGINEERING INSPECTION DETERMINED WELD REPAIRS REQUIRED PRIOR TO RE-COATING. THERE WAS NO FAILURE OF THE PRESSURE BOUNDARY. This is routine repair of corroded areas due to coating failure. RPI 6/20/06

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

Initial J.D. Date 6-20-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial J.D. Date 6-20-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D. Date 6-20-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D. Date 6-20-06 17. 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.
1MEWBE01	N/A	N/A	N/A	N/A

18. Planner [signature] 6-20-06 Printed Name: James I. Davis
Signature Date

19. ISI [signature] 6/20/06 Printed Name: R.P. Indap Log entry RPI
Signature Date

20. ANII [signature] 6-20-06 Printed Name: R.G. Hockstrom
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 06/23/06

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) 2904130 (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 Spray Pond & 1MEWBE01

5. (a) Applicable Construction Code ASME Section III 19 74 Edition, W 75 Addenda, NA Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 92 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)
SP/EW	Struther Wells Corp	17606329132	14441	1MEWBE01	1978	Repaired	Yes

7. Description of Work See remarks on sheet 2.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ Exempt ☐ N-416-2 ☐

Other ☐ Pressure 54.5 psi Test Temp. 76 °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 The work included performed base material weld repairs on the Channel Heads and 2" nozzles.

Pre-Pressure Test Review: ISI NA ANII NA

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 [signature] ENGR (Owner or Owner's Designee, Title) Date 6-23-06

CERTIFICATE 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 Az and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-20-06 to 6-23-06, 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 "A.N.I.C" Az 264 (National Board, State, Province, and Endorsements)

Date 6-23-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIEV217
2.. Item Description: SIT 2A Discharge Check Valve to Loop 2A
3. N-5 Data Package Number: 1RC01-19B 4. W.O. Number: 2904627
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Seat leakage - No ASME boundary failure

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

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

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

Initial J.O. Date 10-4-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.O. Date 10-4-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial J.O. Date 10-4-06 17. 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/Arm/Disc Assm	45060170	Bonnet CF-881 Disc RS213466-8	63	WO# 2912172
		RS 213449-10		

18. Planner [signature] 10-4-06 Printed Name: JAMES I. DAVIS
Signature Date

19. ISI [signature] 10-4-06 Printed Name: R.P. INDAP Log Entry [illegible]
Signature Date

20. ANII [signature] 10-4-06 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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 06-16-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2904627

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A 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)
14" Check Valve	Borg Warner	26224	615	1PSIEV217	1977	Repaired	Yes
Bonnet	Borg Warner	S/N 3	N/A	Ht # 2E76	N/A	Replaced	Yes
Disc	Borg Warner	S/N 5	N/A	Ht # 2E69	N/A	Replaced	Yes
Bonnet	Borg Warner	RS 213449-10 SN CF-881	N/A	N/A	1991	Replacement	Yes
Disc	Borg Warner	RS 213466-863	N/A	N/A	1991	Replacement	Yes

7. Description of Work: Replaced the bonnet and disc assembly with a new assembly

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-2 ☐

   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. W.O. 2904627 replaced bonnet & disc assembly in valve 1PSIEV217, with refurbished bonnet & disc assembly that was removed from valve 3PSIEV247 during U3R12 under W.O. 2861512 and refurbished under W.O. 2912172.

Pre-Pressure Test work order review - ISI : RLB 6/16/07

ANII : 6-16-07

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: RLB ISI ENG Date: 7/4/07
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 10-4-06 to 7-4-07, 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: 7-4-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1SI122H003
2.. Item Description: 1/4 KIP SNUBBER
3. N-5 Data Package Number: 1CH02-8 4. W.O. Number: 2909551
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: REPLACE SNUBBER
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a failure of the ASME III pressure boundary. Snubber is being replaced as a percautionary measure. This is a like for like replacement. No welding.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO
Initial N/A Date 06/13/2007 If required, include a step in the W.O. to perform Preservice Inspection
15. ASME Section XI Pressure Test Required: ☐ YES ☒ NO
Initial N/A Date 06/13/2007 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial SRB Date 06/13/2007 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.
Initial SRB Date 06/13/2007 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Snubber	APN 45350024	14736	N/A	MR 1235960

18. Planner Scott R. Baize 06/13/2007 Printed Name: SCOTT R. BAIZE
Signature Date
19. ISI RLB 6/14/07 Printed Name: RLB/Browning Log Entry RLB
Signature Date
20. ANII RL Hystrom 6-14-07 Printed Name: RL 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: 06/13/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2909551

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SI

5. (a) Applicable Construction Code ASME Section III NF, 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)
PSA 1/4 Snubber	Pacific Scientific	14736	N/A	1SI122H003	1981	Replacement	YES

7. Description of Work: Replaced Snubber NO WELDING

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 290955 removed and will replace 1SI122H003. ITT Grinnell changed to PSA Modification Change Notice #58504.

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: ISI ENGINEER Date: 6-15-07

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 6-14-07 to 6-15-07, 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: 6-15-07

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 1PC006H016
2.. Item Description: 1/4 KIP Snubber
3. N-5 Data Package Number: PC02-1 4. W.O. Number: 2909582
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace Snubber
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

This is not a failure. Snubber is being replaced for precautionary measures. This is a like for like replacement. NO WELDING.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec.III NF C13.1974Edition Summer1976 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 3/NF 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda RPI 6/15/07
14. Preservice Inspection Required: ☒ YES ~~☒ NO~~ RPI 6/15/07

Initial N/A Date 06/14/2007 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial N/A Date 06/14/2007 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial SRB Date 06/14/2007 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial SRB Date 06/14/2007 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1PC006H016	APN 45350024	15456	N/A	WO# 2909582

18. Planner Scott R Baize 06/14/2007 Printed Name: Scott R. Baize
Signature Date

19. ISI RPIndap 6/15/07 Printed Name: R.P. INDAP Log Entry RPI
Signature Date

20. ANII RG Hgstrom 6-15-07 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. Date: 06/14/2007

   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 2909582

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

5. (a) Applicable Construction Code ASME Section III NF, Class 3 1974 Edition, Summer 1976 Addenda, 3 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	PSA	15456	N/A	1PC006H016	80	Replacement	YES
1/4 KIP SNUBBER	PSA	11548	N/A	1PC006H016	1983	REPLACED	YES

7. Description of Work: Snubber repaced with like for like. No welding.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 2909582 removed and replaces the 1/4 KIP snubber it is being changed out for precautionary measures. The snubber being placed into service serial number is 15456.

Pre-Pressured Test WO Review – ISI N/A

ANII

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: SR. ISI ENGINEER Date: 6/16/07
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 6-15-07 to 6-16-07, 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: 6-16-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PCHNV835
2. Item Description: 1-1/2" Borg Warner 1665# Y type lift check valve
3. N-5 Data Package Number: 1CH14-1 4. W.O. Number: 2912076
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Disassemble check valve for inspection. The body to bonnet seal weld will need to be removed and later replaced. Other parts will be replaced if necessary based upon inspection.
8. ☐ ISI Flaw NDE Method of Flaw Detection: n/a
   Report Number: n/a
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   Not a failure of the ASME III pressure boundary. Seal weld is required to be removed for check valve inspection.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial DMG Date 10-7-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 10-7-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 10-7-06 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMG Date 10-7-06 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1-1/2" Borg Warner Valve	N/A	26454	N/A	N/A
Body/Bonnet Seal Weld	n/a	n/a	n/a	n/a

18. Planner [signature] 10-7-06 Printed Name: DAVID M. GOODLET
    Signature Date
19. ISI [signature] 10-9-06 Printed Name: R. P. INDAP Log Entry RPI
    Signature Date
20. ANII [signature] 10-9-06 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: 10/6/2006

Sheet: 1 of 2

Unit: 1

Work Order Number 2912076

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, 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)
Valve	Borg Warner	26454	N/A	1PCHNV835	1979	Repaired	YES
Seal Weld	N/A	N/A	N/A	1PCHNV835	2007	Replacement	NO

7. Description of Work: Removal of seal weld for check valve internal inspection.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ Other Pressure n/a psi Test Temperature n/a °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# 2912076 on check valve 1PCHNV835 for inspection per the check valve program.. The bonnet seal weld needs to be removed and replaced to support this inspection.

Pre-Pressured Test WO Review – ISI n/a

ANII n/a

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: RPhelap, ISI Engineer Date: 6-4-2007

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 10-9-06 to 6-4-07, 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: 6-4-07

ASME SECTION XI – REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 1PIAEV073
2.. Item Description: Containment Service Air Supply Check Valve
3. N-5 Data Package Number: 1IA19-1 4. W.O. Number: 2912105
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Tack Weld Hinge Support to the Bonnet per P221B-00145
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No Failure of the ASME Pressure Boundary

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

15. 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 04/26/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 04/26/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Tack Welds	N/A	N/A	N/A	WO

18. Planner [signature] 04/26/07 Printed Name: JOHN WALTMAN
Signature Date

19. ISI [signature] 4/26/07 Printed Name: R.P. INDAP Log Entry [illegible]
Signature Date

20. ANII [signature] 5-1-07 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: 03/22/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2912105

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 1A

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)
Valve	Anchor Darling	E-6374-3-1	NA	1PIAEV073	1979	Repaired	YES

7. Description of Work: Note remarks on Page 2. **** Code cases listed on NPV-1

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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 2912105 replaced the tack welds between the Check Valve hinge support and the bonnet.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: ISI ENGINEER Date: 5/18/07
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 5-1-07 to 5-18-07, 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: 5-18-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIEV540
2.. Item Description: HPSI/LPSI Header Loop Injection Check Valve
3. N-5 Data Package Number: 1RC01-1C 4. W.O. Number: 2912115
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Seat leakage - No ASME boundary failure

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

Initial N/A Date _____ If required, include a step in the W.O. to perform Preservice Inspection 31MT-92217

15. ASME Section XI Pressure Test Required: ☒ YES RLB 6/12/07 ☒ NO per step 4.7.5 of ~~WO~~ OLD BONNET RE-INSTALLED

Initial J.O Date 10-4-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.O Date 10-4-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial J.O Date 10-4-06 17. 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.
DISC	45021077	#5		2990311

18. Planner [signature] 10-4-06 Printed Name: JAMES I. DAVIS
Signature Date

19. ISI [signature] 10-4-06 Printed Name: R. P. INDAP Log Entry [signature]
Signature Date

20. ANII [signature] 10-4-06 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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 06-16-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2912115

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A 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)
12" Check Valve	Borg Warner	31972	1018	1PSIEV540	1978	Repaired	Yes
Disc	Borg Warner	S/N 10	N/A	Ht # 2G71	N/A	Replaced	Yes
Disc	Borg Warner	S/N 5	N/A	Ht # 2C18	N/A	Replacement	Yes

7. Description of Work: Replaced the disc.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

   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. W.O. 2912115 replaced disc in valve 1PSIEV540, with refurbished disc that was removed from valve 2PSIEV124 during U2R13 under W.O. 2934428 and refurbished under W.O. 2990311.

Pre-Pressure Test work order review - ISI : N/A

ANII : N/A

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] ISI ENG Date: 6-16-07

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 10-4-06 to 6-16-07, 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: 6-16-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PRCEL146
2.. Item Description: Reactor Head Vent Piping Support Bracket
3. N-5 Data Package Number: 1RC01-4 4. W.O. Number: 2914914
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Fabricate and Install Upgraded Design Reactor Head Vent Line Support Bracket
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

The Unit-1 Reactor head vent line support bracket was inspected during U1R12 and found to be out of configuration. The bracket was replaced during U1R12, however the bracket was fabricated from Non-ASME material. The head vent bracket will be replaced with a newly fabricated bracket per the details on drawing N001-0301-00168, utilizing ASME material..

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

Initial KVS Date 4/17/07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial KVS Date 4/17/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial KVS Date 4/17/07 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial KVS Date 4/17/07 17. 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.
Channel, Structural SA36	APN 00097095		J63427	MR 1151657
Tubing, Structural SA36	APN 00097093		N60165	MR 1151657
Plate, 1/2" SA36	APN 00100085		7100294-01	MR 1200428
Bolt, 1/2" SA 193 Gr.B7	APN 43103081		8963218	MR 1151657
Nut, 1/2" SA 194 Gr.B7	APN 00097094		NI	MR 1151657

18. Planner Karl V. Savage 4/17/07 Printed Name: Karl V. Savage
Signature Date

19. ISI RPIndap 4/18/07 Printed Name: R. P. INDAP Log Entry PSR
Signature Date

20. ANII RG Hogstrom 4-18-07 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: 04/25/2007

Sheet: _____ of _____

Unit: 1

Work Order Number 2914914

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC - Reactor Coolant

5. (a) Applicable Construction Code ASME Section III NF, 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)
Channel, Structural SA36	N/A	N/A	N/A	N001-0301-168 Item 656-03	N/A	Replacement	NO
Tubing, Structural SA36	N/A	N/A	N/A	N001-0301-168 Item 656-04	N/A	Replacement	NO
Plate SA36	N/A	N/A	N/A	N001-0301-168 Item 656-05	N/A	Replacement	NO
Bolts SA193GrB7	N/A	N/A	N/A	N001-0301-168 Item 656-12	N/A	Replacement	NO
Nuts SA194GrB7	N/A	N/A	N/A	N001-0301-168 Item 656-13	N/A	Replacement	NO

7. Description of Work: Replace the head vent piping support bracket to updated design shown on N001-0301-00168

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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 2914914. Fabricated and installed updated design of head vent piping support bracket as shown on drawing N001-0301-00168.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: RP Mrdap, ISI Engineer Date: 6-27-2007
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 4-18-07 to 6-27-07, 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.

RG [illegible]
Inspectors Signature

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

Date: 6-27-07

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 1MDGBP04
2.. Item Description: Diesel generator lube oil piping
3. N-5 Data Package Number: 1DG02-10 4. W.O. Number: 2924849
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the missing nut on the pipe u-bolt
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Nut is identical to the original

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 3, 1974 Edition 1976 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl ~~1~~ 3, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda 9-14-06
14. Preservice Inspection Required: ☐ YES ☒ NO
Initial MAMK Date 9-14-06 If required, include a step in the W.O. to perform Preservice Inspection
15. ASME Section XI Pressure Test Required: ☐ YES ☒ NO
Initial N/A MK Date 9.14.06 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial MK Date 9-14-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.
Initial MK Date 9-14-06 17. 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.
lube oil u-bolt nut	APN 43122008	N/A	P8C 8448	MR 1141629

18. Planner [signature] 9-14-06 Printed Name: Martin Sullivan
Signature Date
19. ISI [signature] 9/14/06 Printed Name: R.P. INDAP Log Entry [signature]
Signature Date
20. ANII [signature] 9-14-06 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: 09/14/2006

Sheet: 1 of 2

Unit: 1

Work Order Number 2924849

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: DG lube oil system

5. (a) Applicable Construction Code ASME Section III NF, Class 3 1974 Edition, Summer 1976 Addenda, N/A 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)
L. O u-bolt nut	Cooper Energy	N/A	N/A	1MDGBP04	2006	Replacement	NO

7. Description of Work: Replace the missing nut on the u-bolt on the lube oil system on the E.D.G. work order 2924849

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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: Replace the missing nut on the u-bolt on the lube oil system on the E.D.G. work order 2924849

Pre-Pressured Test WO Review – ISI N/A

ANII

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: SR. ISI ENGINEER Date: 9/15/06
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 9-14-06 to 9-15-06, 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: 9-15-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1MRCEX02
2.. Item Description: Reactor Coolant System Pressurizer
3. N-5 Data Package Number: 1RC01-1A 4. W.O. Number: 2926509
5. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove & install 36 new Pressurizer Heaters at the following Pressurizer Nozzle/Heater locations 1MRCEA01 thru A18 and B01 thru B18.

8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:

9. Evaluation of the suitability of this work as per the requirements of IWA - 4150: The heaters are being replaced as a proactive measure to prevent IGSCCof heater sheaths.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1971 Edition 1973 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: ASME Sec. III, 1974 Ed., Winter 1975 Addenda, & Relief Request 30
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

15. 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 9/22/06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial [illegible] Date 9/22/06 17. 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.
Pzr Htr 1MRCEA01	APN00091387	N05013-09	N/A	MR 1145928
Pzr Htr 1MRCEA02	APN00091387	N05013-03	N/A	MR 1145928
Pzr Htr 1MRCEA03	APN00091387	N03038M01-18	N/A	MR 1145928
Pzr Htr 1MRCEA04	APN 00091387	N05013-02	N/A	MR 1145928
Pzr Htr 1MRCEA05	APN 00091387	N03028M01-21	N/A	MR 01145928
Pzr Htr 1MRCEA06	APN 00098328	N05061-13	N/A	MR 1147297
Pzr Htr 1MRCEA07	APN 00098328	N05061-24	N/A	MR 1147297
Pzr Htr 1MRCEA08	APN 00098328	N05061-21	N/A	MR 1147297

18. Planner [illegible] Signature 9/22/06 Date Printed Name: Herbert L. Green

19. ISI [illegible] per telecon R. Indap Signature 9/22/06 Date Printed Name: Ramakant Indap Log Entry _____

20. ANII [illegible] per telecon R. Hogstrom Signature 9/22/06 Date Printed Name: Robert Hogstrom

ASME SECTION XI – REPAIR / REPLACEMENT

Component Continuation:

Work Order Number: 2926509

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
PZR HTR 1MRCEA09	APN 00091387	N05013-07	N/A	MR 01145928
PZR HTR 1MRCEA10	APN 00098328	N05061-26	N/A	MR 1147297
PZR HTR 1MRCEA11	APN 00098328	N05061-25	N/A	MR 1147297
PZR HTR 1MRCEA12	APN 00098328	N05061-27	N/A	MR 1147297
PZR HTR 1MRCEA13	APN 00098328	N05061-06	N/A	MR 1147297
PZR HTR 1MRCEA14	APN 00091387	N05013-15	N/A	MR 01145928
PZR HTR 1MRCEA15	APN 00091387	~~N01~~ N05013-04	N/A	MR 01145928
PZR HTR 1MRCEA16	APN 00098328	N05061-01	N/A	MR 1147297
PZR HTR 1MRCEA17	APN 00098328	N05061-03	N/A	MR 1147297
PZR HTR 1MRCEA18	APN 00098328	N05061-07	N/A	MR 1147297
PZR HTR 1MRCEB01	APN 00091387	N05013-13	N/A	MR 01145928
PZR HTR 1MRCEB02	APN 00091387	N05013-11	N/A	MR 01145928
PZR HTR 1MRCEB03	APN 00091387	N05013-10	N/A	MR 01145928
PZR HTR 1MRCEB04	APN 00098328	N05061-29	~~N/A~~	MR 1147297
PZR HTR 1MRCEB05	APN 00091387	N05013-14	N/A	MR 01145928
PZR HTR 1MRCEB06	APN 00098328	N05061-23	N/A	MR 1147297
PZR HTR 1MRCEB07	APN 00091387	N03028M01-22	N/A	MR 01145928
PZR HTR 1MRCEB08	APN 00091387	N03028M01-20	N/A	MR 01145928
PZR HTR 1MRCEB09	APN 00091387	N05013-12	N/A	MR 01145928
PZR HTR 1MRCEB10	APN 00091387	N03028M01-19	N/A	MR 01145928
PZR HTR 1MRCEB11	APN 00091387	N05013-05	N/A	MR 01145928
PZR HTR 1MRCEB12	APN 00098328	N05061-19	N/A	MR 1147297
PZR HTR 1MRCEB13	APN 00091387	N05013-08	N/A	MR 01145928
PZR HTR 1MRCEB14	APN 00091387	N05013-01	N/A	MR 01145928
PZR HTR 1MRCEB15	APN 00098328	N05061-09	N/A	MR 1147297
PZR HTR 1MRCEB16	APN 00098328	N05061-04	N/A	MR 1147297
PZR HTR 1MRCEB17	APN 00098328	N05061-10	N/A	MR 1147297
PZR HTR 1MRCEB18	APN (1)	(1)	N/A	MR (1)

18. Planner [signature] 10/2/06 Late Entry 9/22/06 Printed Name: Herbert L. Green
Signature Date

19. ISI [signature] Late Entry 10/2/06 pre telecon R. Indap 9/22/06 Printed Name: Ramakant Indap Log Entry
Signature Date

20. ANII [signature] Late Entry 10/2/06 pre telecon R. Hogstream 9/22/06 Printed Name: Robert Hogstream
Signature Date

(1) INSTALLED UNDER W.O. 2928459 [signature] 10/1/06

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 Company

Date: 09/22/2006

Sheet: 1 of 5

Unit: 1

Work Order Number 2926509

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant 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 1361-2

   (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)
Pressurizer Heater	Doosan	N05013-09	N/A	1MRCEA01	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05013-03	N/A	1MRCEA02	N/A	Replacement	YES
Pressurizer Heater	Doosan	N3028M01-18	N/A	1MRCEA03	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05013-02	N/A	1MRCEA04	N/A	Replacement	YES

7. Description of Work: Remove 35 & install 35 new Pressurizer Heaters at the following Pressurizer Nozzle/Heater locations 1MRCEA01 thru A18 and B01 thru B17.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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 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 Company

Date: 09/22/2006

Sheet: 2 of 5

Unit: 1

Work Order Number 2926509

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant 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 1361-2

   (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)
Pressurizer Heater	Doosan	N03028M01-21	N/A	1MRCEA05	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-13	N/A	1MRCEA06	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-24	N/A	1MRCEA07	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-21	N/A	1MRCEA08	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05013-07	N/A	1MRCEA09	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-26	N/A	1MRCEA10	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-25	N/A	1MRCEA11	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-27	N/A	1MRCEA12	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-06	N/A	1MRCEA13	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05013-15	N/A	1MRCEA14	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05013-04	N/A	1MRCEA15	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-01	N/A	1MRCEA16	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-03	N/A	1MRCEA17	N/A	Replacement	YES

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: 09/22/2006

Sheet: 3 of 5

Unit: 1

Work Order Number 2926509

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant 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 1361-2

   (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)
Pressurizer Heater	Doosan	N05061-07	N/A	1MRCEA18	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05013-13	N/A	1MRCEB01	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05013-11	N/A	1MRCEB02	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05013-10	N/A	1MRCEB03	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-29	N/A	1MRCEB04	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05013-14	N/A	1MRCEB05	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-23	N/A	1MRCEB06	N/A	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-22	N/A	1MRCEB07	N/A	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-20	N/A	1MRCEB08	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05013-12	N/A	1MRCEB09	N/A	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-19	N/A	1MRCEB10	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05013-05	N/A	1MRCEB11	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-19	N/A	1MRCEB12	N/A	Replacement	YES

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: 09/22/2006

Sheet: 4 of 5

2. Plant: Palo Verde Nuclear Generating Station

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

Unit: 1

Work Order Number 2926509

3. Work Performed by: Arizona Public Service Company

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant 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 1361-2

(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)
Pressurizer Heater	Doosan	N05013-08	N/A	1MRCEB13	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05013-01	N/A	1MRCEB14	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-09	N/A	1MRCEB15	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-04	N/A	1MRCEB16	N/A	Replacement	YES
Pressurizer Heater	Doosan	N05061-10	N/A	1MRCEB17	N/A	Replacement	YES
Pressurizer Heater	N/A Plugged IAW DIWO 2928459	N/A	N/A	1MRCEB18	N/A	Replacement	YES

FORM NIS-2 (Back)

Remarks: Remove 35 & install 35 new Pressurizer Heaters at the following Pressurizer Nozzle/Heater locations 1MRCEA01 thru A18 and B01 thru B17. Work to be performed IAW work order 2926509.

Pre-Pressured Test WO Review – ISI N/A

ANII A

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: ISI ENG Date: 10/2/06

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 9-22-06 to 10-2-06, 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 "A,N,I,C" Az 264

National Board, State, Province, and Endorsements

Date: 10-2-06

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured by DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.,LTD. 555,GUYGOK-DONG, CHANGWON, KYUNGNAM, KOREA
(name and address of NPT Certificate Holder)

2. Manufactured for KOREA HYDRO & NUCLEAR POWER CO., LTD. 167,SAMSUNG-DONG,KANGNAM-KU,SEOUL,KOREA.
(name and address of purchaser)

3. Location of Installation ULCHIN NUCLEAR POWER PLANT UNIT 5, 6 / 84-4 BUGU-RI BUK-MYUN ULCHIN-GUN KYUNGSANGBUK-DO
(name and address)

4. Type: D-N03028-22185-M01 Rev.0 (drawing no.) SA213-TP316/SA479-TP316 (mat'l. spec. no.) 75 ksi (tensile strength) N/A (CRN) 2004 (year built)

5.ASME Code,Section III,Division 1 : 1992 (edition) A94(DEC.31.'94) (addenda date) 1 (class) N/A (Code Case no.)

6.Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7.Remarks : 1. ITEM NAME : PRESSURIZER HEATER
2. ( )* : DOOSAN No.

8.Nom. thickness (in.) 0.190" Min. design thickness (in.) 0.180" Dia. ID (ft & in.) 0.892" Length overall (ft & in.) 98.74"

9.When applicable, Certificate Holder' Data Reports are attached for each item of this report :

	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1)	N03028M01-18	N/A (DN-139)*
(2)	N03028M01-19	N/A (DN-140)*
(3)	N03028M01-20	N/A (DN-141)*
(4)	N03028M01-21	N/A (DN-142)*
(5)	N03028M01-22	N/A (DN-143)*
(6)	N03028M01-23	N/A (DN-144)*
(7)	N03028M01-24	N/A (DN-145)*
(8)		
(9)		
(10)		
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
(36)		
(37)		
(38)		
(39)		
(40)		
(41)		
(42)		
(43)		
(44)		
(45)		
(46)		
(47)		
(48)		
(49)		
(50)		

10.Design pressure 2500 psi. Temp. 800 °F. Hydro. test pressure 3125 psi at temp. 70 °F

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

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

FORM N-2 (Back - Pg. 2 of 2)

Certificate Holder's Serial Nos. N03028M01-18 through N03028M01-24

CERTIFICATION OF DESIGN

Design specifications certified by J.Y.LEE (when applicable) P.E.State OREGON Reg.no. 19235

Design report* certified by J.Y.PARK (when applicable) P.E.State GEORGIA Reg.no. 20667

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) PART conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2767 Expires JANUARY. 8. 2006

Date 04.08.19 Name DOOSAN HEAVY INDUSTRIES & CONT.CO.LTD. (NPT Certificate Holder) Signed J. S. Gong (authorized representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of ILLINOIS and employed by Hartford Steam Boiler of CT of CONN. have inspected these items described in this Data Report on 8/19/04, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 8/19/04 Signed (Authorized Inspector) Commissions IL1546 [Nat'l.Bd.(incl.endorsements) and state or prov.and no.]

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

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

1. Manufactured by DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.,LTD. 555,GUYGOK-DONG, CHANGWON, KYUNGNAM, KOREA
(name and address of NPT Certificate Holder)

2. Manufactured for KOREA HYDRO & NUCLEAR POWER CO., LTD. 167,SAMSUNG-DONG,KANGNAM-KU,SEOUL,KOREA.
(name and address of purchaser)

3. Location of installation ULCHIN NUCLEAR POWER PLANT UNIT 5, 6 / 84-4 BUGU-RI BUK-MYUN ULCHIN-GUN KYUNGSANGBUK-DO
(name and address)

4. Type: D-N05013-22185-M01 Rev.1 (drawing no.) SA213-TP316/SA479-TP316 (mat'l. spec. no.) 75 ksi (tensile strength) N/A (CRN) 2006 (year built)

5.ASME Code,Section III,Division 1 : 1992 (edition) A94(DEC.31.'94) (addenda data) 1 (class) N/A (Code Case no.)

6.Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7.Remarks : 1. ITEM NAME : PRESSURIZER HEATER
2. ( )* : DOOSAN No.
3. ** : EXTERNAL TEST FINAL ACCEPTANCE TESTING IS SYSTEM PRESSURE TEST

8.Nom. thickness (in.) 0.190" Min. design thickness (in.) 0.180" Dia. ID (ft & in.) 0.892" Length overall (ft & in.) 98.74"

9.When applicable, Certificate Holder' Data Reports are attached for each item of this report :

	Part or Appurtenance Serial Number	National Board No. in Numerical Order		Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1)	N05013-01	N/A (DN-2705)*	(26)		
(2)	N05013-02	N/A (DN-2706)*	(27)		
(3)	N05013-03	N/A (DN-2707)*	(28)		
(4)	N05013-04	N/A (DN-2708)*	(29)		
(5)	N05013-05	N/A (DN-2709)*	(30)		
(6)	N05013-06	N/A (DN-2710)*	(31)		
(7)	N05013-07	N/A (DN-2711)*	(32)		
(8)	N05013-08	N/A (DN-2712)*	(33)		
(9)	N05013-09	N/A (DN-2713)*	(34)		
(10)	N05013-10	N/A (DN-2714)*	(35)		
(11)	N05013-11	N/A (DN-2715)*	(36)		
(12)	N05013-12	N/A (DN-2716)*	(37)		
(13)	N05013-13	N/A (DN-2717)*	(38)		
(14)	N05013-14	N/A (DN-2718)*	(39)		
(15)	N05013-15	N/A (DN-2719)*	(40)		
(16)	N05013-16	N/A (DN-2720)*	(41)		
(17)	N05013-17	N/A (DN-2721)*	(42)		
(18)	N05013-18	N/A (DN-2722)*	(43)		
(19)			(44)		
(20)			(45)		
(21)			(46)		
(22)			(47)		
(23)			(48)		
(24)			(49)		
(25)			(50)		

10.Design pressure 2500 psi. Temp. 800 °F. Hydro. test pressure ** 3125 psi at temp. 70 °F

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

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

FORM N-2 (Back - Pg. 2 of 2)

Certificate Holder's Serial Nos. N05013-01 through N05013-18

CERTIFICATION OF DESIGN

Design specifications certified by J.Y.LEE (when applicable) P.E.State OREGON Reg.no. 19235

Design report* certified by J.Y.PARK (when applicable) P.E.State GEORGIA Reg.no. 20667

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) PART conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2767 Expires JANUARY. 8. 2009

Date 6/19/06 Name DOOSAN HEAVY INDUSTRIES & CONT.CO.LTD. (NPT Certificate Holder) Signed J. S. Gong (authorized representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Michigan and employed by Hartford Steam Boiler of CT of CONN. have inspected these items described in this Data Report on 6-20-06, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 6-2006 Signed [signature] (Authorized Inspector) Commissions MI 533 [Nat'l.Bd.(incl.endorsements) and state or prov.and no.]

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

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

Not to Exceed One Day's Production

1. Manufactured by DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO.,LTD. 555,GUYGOK-DONG, CHANGWON, KYUNGNAM, KOREA.
(name and address of NPT Certificate Holder)

2. Manufactured for KOREA HYDRO & NUCLEAR POWER CO., LTD. 167,SAMSUNG-DONG,KANGNAM-KU,SEOUL,KOREA.
(name and address of purchaser)

3. Location of installation YONGGWANG NUCLEAR POWER PLANT UNIT 3,4 / 517 KYEMA-RI HONGNONG-EUP YONGGWANG-GUN
(name and address)

4. Type: D-N05061-22185-M01 Rev.0 (drawing no.) | SA213 TP316/SA479 TP316 (mat'l. spec. no.) | 75 ksi (tensile strength) | N/A (CRN) | 2006 (year built)

5.ASME Code,Section III,Division 1 : 1992 (edition) | A93(DEC.31.'93) (addenda data) | 1 (class) | N/A (Code Case no.)

6.Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7.Remarks : 1. ITEM NAME : PRESSURIZER HEATER
2. ( )* : DOOSAN No.
3. ** : EXTERNAL TEST FINAL ACCEPTANCE TESTING IS SYSTEM PRESSURE TEST

8.Nom. thickness (in.) 0.190" Min. design thickness (in.) 0.180" Dia. ID (ft & in.) 0.892" Length overall (ft & in.) 98.74"

9.When applicable, Certificate Holder' Data Reports are attached for each item of this report :

	Part or Appurtenance Serial Number	National Board No. In Numerical Order		Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1)	N05061-01	N/A (DN-2723)*	(26)		
(2)	N05061-03	N/A (DN-2725)*	(27)		
(3)	N05061-04	N/A (DN-2726)*	(28)		
(4)	N05061-06	N/A (DN-2728)*	(29)		
(5)	N05061-07	N/A (DN-2729)*	(30)		
(6)	N05061-09	N/A (DN-2731)*	(31)		
(7)	N05061-10	N/A (DN-2732)*	(32)		
(8)	N05061-13	N/A (DN-2735)*	(33)		
(9)	N05061-19	N/A (DN-2741)*	(34)		
(10)	N05061-21	N/A (DN-2743)*	(35)		
(11)	N05061-23	N/A (DN-2745)*	(36)		
(12)	N05061-24	N/A (DN-2746)*	(37)		
(13)	N05061-25	N/A (DN-2747)*	(38)		
(14)	N05061-26	N/A (DN-2748)*	(39)		
(15)	N05061-27	N/A (DN-2749)*	(40)		
(16)	N05061-29	N/A (DN-2751)*	(41)		
(17)			(42)		
(18)			(43)		
(19)			(44)		
(20)			(45)		
(21)			(46)		
(22)			(47)		
(23)			(48)		
(24)			(49)		
(25)			(50)		

10.Design pressure 2500 psi. Temp. 800 °F. Hydro. test pressure ** 3125 psi at temp. 70 °F

Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11, (2) information in items 2 and 3 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

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

Certificate Holder's Serial Nos. N05061-01,03,04,06,07,09,10,13,19,21,23 through N05061-27,29

CERTIFICATION OF DESIGN

Design specifications certified by DONALD.R.WADE (when applicable) P.E.State PENNSYLVANIA Reg.no. PE-008129-E

Design report* certified by FRANK.P.HILL (when applicable) P.E.State TENNESSEE Reg.no. 5275

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) PART conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2767 Expires JANUARY. 8. 2009

Date Sep 27 2006 Name DOOSAN HEAVY INDUSTRIES & CONT.CO.LTD. (NPT Certificate Holder) Signed J. K. Lee (authorized representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MICHIGAN and employed by Hartford Steam Boiler of CT of CONN. have inspected these items described in this Data Report on 9-27-2006 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 9-27-06 Signed [signature] (Authorized Inspector) Commissions MI 533 [Nat'l.Bd.(incl.endorsements) and state or prov.and no.]

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1MRCEX02
2.. Item Description: Pressurizer
3. N-5 Data Package Number: 1RC01-4 4. W.O. Number: 2928459
5. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Install a plug in the Pressurizer at 1MRCEB18 location per ENG-DF01 2928426
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Electrical portion of the heater failed. No failure of the ASME pressure boundary

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1971 Edition 1973 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

15. ASME Section XI Pressure Test Required: RLB 9-30-06 ☒ YES ☒ NO

Initial J.O Date 9-30-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.O Date 9-30-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial J.O. Date 9-30-06 17. 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.
Shop Fabricated Heater Plug	APN 00076370	N/A	417310	MR 1147301

18. Planner [signature] 9-30-06 Printed Name: JAMES I. DAVIS
Signature Date

19. ISI [signature] 9-30-06 Printed Name: R.L. BROWNING Log Entry RLB
Signature Date

20. ANII [signature] 9-30-06 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: 10/2/06

Sheet: 1 of 2

Unit: 1

Work Order Number 2928459

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1971 Edition, Winter 1973 Addenda, 1361-2 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)
Pressurizer	Combustion Engineering	78373	22234	1MRCEX02	1978	Repaired	YES

7. Description of Work: Install a Pressurizer Sleeve plug per DFWO 2928426

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☒

   N-416-2 ☐ 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 2928459 fabricated and installed a sleeve plug in the Pressurizer at heater 1MCEB18 per the requirements of ENG-DF01 2928426.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: ISI ENG Date: 10/2/06

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 9-30-06 to 10-2-06, 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: 10-2-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIBL112
2.. Item Description: Safety Injection (SI) piping.
3. N-5 Data Package Number: 1SI09-3 4. W.O. Number: 2932479
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace a section of pipe 1PSIBL112, spool N00D, downstream of valve 1JSIBUV0667 in accordance with instructions provided in work order 2932479
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

The pipe is being replaced due to leaking hole most likely caused by cavitation. CRDR #2932504 will provide additional evaluation once completed.

luation

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial [illegible] Date 10/13/06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 10/13/06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 10/13/06 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 10/13/06 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1PSIBL112	APN 43510414	N/A	474900	1152114

18. Planner [illegible] Signature 10/13/06 Date Printed Name: HERBERT L. GREEN

19. ISI [illegible] Signature 10/13/06 Date Printed Name: FRED POTEET Log Entry [illegible]

20. ANII [illegible] Signature 10-13-06 Date Printed Name: RG HOGSTROM

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1-SI-112-H-00A
2.. Item Description: Safety Injection (SI) pipe support.
3. N-5 Data Package Number: 1SI09-3 4. W.O. Number: 2932479
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove and install Dummy pipe on pipe support 1-SI-112-H00A to support pipe replacement on pipe line 1PSIBL112, spool N00D in accordance with instructions provided in work order 2932479
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Rewelding of this weld is due to replacement of the SI pipe section leak most likely due to cavitation.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ~~☒ YES~~ fp 10/15/06 ☒ NO ~~PER ISI PROGRAM OWNER~~ fp 10/15/06

Initial [illegible] Date 10/13/06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 10/13/06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 10/13/06 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 10/13/06 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.

18. Planner [illegible] Signature 10/13/06 Date Printed Name: HERBERT L. GREEN

19. ISI [illegible] Signature 10/13/06 Date Printed Name: FRED POTEET Log Entry fp

20. ANII [illegible] Signature 10-13-06 Date Printed Name: R.G. HOGESTROM

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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 10/15/2006

Sheet: 1 of 2

Unit: 1

Work Order Number 2932479

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Winter 1975 Addenda, N/A 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)
Pipe	Bechtel Power	1SI112N00D	N/A	1SI112N00D-0	1983	Repaired	YES
Hanger	Bechtel Power	N/A	N/A	1SI112H00A	1983	Repaired	YES

7. Description of Work: Replace pipe spool and reweld hanger dummy pipe to baseplate

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

   Other ☐ Pressure N/A psi Test Temperature N/A °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. W.O. 2932479 replaced pipe spool 1SI112N00D between valve 1JSIBUV0667 and the downstream pipe tee. The dummy pipe on 1SI112H00A was replaced. The dummy leg to base plate weld was also performed under W.O. 2932479. The pipe to dummy leg weld was accomplished under W.O. 2932705..

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: SR. ISI ENGINEER Date: 10/15/06
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 10-13-06 to 10-15-06, 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: 10-15-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1SI112H00A
2.. Item Description: Hanger for HPSI Pump 2 Discharge Header To Refuel Water Tank
3. N-5 Data Package Number: 1SI09-3 4. W.O. Number: 2932705
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Fabricate and install a new hanger support pipe per EDC 2006-00961 and DMWO 2932663
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Replacing the support pipe in support of CMWO 2932479

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☒ NO RLB 10-14-06

Initial J.D Date 10-13-06 If required, include a step in the W.O. to perform Preservice Inspection

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

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

Initial J.D Date 10-13-06 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial J.D Date 10-13-06 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Hanger Support Pipe	APN 43510414		474900	MR 152114

18. Planner [signature] 10-13-06 Printed Name: JAMES I. DAVIS
Signature Date

19. ISI RAMAKANT INDAP PER TELECON [signature] 10-13-06 Printed Name: R. INDAP Log Entry _____
Signature Date

20. ANII ROBERT HOGSTROM PER TELECON [signature] 10-13-06 Printed Name: R. 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: 10/13/2006

Sheet: 1 of 2

Unit: 1

Work Order Number 2932705

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

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)
Hanger	Bechtel Power	N/A	N/A	1SI112H00A	1983	Repaired	YES

7. Description of Work: Replace the hanger support pipe

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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 2932705 replaced the Support Pipe on 1SI112H00A per 13-SI-112-H-00A, DFWO 2932663 and EDC 2006-00961.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: [signature] ISI Sub Date: 10-14-06

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 10-13-06 to 10-14-06, 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: 10-14-06

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSIBUV667
2. Item Description: Safety Injection (SI) HPSI "B" to the RWT isolation valve.
3. N-5 Data Package Number: 1SI09-3 4. W.O. Number: 2932833
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace valve 1JSIBUV667 on line 1PSIBL112 in accordance with instructions provided in work order 2932833.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   Replacement of this component is most likely due to cavitation.Structural intgrity of the replacement valve will be monitored as per CRDR 2932507 disposition.
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial [illegible] Date 2/16/07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 2/16/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 2/16/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 2/16/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1JSIBUV667	APN 00050507	51	N/A	MR-1188556

18. Planner [illegible] Signature 2/16/07 Date Printed Name: Herbert L. Green
19. ISI [illegible] Signature 3-23-07 Date Printed Name: WILEY ARMSTRONG Log Entry [illegible]
20. ANII [illegible] Signature 3-23-07 Date Printed Name: Robert G. Hogstrom

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1-SI-112-H-00A
2. Item Description: Safety Injection (SI) pipe support.
3. N-5 Data Package Number: 1SI09-3 4. W.O. Number: 2932833
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove and reinstall 3/16" Fillet Weld for the Dummy pipe to plate weld on pipe support 1-SI-112-H00A to support valve 1JSIBUV667 in accordance with instructions provided in work order 2932833
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   Rewelding of this support weld is due to replacement of valve 1JSIBUV667.
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: WOA 3-23-07 ☒ YES ☒ NO

Initial [illegible] Date 2/16/07 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☒ YES ☒ NO REQUIRED FOR PIPING ONLY, NOT FOR HANGER WOA WOA 3-23-07 3-23-07

Initial [illegible] Date 2/16/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 2/16/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 2/16/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
~~VALVE BODY~~ [illegible] 6/3/07	~~50507~~	~~51~~	~~36240~~	~~1188556~~

18. Planner [illegible] Signature 2/16/07 Date Printed Name: HERBERT L. GREEN
19. ISI [illegible] Signature 3-23-07 Date Printed Name: WILEY AHLSTROM Log Entry WOA
20. ANII [illegible] Signature 3-23-07 Date Printed Name: ROBERT G. HOGSTROM

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1-SI-112-H-00A
2.. Item Description: Safety Injection (SI) pipe support.
3. N-5 Data Package Number: 1SI09-3 4. W.O. Number: 2932833
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove Dummy pipe on support 1-SI-112-H00A and replace with a new pipe IAW EDC 2006-00961 in accordance with instructions provided in work order 2932833.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Replacement of the support Dummy pipe is due to replacement of valve 1JSIBUV667.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial [illegible] Date 6/6/07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 6/6/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 6/6/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 6/6/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1-SI-112-H-00A	APN 43510414	N/A	474900	MR 1232912

18. Planner [illegible] Signature 6/6/07 Date Printed Name: HERBERT L. GREEN
19. ISI RPIndap Signature 6/6/02 Date Printed Name: R. P. INDAP Log Entry RPI
20. ANII [illegible] Signature [illegible] Date Printed Name: [illegible]

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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 06-27-2007

Sheet: 1 of 2

Unit: 1

Work Order Number: 2932833

Type of Code Stamp: None

Authorization No.: N/A

Expiration Date: N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Winter 1975 Addenda, N/A 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	Borg Warner	51	N/A	1JSIBUV0667	1997	Replacement	Yes
Hanger	N/A	N/A	N/A	1SI112H00A	2007	Replacement	Yes

7. Description of Work: Replace valve 1JSIBUV0667 and reinstall hanger 1SI112H00A dummy pipe.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-2 ☐

   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: Replace valve 1JSIBUV667 and remove and reinstall hanger 1SI112H00A dummy pipe to plate weld. Ref work order 2932833.

Pre-Pressured Test WO Review – ISI RPSnedeg 6/27/07

ANII

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: RLB ISI ENG Date: 6-28-07
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 3-23-07 to 6-28-07, 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.

RB Hytner
Inspectors Signature

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

Date: 6-28-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIBL112
2.. Item Description: Safety Injection (SI) piping.
3. N-5 Data Package Number: 1SI09-3 4. W.O. Number: 2932834
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace a 90° elbow and section of pipe on 1PSIBL112, spool N00D, downstream of valve 1JSIBUV0667 in accordance with instructions provided in work order 2932834
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Replacement of this component is most likely due to cavitation. Structural intgrity of the replacement pipe will be monitored as per CRDR 2932507 disposition.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

Initial [signature] Date 2/12/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [signature] Date 2/12/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [signature] Date 2/12/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1PSIBL112	APN 43510414	N/A	474900	PO#6D2D4173
1PSIBL112	APN 43540474	N/A	MEWY-1	MR#1153105

18. Planner [signature] 2/12/07 Printed Name: HERBERT L. GREEN
Signature Date

19. ISI [signature] 3-23-07 Printed Name: WILEY AHLSTROM Log Entry WJA
Signature Date

20. ANII [signature] 3-23-07 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

Date: 02/17/2007

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

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

Unit: 1

Work Order Number 2932834

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

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)
Pipe	Bechtel Power	1SI112N00D	N/A	1PSIBL112, Spool N00D	1983	Repaired	YES

7. Description of Work: Replace a 90° elbow and section of pipe on 1PSIBL112, spool N00D, downstream of valve 1JSIBUV0667 in accordance with instructions provided in work order 2932834

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐

N-416-2 ☒ Other Pressure 500 psi Test Temperature 90 °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: eplace a 90° elbow and section of pipe on 1PSIBL112, spool N00D, downstream of valve 1JSIBUV0667 in accordance with instructions provided in work order 2932834

Pre-Pressured Test WO Review – ISI N

ANII A-

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: RL B ISI ENG Date: 6-16-07

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 3-23-07 to 6-16-07, 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.

RS Fytton

Inspectors Signature

Commissions: **NB 9685 "N" "I" AZ264**

National Board, State, Province, and Endorsements

Date: 6-16-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSPAL098
2.. Item Description: Jacket water cooler inlet elbow
3. N-5 Data Package Number: 1SP01-2 4. W.O. Number: 2942222
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Weld repair of the flange area due to corrosion.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Periodic weld build up of corroded area of the flange due to coating unbonding. After weld build up, the coating will be re-applied.

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

Initial MJL Date 6-11-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MJL Date 6-11-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MJL Date 6-11-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial MJL Date 6-11-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1PSPAL098	N/A	1SP098S004		WO 2942222

18. Planner [signature] 6-11-07 Printed Name: Martin Sullivan
Signature Date

19. ISI [signature] 6-11-07 Printed Name: WILEY AHLSTROM Log Entry [illegible]
Signature Date

20. ANII [signature] 6-11-07 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: 6/11/07

Sheet: 1 of 2

Unit: 1

Work Order Number 2942222

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SP

5. (a) Applicable Construction Code ASME Section III NB, Class ~~1~~ 3 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)
Jacker water inlet elbow	Pullman Kellog	1SP098S004	N/A	1PSPAL098	1979	Repaired	YES

7. Description of Work: Weld build up of corroded area due to coating separation from the flange. W.O. 2942222

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ Other Pressure N/A psi Test Temperature 72 °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: Weld build up of corroded area due to coating separation from the flange. W.O. 2942222

Pre-Pressured Test WO Review – ISI WJ9

ANII 6-18-07

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: ISI ENGINEER Date: 6-18-07
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 6-11-07 to 6-18-07, 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: 6-18-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PCHAVM41
2.. Item Description: 1" Dresser valve model 7250W
3. N-5 Data Package Number: 1RC03-1 4. W.O. Number: 2942937
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Weld replacement of valve.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Not a failure of the ASME III pressure boundary. The valve is being replaced to correct repeated packing leakage.

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

Initial [illegible] Date 5-10-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 5-10-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 5-10-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 5-10-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Valve	APN 45000244	59BGY	N/A	MR 1222747

18. Planner [illegible] 5-10-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI [illegible] 5-11-07 Printed Name: R.L. BROWNING Log Entry RLB
Signature Date

20. ANII [illegible] 5-11-07 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: 6/17/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2942937

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 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)
Valve	Dresser	H013AAP	N/A	1PCHAVM41	1980	Replaced	YES
Valve	Flowserve	59BGY	N/A	1PCHAVM41	2006	Replacement	YES

7. Description of Work: Weld replacement of valve.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 2942937 for valve 1PCHAVM41 will be weld replaced due to repeated packing leakage.

Pre-Pressured Test WO Review – ISI _____

ANII _____

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] ISI ENGINEER Date: 6-18-07

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 5-11-07 to 6-18-07, 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: 6-18-07

FORM NPV-1 N CERTIFIC E HOLDERS' DATA REPORT FOR NUC AR PUMPS OR VALVES*

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

1. Manufactured by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603
(Name and Address of N Certificate Holder)

2. Manufactured for Arizona Public Service PO Box 52034 Phoenix, AZ 85072-2034
(Name and Address of Purchaser or Owner)

3. Location of Installation APS- Palo Verde 5801 South Wintersburg Rd. Tonopah, AZ 85354
(Name and Address)

4. Pump or Valve Valve Nominal Inlet Size 1" (inch) Outlet Size 1" (inch)

	(a) Model No. Series No. or Type	(b) N Certificate Holder's Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l Bd. No.	(g) Year Built
(1)	1690#	58BGY	N/A	ARZ-21508-(1) Rev. C	1	N/A	2006
(2)	1690#	59BGY	N/A	ARZ-21508-(1) Rev. C	1	N/A	2006
(3)	1690#	60BGY	N/A	ARZ-21508-(1) Rev. C	1	N/A	2006
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							

5. 1"-Class 1690# Stainless Steel Packed Y-Globe Valve
(Brief description of service for which equipment was designed)

38809 Item 002

6. Design Conditions 2775 (Pressure) psi 650 (Temperature) °F or Valve Pressure Class 1690 (1)

7. Cold Working Pressure 4056 psi at 100 °F.

8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
(b) Forgings			
84703	SA182 Gr. F316	Larson	Body
A1	SA182 Gr. F316	Trinity	Bonnet
26594-1	SA479-316	DuBose	Disc

(1) For manually operated valves only

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

2

Valve S/N 58BGY through 60BGY

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
(d) Other Parts			

9. Hydrostatic test 6100 psi. Disk Differential test pressure 4465 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components. Section III, Div. 1, Edition 1974

Addenda Summer 1976, Code Case No. N/A Date 11-30-06

Signed Flowserve Corp. by [signature]
(N Certificate Holder)

Our ASME Certificate of Authorization No. N-1562 to use the N (N) symbol expires 11-26-09 (Date)

CERTIFICATION OF DESIGN

Design information on file at Flowserve Corporation Raleigh, NC

Stress analysis report (Class 1 only) on file at Flowserve Corporation Raleigh, NC

Design specifications certified by (1) A. Bhattacharya

PE State AZ Reg. No. 27603

Stress analysis certified by (1) T.C. Bartlett

PE State PA Reg. No. 039036-E

(1) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by HSB CT of Hartford Connecticut have inspected the pump, or valve, described in this Data Report on 11/30/06, and state that, to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with ASME Code, Section III.

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

Date 11/30/06

Signed [signature] (Inspector) Commissions NC #1421 (Nat'l Bd., State, Prov. and No.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID BS-08604
2.. Item Description: Main Steam Safety Valve: Dresser - 6"- 3707RAX-RT-25 1315 psig
3. N-5 Data Package Number: 1SG01-6 4. W.O. Number: 2945305
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Maintenance overhaul and testing of spare valve. Based upon inspection results, may replace code parts using other spare valves or from approved spare parts.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Not a failure of the ASME III pressure boundary. The disc will be replaced with a preoxidized ASME SD637 or ASTM B637 Inconel X-750 material to enhance performance. Other parts will be replaced based upon inspection results.

10. Repair/Replacement Work Organization: NWS Technologies
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial [illegible] Date 3-30-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 3-30-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 3-30-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 3-30-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Disc	APN 00064290	ADH-30	N/A	PO# ~~MR~~ 500238999

18. Planner [signature] 3-30-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI [signature] 4-10-07 Printed Name: WILEY AHLSTROM Log Entry WJA
Signature Date

20. ANII [signature] 4-10-07 Printed Name: ROBERT G. HOGSTROM
Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID BS-08603
2. Item Description: Main Steam Safety Valve: Dresser - 6"- 3707RAX-RT-25 1315 psig
3. N-5 Data Package Number: 1SG 4. W.O. Number: 2945305
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Maintenance overhaul and testing of spare valve. Based upon inspection results, may replace code parts using other spare valves or from approved spare parts. Will be installed at 1JSGEPSV0575 location under wo# 2894829.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
   Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   Not a failure of the ASME III pressure boundary. The disc will be replaced with a preoxidized ASME SD637 or ASTM B637 Inconel X-750 material to enhance performance. Other parts will be replaced based upon inspection results.

10. Repair/Replacement Work Organization: NWS Technologies
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial DMG Date 5-11-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 5-11-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 5-11-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMG Date 5-11-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Disc	APN 00064290	ADH-29	N/A	PO# ~~MR~~ 500238999

18. Planner [signature] 5-11-07 Printed Name: DAVID M. GOODLET
    Signature Date
19. ISI [signature] 5/15/07 Printed Name: R. P. INDAP Log Entry RPI
    Signature Date
20. ANII [signature] 5-15-07 Printed Name: ROBERT G. HOGSTROM
    Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID BS-08602
2.. Item Description: Main Steam Safety Valve: Dresser - 6"- 3707RAX-RT-25 1315 psig
3. N-5 Data Package Number: 1SG 4. W.O. Number: 2945305
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Maintenance overhaul and testing of spare valve. Based upon inspection results, may replace code parts using other spare valves or from approved spare parts. Will be installed at 1JSGEPSV0 55 location under wo# 2894829.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Not a failure of the ASME III pressure boundary. The disc will be replaced with a preoxidized ASME SD637 or ASTM B637 Inconel X-750 material to enhance performance. Other parts will be replaced based upon inspection results.

10. Repair/Replacement Work Organization: NWS Technologies
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial DMG Date 5-11-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 5-11-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 5-11-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMG Date 5-11-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Disc	APN 00064290	ADE-76	N/A	~~MR~~ PO# 500238999

18. Planner [signature] 5-11-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI [signature] 5/15/07 Printed Name: R. P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 5-15-07 Printed Name: ROBERT G. HOGSTROM
Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID BT-01679
2.. Item Description: Main Steam Safety Valve: Dresser - 6"- 3707RAX-RT-25 1315 psig
3. N-5 Data Package Number: 1SG 4. W.O. Number: 2945305
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Maintenance overhaul and testing of spare valve. Based upon inspection results, may replace code parts using other spare valves or from approved spare parts. Will be installed at 1JSGEPSV0[illegible] location under wo# 2894829.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a failure of the ASME III pressure boundary. The disc will be replaced with a preoxidized ASME SD637 or ASTM B637 Inconel X-750 material to enhance performance. Other parts will be replaced based upon inspection results.

10. Repair/Replacement Work Organization: NWS Technologies
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial [illegible] Date 5-11-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 5-11-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 5-11-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 5-11-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Disc	APN 00064290	ADH32	N/A	PO# ~~MR~~ 500238999

18. Planner [signature] 5-11-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI [signature] 5/15/07 Printed Name: R.P. INDAP Log Entry [illegible]
Signature Date

20. ANII [signature] 5-15-07 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.

   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: NWS Technologies

Date: 6/11/2007

Sheet: 1 of 3

Unit: 1

Work Order Number 2945305

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG- Main Steam 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)
Valve	Dresser	BS-08604	N/A	1JSGEPSV0692	1980	Repaired	YES
Disc	Dresser	ADH-30	N/A	BS-08604	2001	Replacement	NO
Valve	Dresser	BS-08603	N/A	1JSGEPSV0575	1980	Repaired	YES
Disc	Dresser	ADH-29	N/A	BS-08603	2001	Replacement	NO

7. Description of Work: Overhaul and test four (4) spare Main Steam Safety Valves.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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 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: NWS Technologies

Date: 6/11/2007

Sheet: 2 of 3

Unit: 1

Work Order Number 2945305

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG- Main Steam 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)
Valve	Dresser	BS-08602	N/A	1JSGEPSV0557	1980	Repaired	YES
Disc	Dresser	ADE-76	N/A	BS-08602	2001	Replacement	NO
Valve	Dresser	BT-01679	N/A	1JSGEPSV0694	1979	Repaired	YES
Disc	Dresser	ADH-32	N/A	BT-01679	2001	Replacement	NO

7. Description of Work: Overhaul and test four (4) spare Main Steam Safety Valves.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 2945305 for off-site disassembly, reconditioning and testing of four (4) spare Main Steam Safety Valves, S/N BS-08604, BS-08603, BS-08602 and BT-01679. These spare valves will be installed at 1JSGEPSV0692, 694, 557 & 575 under wo# 2894829 during 1R13 refueling outage. The new type (material) disc will be installed during rebuild at NWS.

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: RPhadap, ISI Engineer Date: 6-12-2007
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 4-10-07 to 6-14-07, 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.

RS Hyatt
Inspectors Signature

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

Date: 6-14-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIEV144
2.. Item Description: LPSI Header Containment Penetration Check Valve
3. N-5 Data Package Number: 1RC01-5 4. W.O. Number: 2945354
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No ASME boundary failure. Replacement is to correct seat leakage
RPIndap 12/13/06

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial J.D Date 12-9-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial J.D. Date 12-9-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 12-9-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial J.D. Date 12-9-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	APN Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet/Disc Assembly	45060195	Bonnet SN-15 Disc SN-11		WO# 2934532
	→ STATEMENT OF ACCEPTABILITY			
	PART# 76855			

18. Planner [signature] 12-9-06 Printed Name: JAMES I. DAVIS
Signature Date

19. ISI RPIndap 12-13-06 Printed Name: R. P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 12-20-06 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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 06-16-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2945354

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A 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)
12" Check Valve	Borg Warner	27608	747	1PSIEV144	1978	Repaired	Yes
Bonnet	Borg Warner	S/N 1	N/A	Ht # 2B62	1978	Replaced	Yes
Disc	Borg Warner	S/N 6	N/A	Ht # 2C19	1978	Replaced	Yes
Bonnet	Borg Warner	S/N 15	N/A	Ht # 3C64	N/A	Replacement	Yes
Disc	Borg Warner	S/N 11	N/A	Ht # 3L96	N/A	Replacement	Yes

7. Description of Work: Replaced the bonnet and disc assembly with a refurbished assembly

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-2 ☐

   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. W.O. 2945354 replaced bonnet & disc assembly in valve 1PSIEV144, with refurbished bonnet & disc assembly that was removed from valve 2PSIEV543 during U2R13 under W.O. 2863671 and refurbished under W.O. 2934532.

Pre-Pressure Test work order review - ISI : RLB 6/16/07

ANII : 6-16-07

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: RLB ISI SNC Date: 7-1-07
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 12-20-06 to 7-6-07, 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.

RB Boytone
Inspectors Signature

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

Date: 7-6-07

ASME SECTION XI – REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 1PSIEV541
2.. Item Description: HPSI/LPSI Header Loop Injection Check Valve
3. N-5 Data Package Number: 1RC01-1C 4. W.O. Number: 2945386
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

No ASME boundary failure

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

Initial J.D Date 12-9-06 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☒ YES ☒ NO BONNET NOT REPLACED PER 31MT-92Z17 step 4.7.5 RLB 6/13/07

Initial J.D Date 12-9-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 12-9-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial J.D Date 12-9-06 17. 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.
~~Item 19 pg. 62~~ LK 6-6-07				~~01192625~~ 01207
Disc and Stud Assy	45021077	S/N 6		01192625

18. Planner [signature] 12-9-06 Printed Name: JAMES I. DAVIS
Signature Date

19. ISI [signature] 12/20/06 Printed Name: R.P. INDAP Log Entry RPR
Signature Date

20. ANII [signature] 12-20-06 Printed Name: R.G. HOGESTROM
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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 06-14-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2945386

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A 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)
12" Check Valve	Borg Warner	31970	1001	1PSIEV541	1978	Repaired	Yes
Disc - removed	Borg Warner	S/N 7	N/A	Ht # 2G66	N/A	Replaced	Yes
Disc - installed	Borg Warner	R/S 216313 S/N 6	N/A	N/A	1991	Replacement	Yes

7. Description of Work: Replaced the bonnet and disc assembly with a new assembly

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

   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. W.O. 2945386 replaced disc on valve 1PSIEV541

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: RLB ISI ENG Date: 6/14/07
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 2-20-06 to 6-14-07, 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: 6-14-07

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 1PSIEV543
2.. Item Description: HPSI/LPSI Header Loop Injection Check Valve
3. N-5 Data Package Number: 1RC01-1C 4. W.O. Number: 2945392
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

No ASME boundary failure

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

Initial J.D Date 12-9-06 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☒ YES RLB 6/13/07 ☒ NO BONNET NOT REPLACED 12RR 31MT-9ZZ17 step 4.7.5

Initial J.D Date 12-9-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 12-9-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial J.D Date 12-9-06 17. 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.
Disc	45021077	SN-9		WO# 2990288

18. Planner [signature] 12-9-06 Printed Name: _____
Signature Date

19. ISI RPIndap 12-20-06 Printed Name: R.P. INDAP Log Entry RBZ
Signature Date

20. ANII RG Hogstrom 12-20-06 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. — Date: 06-16-2007

   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 2945392

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

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529 — Authorization No. N/A

   Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A 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)
12" Check Valve	Borg Warner	31971	1017	1PSIEV543	1978	Repaired	Yes
Disc	Borg Warner	S/N 12	N/A	Ht # 2G69	N/A	Replaced	Yes
Disc	Borg Warner	S/N 9	N/A	Ht # 2G68	N/A	Replacement	Yes

7. Description of Work: Replaced the disc.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

   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. W.O. 2945392 replaced disc in valve 1PSIEV543, with refurbished disc that was removed from valve 2PSIEV134 during U2R13 under W.O. 2721742 and refurbished under W.O. 2990288.

Pre-Pressure Test work order review - ISI : N/A

ANII : N/A

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: RLB ISI ENG Date: 6-16-07

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 12-20-06 to 6-16-07, 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: 6-6-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIEV225
2.. Item Description: SIT 2B Discharge Check Valve
3. N-5 Data Package Number: 1RC01-1C 4. W.O. Number: 2945394
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

No ASME boundary failure

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

Initial J.D. Date 12-9-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial J.D. Date 12-9-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D. Date 12-9-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial J.D. Date 12-9-06 17. 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/Arm/Disc	~~Bonnet/Arm/Disc~~ 06-11-07	Bonnet SN 10 Disc 5019	Bonnet 2X58W Disc 2X51	W.O. 2912177
	45060170			

18. Planner [signature] 12-8-06 Printed Name: JAMES I. DAVIS
Signature Date

19. ISI [signature] 12-20-06 Printed Name: R.P. INDAP Log Entry [signature]
Signature Date

20. ANII [signature] 12-20-06 Printed Name: R.G. HOKSTROM
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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 06-27-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2945394

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A 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)
14" Check Valve	Borg Warner	26225	681	1PSIEV225	1977	Repaired	Yes
Bonnet	Borg Warner	S/N 2	N/A	Ht # 2E76	N/A	Replaced	Yes
Disc	Borg Warner	S/N 8	N/A	Ht # 2E69	N/A	Replaced	Yes
Bonnet	Borg Warner	S/N 10	N/A	Ht # 2X58	N/A	Replacement	Yes
Disc	Borg Warner	S/N 19	N/A	Ht # 2X51	N/A	Replacement	Yes

7. Description of Work: Replaced the bonnet and disc assembly with a refurbished assembly

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-2 ☐

   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. W.O. 2945394 replaced bonnet & disc assembly in valve 1PSIEV225, with refurbished bonnet & disc assembly that was removed from valve 3PSIEV245 during U3R12 under W.O. 2783999 and refurbished under W.O. 2912177.

Pre-Pressure Test work order review - ISI : RLB 6/27/02

ANII : RG signature 6-27-07

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] SR. ISI ENGINEER Date: 7/6/07
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 12-20-06 to 7-6-07, 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.

RG signature
Inspectors Signature

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

Date: 7-6-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIEV227
2.. Item Description: SIT 2A Discharge to RC Loop Check Valve
3. N-5 Data Package Number: 1RC01-1C 4. W.O. Number: 2945408
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No ASME boundary failure

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

Initial J.O Date 12-9-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial J.O Date 12-9-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.O Date 12-9-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial J.O Date 12-9-06 17. 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/Arm/Disk Assm	45060170	Bonnet 15 Disk 17	Bonnet 2X63 Disk 2X49	WO# 2822086

18. Planner [signature] 12-9-06 Printed Name: JAMES I. DAVIS
Signature Date

19. ISI [signature] 12-20-06 Printed Name: R. P. INDAP Log Entry [signature]
Signature Date

20. ANII [signature] 12-20-06 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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona. 85354-7529

Date: 06-16-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2945408

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A 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)
12" Check Valve	Borg Warner	26226	702	1PSIEV227	1977	Repaired	Yes
Bonnet	Borg Warner	S/N 1	N/A	Ht # 2E76	1977	Replaced	Yes
Disc	Borg Warner	S/N 6	N/A	Ht # 2E69	1977	Replaced	Yes
Bonnet	Borg Warner	S/N 15	N/A	Ht # 2X63	1978	Replacement	Yes
Disc	Borg Warner	S/N 17	N/A	Ht # 2X49	1978	Replacement	Yes

7. Description of Work: Replaced the bonnet and disc assembly with a refurbished assembly

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-2 ☐

   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. W.O. 2945408 replaced bonnet & disc assembly in valve 1PSIEV227, with refurbished bonnet & disc assembly that was removed from valve 2PSIEV227 during U2R12 under W.O. 2692582 and refurbished under W.O. 2822086.

Pre-Pressure Test work order review - ISI : 6/16/07

ANII : 6-16-07

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: SR. ISI ENGINEER Date: 7/6/07
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 12-20-06 to 7-6-07, 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: 7-6-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIEV235
2. Item Description: SIT 2B Discharge Check Valve
3. N-5 Data Package Number: 1RC01-1C 4. W.O. Number: 2945409
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   No ASME boundary failure

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

Initial J.D. Date 12-9-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial J.D. Date 12-9-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D. Date 12-9-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial J.D. Date 12-9-06 17. 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/arm/disc assem	45060170	Bonnet SN 6 Disc ~~193724~~ 193722	Bonnet 2E76 Disc H48334	W.O. 28600076

18. Planner [signature] 12-9-06 Printed Name: JAMES I. DAVIS
    Signature Date
19. ISI [signature] 12/20/06 Printed Name: R. P. INDAP Log Entry [illegible]
    Signature Date
20. ANII [signature] 12-20-06 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.

   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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 06-27-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2945409

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A 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)
14" Check Valve	Borg Warner	26219	607	1PSIEV235	1977	Repaired	Yes
Bonnet	Borg Warner	193801	N/A	N/A	N/A	Replaced	Yes
Disc	Borg Warner	SN 3	N/A	Ht # 2E69	N/A	Replaced	Yes
Bonnet	Borg Warner	SN 6	N/A	Ht # 2E76	N/A	Replacement	Yes
Disc	Borg Warner	193722	N/A	Ht # 8334	N/A	Replacement	Yes

7. Description of Work: Replaced the bonnet and disc assembly with a refurbished assembly

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-2 ☐

   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. W.O. 2945409 replaced bonnet & disc assembly in valve 1PSIEV235, with refurbished bonnet & disc assembly that was removed from valve 1PSIEV247 during U1R12 under W.O. 2791139 and refurbished under W.O. 2860076.

Pre-Pressure Test work order review - ISI : RLB 6/28/02

ANII : RD Lytton 6-28-07

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: SR. ISI ENGINEER Date: 7/6/07
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 12-20-06 to 7-6-07, 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.

RD Lytton
Inspectors Signature

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

Date: 7-6-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PCHBV305
2. Item Description: 20"-300# Borg Warner check valve
3. N-5 Data Package Number: 1SI01-1A
4. W.O. Number: 2945411
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Disassemble the check valve for Engineering inspection.
8. ☐ ISI Flaw — NDE Method of Flaw Detection: N/A — Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   Not a failure of the ASME Section XI pressure boundary. Installation of new disk to mitigate seat leakage. RPI 3/13/07

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

    Initial DMG Date 3-8-07 If required, include a step in the W.O. to perform Preservice Inspection
15. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

    Initial DMG Date 3-8-07 If required, include a step in the W.O. for ISI & ANII Inspection.

    Initial DMG Date 3-8-07
16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

    Initial DMG Date 3-8-07
17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Disk	APN 45021043	~~15~~	~~D2 2D693~~	MR ~~1192696~~
		212290-A	697618	1171629

18. Planner [signature] 3-8-07 (Signature / Date) Printed Name: DAVID M. GOODLET
19. ISI [signature] 3-13-07 (Signature / Date) Printed Name: R.P. INDAP Log Entry RPR
20. ANII [signature] 3-14-07 (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.

   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: 6/15/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2945411

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, 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)
Check Valve	Borg Warner	30018	N/A	1PCHBV305	1978	Repaired	YES
Disk	Borg Warner	4	N/A	1PCHBV305	n/a	Replaced	YES
Disk	Borg Warner	212290-A	N/A	1PCHBV305	1991	Replacement	YES

7. Description of Work: Disassemble the 20" check valve for Engineering inspection.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 2945411 for valve 1PCHBV305. The Disk & Stud Assembly is being replaced to minize the time that the valve is out of service. The removed disk will be reworked as an assembly for future spare part.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: RPhalap, ISI Engineer Date: 6-15-2007
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 3-14-07 to 6-15-07, 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: 6-15-07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL
NUCLEAR PARTS AND APPURTENANCES
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

M.O. No. 60203229
QUALITY DOCUMENTS
PAGE 293 of 823

1. Manufactured and certified by BW/IP INTERNATIONAL INC. PUMP DIV. LOS ANGELES OPERATIONS 2300 E. VERNON AVE. VERNON, CA. 90058
(name and address of NPT Certificate Holder)

2. Manufactured for ARIZONA PUBLIC SERVICE 4 MILES SOUTH OF WINTERSBURG, WINTERSBURG ARIZONA 85343
(name and address of Purchaser)

3. Location of installation ARIZONA PUBLIC SERVICE 4 MILES SOUTH OF WINTERSBURG, WINTERSBURG ARIZONA 85343
(name and address)

4. Type: 76553-11 REV. B (drawing no.) SA-182-F316 (mat'l. spec. no.) 75,000 PSI (tensile strength) N/A (CRN) 1991 (year built)

5. ASME Code, Section III, Division 1: 1974 (edition) WINTER 1975 (addenda date) 2 (class) N/A (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7. Remarks: BW/IP JOB NO. 901-L-2120 PART NAME- DISK AND STUD ASSY.

HYDROSTATIC TESTING NOT PERFORMED.

8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 212290-A	N/A	(26)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 720 psi. Temp. 100 °F. Hydro. test pressure N/A (when applicable) at temp. °F

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

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

FORM N-2 (Back — Pg. 2 of 2)

P.O. No. 60203229
QUALITY DOCUMENTS
PAGE 204 of 223

Certificate Holder's Serial Nos. 212290-A through

CERTIFICATION OF DESIGN

Design specifications certified by N/A (when applicable) P.E. State N/A Reg. no. N/A

Design report* certified by N/A (when applicable) P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) DISK AND STUD ASSY. conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1131 Expires JUNE 10, 1993

Date 29 JUNE 1991 Name BW/IP INTERNATIONAL INC. (NPT Certificate Holder) Signed (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by ARKWRIGHT MUTUAL INS. CO. FACTORY MUTUAL SYSTEM of NORWOOD, MASS. have inspected these items described in this Data Report on JUNE 29 1991, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 6/29/91 Signed (Authorized Inspector) Commissions 1275 CA.
(Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PCHAV306
2. Item Description: 20"-300# Borg Warner check valve
3. N-5 Data Package Number: 1SI01-1A
4. W.O. Number: 2945414
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Disassemble the check valve for Engineering inspection.
8. ☐ ISI Flaw — NDE Method of Flaw Detection: N/A — Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   Not a failure of the ASME Section XI pressure boundary. Being disassembled to correct seat leakage RPJndap 12/12/06

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial DMG Date 12-7-2006 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 12-7-2006 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 12-7-2006 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMG Date 12-7-2007 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Disk	APN 45021043	~~212290-A~~	~~697618~~	MR ~~1171629~~
		15 DMG 6-15-07	D2-2D693	MR# 1192696

18. Planner [signature] 12-7-06 (Signature / Date) Printed Name: DAVID M. GOODLET
19. ISI RPJndap 12/12/06 (Signature / Date) Printed Name: R.P. JNDAP Log Entry RPJ
20. ANII [signature] 12-19-06 (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.

   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: 6/15/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2945414

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, 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)
Check Valve	Borg Warner	30017	N/A	1PCHAV306	1978	Repaired	YES
Disk	Borg Warner	3	N/A	1PCHAV306	n/a	Replaced	YES
Disk	Borg Warner	15	N/A	1PCHAV306	1985	Replacement	YES

7. Description of Work: Disassemble the 20" check valve for Engineering inspection.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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)

7. Remarks: WO# 2945414 for valve 1PCHAV306. The Disk & Stud Assembly is being replaced to minize the time that the valve is out of service. The removed disk will be reworked as an assembly for future spare part.

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: 6-15-2007

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 12-19-06 to 6-15-07, 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: 6-15-07

NEW DISC BMG 5-9-91

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

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

Not To Exceed One Day's Production

1. Manufactured and certified by Nuclear Valve Division of Borg Warner, 7500 Tyrone Avenue, Van Nuys, CA 91409 (name and address of certificate holder)
2. Manufactured for Combustion Engineering, P.O. Box 488, Windsor, Conn. 06095 (name and address of purchaser)
3. Location of installation Arizona Public Services, Palo Verde, Arizona (name and address)
4. Type 76553-11 (drawing no.) SA 182 F316 (mat'l. spec. no.) 80,200 (tensile strength) N/A (CRN) 1985 (year built)
5. ASME Code, Section III: 1974 (edition) Winter '75 (addenda) 2 (class) N/A (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (No.) Revision N/A Date N/A
7. Remarks: Parts supplied herein may not have the NPT symbol stamp due to size or other considerations as allowed in NCA-8230.
8. Nom. thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft. & in.) N/A Length overall (ft. & in.) N/A
9. When applicable, Certificate Holders' data reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board Number in Numerical Order
(1) Disc N/C 5K02 S/N 15	N/A	(26)	
(2)		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure N/A psi Temp. N/A °F. Hydro. test pressure N/A (when applicable) at temp. °F.

*Supplementary information in form of lists, sketches or drawings may be used provided (1) size is 8½ X 11, (2) information is name 2 and 3 on this data report is included on each sheet, (3) each

9607230009

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PCHAV190
2.. Item Description: 3" - 300# Swing Check Valve model 77680-1
3. N-5 Data Package Number: 1CH03-5 4. W.O. Number: 2948910
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Disassemble the check valve for Engineering inspection.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a failure of the ASME Section XI pressure boundary. The disc/stud assembly is being replaced to rework fit-up of washer to arm gap.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial DMS Date 5-4-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMS Date 5-4-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMS Date 5-4-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMS Date 5-4-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Disc	APN 45020877	199225-3	M7988	MR 1190113

18. Planner [signature] 5-4-07 Printed Name: DAVID M GOODLET
Signature Date

19. ISI [signature] 5/4/07 Printed Name: R. P. FOXDAP Log Entry RPF
Signature Date

20. ANII [signature] 5-4-07 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: 5/4/2007

   Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

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

   Unit: 1

   Work Order Number 2948910

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, 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)
Check Valve	Borg Warner	27615	N/A	1PCHAV190	1978	Repaired	YES
Disc	Jorgensen Steel		N/A	1PCHAV190	1978	Replaced	YES
Disc	BW / IP	199225-3	N/A	1PCHAV190	1988	Replacement	YES

7. Description of Work: Disassemble the 3" check valve for Engineering inspection.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 2948910 for valve 1PCHAV190. The Disc & Stud Assembly is being replaced to minize the time that the valve is out of service. The removed disk will be reworked as an assembly for future spare part.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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 Phadap, IST Engineer Date: 6-6-2007

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 5-4-07 to 6-6-07, 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: 6-6-07

Ub.# 60156 203
LINE ITEM 01

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

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

Not To Exceed One Day's Production

1. Manufactured and certified by BW/IP INTERNATIONAL, INC., PUMP DIV. LOS ANGELES OPERATIONS 2300 EAST VERNON AVE., VERNON, CALIF. 90058 (name and address of NPT Certificate Holder)
2. Manufactured for ARIZONA NUCLEAR POWER PROJECT 4 MILES SOUTH OF WINTERSBURG, ARIZ. 85343 (name and address of purchaser)
3. Location of installation ARIZONA NUCLEAR POWER PROJECT 4 MILES SOUTH OF WINTERSBURG, ARIZ. 85343 (name and address)
4. Type 78333 REV. C (drawing no.) SA-182 F316 (mat'l. spec. no.) 75,000 PSI (tensile strength) N/A (CRN) 1988 (year built)
5. ASME Code, Section III: 1974 (edition) WINTER 75 (addenda date) 2 (class) N/A (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A
7. Remarks: BW/IP JOB NO. 861-L-2554 PART NAME - DISC & STUD ASSY

HYDROSTATIC TESTING NOT PERFORMED. IDENTIFICATION IS PER NCA-8230 IN LIEU OF NAMEPLATE.

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

	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1)	199225-1	N/A
(2)	199225-2	N/A
(3)	199225-3	N/A
(4)	199225-4	N/A
(5)		
(6)		
(7)		
(8)		
(9)		
(10)		
(11)		
(12)		
(13)		
(14)		
(15)		
(16)		
(17)		
(18)		
(19)		
(20)		
(21)		
(22)		
(23)		
(24)		
(25)		

	Part or Appurtenance Serial Number	National Board Number in Numerical Order
(26)		
(27)		
(28)		
(29)		
(30)		
(31)		
(32)		
(33)		
(34)		
(35)		
(36)		
(37)		
(38)		
(39)		
(40)		
(41)		
(42)		
(43)		
(44)		
(45)		
(46)		
(47)		
(48)		
(49)		
(50)		

10. Design pressure 720 psi. Temp. 100 °F. Hydro. test pressure N/A (when applicable) at temp. °F

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

(12/86) This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

92075173

FORM N-2 (back)

Mfr. Serial No. 199225-1
199225-2
199225-3
199225-4

CERTIFICATION OF DESIGN

Design specifications certified by N/A (when applicable) P.E. State N/A Reg. no. N/A

Design report* certified by N/A (when applicable) P.E. State N/A Reg. no. N/A

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that ~~this~~ (these) DISC & STUD ASSY. conforms to the rules of construction of the ASME Code, Section III.

NPT Certificate of Authorization No. N-1131 Expires JUNE 16, 1990

Date 31 AUG 88 Name BW/IP INTERNATIONAL, INC. (NPT Certificate Holder) Signed (authorized representative)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of CALIFORNIA and employed by ARKWRIGHT MUTUAL INS. CO.* of NORWOOD, MASS. have inspected these items described in this Data Report on August 31, 1988, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.

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

Date 8-31-88 Signed (Authorized Inspector) Commissions Calif 1222 (Nat'l. Bd. (incl. endorsements) state or prov. and no.)

2307 15 173 38

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSIBUV0667
2. Item Description: HPSI "B" TO THE RWT ISOLATION VALVE
3. N-5 Data Package Number: 1SI09-3 4. W.O. Number: 2952358
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: INSTALL NEW VALVE INTERNALS (VALVE MOD KIT) INTO NEW VALVE BODY AND SEAL WELD
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
NO FAILURE OF THE ASME BOUNDARY // INSTALLING NEW INTERNALS INTO NEW VALVE BODY AND SEAL WELD

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial GEO Date 2-1-07 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☒ YES ~~☒ NO~~ RPI 6-27-07

Initial GEO Date 2-1-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial GEO Date 2-1-07 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component for permanent service or power operation.

Initial GEO Date 2-1-07 17. 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.
Value body	50507	51	N/A	01188556
Bonnet	4500 4518	56060-11	N/A	01188554
DISC	4500 4518	N/A	HT#M8818	01188554

18. Planner G. Osmundson 2-1-07 Printed Name: G. Osmundson
Signature Date

19. ISI RPIndap 2-1-07 Printed Name: R.P. Indap Log Entry RPI
Signature Date

20. ANII [illegible] 2-1-07 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

Owner: Arizona Public Service Company, et. al.

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

Date: 06-27-2007

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

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

Unit: 1

Work Order Number 2952358

3. Work Performed by: Arizona Public Service Co.

5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 1SI09-3

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Winter 1975 Addenda, N/A 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 body	Borg Warner	51	N/A	1JSIBUV0667	1997	Replacement	Yes
Valve modification kit (bonnet)	Flowserve	56060-11	N/A	1JSIBUV0667	2004	Replacement	Yes
Valve modification kit (disc)	Flowserve	N/A	N/A	Ht # M8818	2004	Replacement	No

7. Description of Work: Installed new valve internals (valve modification kit) into new valve body and reweld seal weld.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-2 ☐

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: 2952358 INSTALL NEW VALVE INTERNALS (VALVE MOD KIT) INTO NEW VALVE BODY AND SEAL WELD. PRESSURE TEST PERFORMED AFTER INSTALLATION OF NEW VALVE UNDER W.O. 2932833.

Pre-Pressured Test WO Review – ISI RPHodgp 6/27/07

ANII RJ Fytton 6-28-07

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: RL P ISI Supv Date: 6-28-07

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 2-1-07 to 6-28-07, 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.

RJ Fytton

Inspectors Signature

Commissions: **NB 9685 "N" "I" AZ264**

National Board, State, Province, and Endorsements

Date: 6-28-07

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

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

1. Manufactured and certified by Flowserve Corporation, 1900 S. Saunders St., Raleigh, NC 27603 (name and address of NPT Certificate Holder)
2. Manufactured for Arizona Public Service, P. O. Box 52034, Phoenix, AZ 85072 (name and address of purchaser)
3. Location of installation APS - Palo Verde Nuclear Station, 5801 S. Wintersburg Rd., Tonopah, AZ 85354 (name and address)
4. Type 306FCB3-010 & 011* (drawing no.) SA182, F316 (mat'l. spec. no.) N/A (tensile strength) N/A (CRN) 2004 (year built)
5. ASME Code, Section III, Division 1: 1974 (edition) Summer, 1975 (addenda date) 2 (class) None (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A
7. Remarks: Bonnet for 2" 1500# Y-Globe Valve (Qty. 2)

*Revision A S. O. 27694

8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A
9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 56060-11	N/A	(26)	
(2) 56060-12	N/A	(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 2050 psi. Temp. 350 °F. Hydro. test pressure N/A (when applicable) at temp. °F

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

FORM N-2 (Back — Pg 2 of 2)

Certificate Holder's Serial Nos. 56060-11 through 56060-12

CERTIFICATION OF DESIGN

Design specifications certified by _____ (when applicable) P.E. State _____ Reg. no. _____

Design report* certified by _____ (when applicable) P.E. State _____ Reg. no. _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Part(s) conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires November 26, 2006

Date 4/22/04 Name Flowserve Corporation (NPT Certificate Holder) Signed [signature] (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by HSB CT of Hartford, CT have inspected these items described in this Data Report on 4-22-04, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 4-30-04 Signed [signature] (Authorized Nuclear Inspector) Commissions NC 1083 [Nat'l. Bd. (incl. endorsements) and state or prov. and no.]

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PCHEVM70
2.. Item Description: 3"Borg Warner Swing Check Valve
3. N-5 Data Package Number: 1CH04-1 4. W.O. Number: 2967330
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Disassemble check valve for inspect per ASME program.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a failure of the ASME pressure boundary. Disassembly of check valve for inspection, will remove the stud & disc assembly for inspection and will install spare to expedite valve reassembly..

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

Initial [illegible] Date 6-4-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 6-4-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 6-4-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
~~Disk (disk/stud ass'y)~~	~~APN 00088601~~	~~25292-8~~ 71107 ~~27240-6~~	~~N/A~~	~~MR 1201510~~ 1191622
~~45060185 (93939)~~				
Bonnet/Arm/Disc Assy	Old APN 45060185 / New APN 00093939	Bonnet 5 Disc 27240-6		WO# 2860073

18. Planner [signature] 6-4-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI [signature] 6/4/07 Printed Name: R.P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 6-4-07 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: 07/12/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2967330

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, Winter 1975 Addenda, NA 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)
Check Valve	Borg Warner	73531	N/A	1PCHEVM70	1984	Repaired	YES
Disk & stud ass'y	Borg Warner	31	N/A	1PCHEVM70	1984	Replaced	YES
Disk & stud ass'y	Borg Warner	27240-6	N/A	1PCHEVM70	2007	Replacement	YES
Bonnet	Borg Warner	18	N/A	1PCHEVM70	1984	Replaced	YES
Bonnet	Borg Warner	5	N/A	1PCHEVM70	1978	Replacement	YES

7. Description of Work: Disassembled 3" Check Valve per ASME check valve inspection program.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☒ DBH 7-12-07

   N-416-2 ☐ 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)

1. W.O. 2967330 replaced the bonnet, disc & arm assembly in valve 1PCHEVM70 with bonnet, disc & arm assembly removed from valve 1PSIBV532 and reworked under W.O. 2860073.

Pre-Pressure Test work order review - ISI : NA

ANII : NA

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] Date: 7-13-07

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 6-4-07 to 7-13-07, 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: 7-13-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIEV123
2.. Item Description: HPSI Injection Header Containment Check Valve
3. N-5 Data Package Number: 1RC01-5 4. W.O. Number: 2967332
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly as required to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No failure of the ASME pressure boundary. Like for like replacement to correct seat leakage.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

Initial J.A. Date 4-14-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.A. Date 4-14-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial J.A. Date 4-14-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet/Disc	76356 (Borg Warner)	RJL-2		01243744
Arm Assembly	APN# 0009-3939	7/12/07		
Bonnet Only		2		01243744
Disc only		27240-2		01243744

18. Planner [signature] 4-14-07 Printed Name: JAMES I. DAVIS
Signature Date

19. ISI [signature] 4/19/07 Printed Name: R.P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 4-20-07 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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 07-12-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2967332

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Winter 1975 Addenda, N/A 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)
3" Check Valve	Borg Warner	49479	N/A	1PSIEV123	1979	Repaired	Yes
Bonnet, Disc & Arm Assembly	Flowserve	RJL-2	N/A	1PSIEV123	2006	Replacement	Yes

7. Description of Work: Replaced the bonnet, disc & arm assembly, to correct seat leakage.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-2 ☐

   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. W.O. 2967332 replaced bonnet, disc & arm assembly in valve 1PSIEV123.

Pre-Pressure Test work order review - ISI : 7/12/07

ANII : 7-12-07

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: ISI ENGINEER Date: 7-13-07

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 4-20-07 to 7-13-07, 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: 7-13-07

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

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

1. Manufactured and certified by Flowserve Corporation 1900 S. Saunders St. Raleigh, NC 27603
(name and address of NPT Certificate Holder)

2. Manufactured for Pinnacle West Capital Corp/Disbursement Accounting, MS 95/P.O Box 53940, Phoenix, AZ 85072-3940
(name and address of purchaser)

3. Location of installation APS-PALO VERDE/Arizona Public Service Palo Verde Plant/P.O. Box 52034, Phoenix AZ 85072-2034
(name and address)

4. Type

(drawing no.)	(mat'l. spec. no.)	(tensile strength)	(CRN)	(year built)
77700 REV H	SA182 GR. F316	N/A	N/A	2006

5. ASME Code, Section III, Division 1:

(edition)	(addenda date)	(class)	(Code Case no.)
1974	Winter 1975	1	N/A

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7. Remarks: Bonnet Disc & Arm Assembly for a 3" 1521# SC Valve
Disc Material SA182 Gr. F316, Heat Numbers 27240-1 and 27240-2

8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) RJL-1	N/A	(26)	
(2) RJL-2	N/A	(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 2500 psi. Temp. 650 °F. Hydro. test pressure ——— (when applicable) at temp. °F

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

/05)

2

Certificate Holder's Serial Nos. RJL-1 through RJL-2

CERTIFICATION OF DESIGN

Design specifications certified by John C. Nunnery (when applicable) P.E. State ILL Reg. no. 062-043270

Design report* certified by N/A (when applicable) P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Parts conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires 11-26-06

Date 10/31/06 Name Flowserve Corporation (NPT Certificate Holder) Signed (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected these items described in this Data Report on 10/31/06, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 10/31/06 Signed (Authorized Nuclear Inspector) Commissions NC#1721 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIEV133
2.. Item Description: HPSI Injection Header Containment Check Valve
3. N-5 Data Package Number: 1RC01-5 4. W.O. Number: 2967333
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly as required to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

No failure of the ASME pressure boundary. Like for like replacement to correct seat leakage.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

Initial J.D. Date 4-14-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D. Date 4-14-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial J.D. Date 4-14-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
VALVE	APN # 45004053	301311	NA	MR # 1244189
JA ~~DISC~~	JA ~~FROM 45004053~~	JA ~~2~~	JA ~~N/A~~	JA ~~"~~
BONNET	" "	5	N/A	" "
DISC	APN 00088601	25292-6	N/A	MR # 01191620-7

18. Planner [signature] 4-14-07 Printed Name: JAMES I. DAVIS
Signature Date

19. ISI [signature] 4/19/07 Printed Name: R.P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 4-20-07 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: 07-12-2007

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station
   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

Unit: 1

Work Order Number 2967333

3. Work Performed by: Arizona Public Service Co.
   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Winter 1975 Addenda, N/A 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)
3" Check Valve	Borg Warner	49480	N/A	1PSIEV133	1979	Repaired	Yes
Disc	Borg Warner	RS-213306-1	N/A	1PSIEV133	1979	Replaced	Yes
Bonnet	Borg Warner	RS212938-4	N/A	1PSIEV133	1979	Replaced	Yes
Disc	Flowserve	25292-6	N/A	1PSIEV133	2006	Replacement	Yes
Bonnet	Flowserve	5	N/A	1PSIEV133	1993	Replacement	Yes

7. Description of Work: Replaced the bonnet, disc & arm assembly, to correct seat leakage.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-2 ☐

   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. W.O. 2967333 replaced bonnet, disc & arm assembly in valve 1PSIEV133. Replacement bonnet was removed from spare Borg Warner valve s/n 301311.

Pre-Pressure Test work order review - ISI : 7/12/07

ANII : 7-12-07

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: ISI ENGINEER Date: 7-13-07

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 4-20-07 to 7-13-07, 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: 7-13-07

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

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

Not to Exceed One Day's Production

1. Manufactured and certified by Flowserve Corporation/ 1900 South Saunders Street, Raleigh NC 27603
(Name and Address of NPT Certificate Holder)

2. Manufactured for Pinnacle West Capital Corp/ Disbursement ACCTG/ PO Box 53940 Phoenix, AZ. 85072-3940
(Name and Address of Purchaser)

3. Location of Installation APS Palo Verde/ Palo Verde Warehouse/ 5801 South Wintersburg Road Tonopah, AZ. 85354
(Name and Address)

4. Type: 77700 Rev. H (drawing no.) | SA 182 grade F316 (mat'l. spec. no.) | N/A (tensile strength) | N/A (CRN) | 2006 (year built)

5. ASME Code, Section III, Division 1: 1974 (edition) | Winter, 1975 (addenda date) | 1 (class) | N/A (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7. Remarks: Disk for 3" 1521# Swing Check Valve

S.O. 33861

8. Nom. Thickness (in.) N/A Min. design thickness (in.) PER#4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

	Part or Appurtenance Serial Number	National Board No. In Numerical Order		Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1)	25292-6	N/A	(26)		
(2)	25292-7	N/A	(27)		
(3)	25292-8	N/A	(28)		
(4)			(29)		
(5)			(30)		
(6)			(31)		
(7)			(32)		
(8)			(33)		
(9)			(34)		
(10)			(35)		
(11)			(36)		
(12)			(37)		
(13)			(38)		
(14)			(39)		
(15)			(40)		
(16)			(41)		
(17)			(42)		
(18)			(43)		
(19)			(44)		
(20)			(45)		
(21)			(46)		
(22)			(47)		
(23)			(48)		
(24)			(49)		
(25)			(50)		

10. Design pressure _____ psi. Temp. _____ °F. Hydro. Test pressure N/A At temp. °F

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

Certificate Holder's Serial Nos. 25292-6 THRU 25292-8

CERTIFICATION OF DESIGN

Design specification certified by _____ P.E. State _____ Reg. no. _____

Design Report * certified by _____ P.E. State _____ Reg. no. _____

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) **PARTS** Conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. **N1563** Expires **11/26/2006**

Date 1/27/06 Name **Flowserve, Corporation** Signed _____
(NPT Certificate Holder) (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of **North Carolina** and employed by **HSB CT** of **Hartford, Connecticut** have inspected these items described in this Data Report on 1/30/06, and state that, to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 1/30/06 Signed _____ Commissions NC #1421
(Authorized Inspector) (Nat'l. Bd. (incl. Endorsements) and state, prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIBV533
2.. Item Description: HPSI Header Containment Isolation Check Valve
3. N-5 Data Package Number: 1RC01-1C 4. W.O. Number: 2967337
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly as required to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

No failure of the ASME pressure boundary. Like for like replacement to correct seat leakage.

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

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

15. ASME Section XI Pressure Test Required: ☐ YES ☐ NO

Initial J.O Date 4-14-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.O Date 4-14-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial J.O Date 4-14-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet/Disc Assy	93939	RJL-1	27240-1	01233011-0001
~~Bonnet/Disc Assy~~	~~93939~~	~~RJL-2~~	~~27240-2~~	~~01233011-0001~~

18. Planner [signature] 4-14-07 Printed Name: JAMES I. DAVIS
Signature Date

19. ISI [signature] 4/19/07 Printed Name: R.P. INDAP Log Entry [illegible]
Signature Date

20. ANII [signature] 4-20-07 Printed Name: R.G. HOLGSTROM
Signature Date

PV216-08NI (8-88) 73DP-9ZZ17 Rev 9

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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 06-27-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2967337

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A 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)
3" Check Valve	Borg Warner	27604	N/A	1PSIBV533	1978	Repaired	Yes
Bonnet, Disc & Arm Assembly	Flowserve	RJL-1	N/A	1PSIBV533	2006	Replacement	Yes

7. Description of Work: Replaced the bonnet, disc & arm assembly, to correct seat leakage.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-2 ☐

   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)

W.O. 2967337 replaced bonnet, disc & arm assembly in valve 1PSIBV533.

Pre-Pressure Test work order review - ISI : RLB 6/27/02. PT Report 07-VT-1163

ANII : RB Fytom 6-27-07

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: RLB ISI ENG Date: 7-4-07
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 4-20-07 to 7-4-07, 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.

RB Fytom
Inspectors Signature

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

Date: 7-4-07

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

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

1. Manufactured and certified by Flowserve Corporation 1900 S. Saunders St. Raleigh, NC 27603
(name and address of NPT Certificate Holder)

2. Manufactured for Pinnacle West Capital Corp/Disbursement Accounting, MS 95/P.O Box 53940, Phoenix, AZ 85072-3940
(name and address of purchaser)

3. Location of installation APS-PALO VERDE/Arizona Public Service Palo Verde Plant/P.O. Box 52034, Phoenix AZ 85072-2034
(name and address)

4. Type

(drawing no.)	(mat'l. spec. no.)	(tensile strength)	(CRN)	(year built)
77700-REV H	SA182 GR. F316	N/A	N/A	2006

5. ASME Code, Section III, Division 1:

(edition)	(addenda date)	(class)	(Code Case no.)
1974	Winter 1975	1	N/A

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7. Remarks: Bonnet Disc & Arm Assembly for a 3" 1521# SC Valve
Disc Material SA182 Gr. F316, Heat Numbers 27240-1 and 27240-2

8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) RJL-1	N/A	(26)	
(2) RJL-2	N/A	(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 2500 psi. Temp. 650 °F. Hydro. test pressure ——— (when applicable) at temp. °F

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

(11/05)

Certificate Holder's Serial Nos. RJL-1 through RJL-2

CERTIFICATION OF DESIGN

Design specifications certified by John C. Nunnery (when applicable) P.E. State ILL Reg. no. 062-043270

Design report* certified by N/A (when applicable) P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Parts conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires 11-26-06

Date 10/31/06 Name Flowserve Corporation (NPT Certificate Holder) Signed (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected these items described in this Data Report on 10/31/06, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 10/31/06 Signed (Authorized Nuclear Inspector) Commissions NC #1421 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PRCEL001
2. Item Description: Piping from Pressurizer 1MRCEX02 to PSV 1JRCEPSV200
3. N-5 Data Package Number: 1RC03-2 4. W.O. Number: 2967764
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL001 (PSV 200) to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   The weld overlay repair is a preemptive mitigation measure to prevent potential failure due to PWSCC. The suitability of this repair is fully discussed in DMWO 2940436
10. Repair/Replacement Work Organization: Welding Services Incorporated
11. Replacement Items Construction or reconciled Code/Edition: N/A
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Class 1, 2001 Edition, 2003 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial [illegible] Date 5/10/07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 5/10/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 5/10/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 5/10/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.

18. Planner [illegible] Signature 5/10/07 Date Printed Name: HERBERT L. GREEN
19. ISI [illegible] Signature 5/21/07 Date Printed Name: FRED POTEET Log Entry [illegible]
20. ANII [illegible] Signature 5-21-07 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: Welding Services Incorporated

Date: 05/10/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2967764

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant System (RC)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 2001 Edition, 2003 Addenda

   (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)
RC pipe line	Pullman Power Products	1RC001S001	N/A	1PRCEL001	1979	Repaired	YES

7. Description of Work: Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL001 (PSV 200) to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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: DIWO 2967764- Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL001 (PSV 200) to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: SR. ISI ENGINEER Date: 7/5/07
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 5-21-07 to 7-5-07, 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: 7-5-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PRCEL003
2.. Item Description: Piping from Pressurizer 1MRCEX02 to PSV 1JRCEPSV201
3. N-5 Data Package Number: 1RC03-2 4. W.O. Number: 2967769
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL003 (PSV 201) to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.
8. ☐ ISI Flaw – NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
The weld overlay repair is a preemptive mitigation measure to prevent potential failure due to PWSCC. The suitability of this repair is fully discussed in DMWO 2940436
10. Repair/Replacement Work Organization: Welding Services Incorporated
11. Replacement Items Construction or reconciled Code/Edition: N/A
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Class 1, 2001 Edition, 2003 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial [illegible] Date 5/10/07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 5/10/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 5/10/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 5/10/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.

18. Planner [illegible] Signature 5/10/07 Date Printed Name: HERBERT L. GREEN

19. ISI [illegible] Signature 5/21/07 Date Printed Name: FRED POTEET Log Entry [illegible]

20. ANII [illegible] Signature 5-21-07 Date Printed Name: R.G. HOLSTROM

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: 05/10/2007

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

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

Unit: 1

Work Order Number 2967769

3. Work Performed by: Welding Services Incorporated

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant System (RC)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 2001 Edition, 2003 Addenda

(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)
RC pipe line	Pullman Power Products	1RC003S001	N/A	1PRCEL003	1979	Repaired	YES

7. Description of Work: Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL003 (PSV 201) to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

N-416-2 ☐ 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: DIWO 2967769- Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL003 (PSV 201) to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: SR. ISI ENGINEER Date: 7/5/07
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 5-21-07 to 7-5-07, 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: 7-5-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PRCEL005
2.. Item Description: Piping from Pressurizer 1MRCEX02 to PSV 1JRCEPSV202
3. N-5 Data Package Number: 1RC03-2 4. W.O. Number: 2967774
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL005 (PSV 202) to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

The weld overlay repair is a preemptive mitigation measure to prevent potential failure due to PWSCC. The suitability of this repair is fully discussed in DMWO 2940436

10. Repair/Replacement Work Organization: Welding Services Incorporated
11. Replacement Items Construction or reconciled Code/Edition: N/A
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Class 1, 2001 Edition, 2003 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial [signature] Date 5/10/07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [signature] Date 5/10/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [signature] Date 5/10/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [signature] Date 5/10/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.

18. Planner [signature] Signature 5/10/07 Date Printed Name: HERBERT L. GREEN

19. ISI [signature] Signature 5/21/07 Date Printed Name: FRED POTEET Log Entry [signature]

20. ANII [signature] Signature 5-21-07 Date Printed Name: R.G. HOLSTROM

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: Welding Services Incorporated

Date: 05/10/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2967774

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant System (RC)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 2001 Edition, 2003 Addenda

   (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)
RC pipe line	Pullman Power Products	1RC005S001	N/A	1PRCEL005	1979	Repaired	YES

7. Description of Work: Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL005 (PSV 202) to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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: DIWO 2967774- Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL005 (PSV 202) to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: SR. ISI ENGINEER Date: 7/5/07
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 5-21-07 to 7-5-07, 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: 7-5-07

ASME SECTION XI – REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 1PRCEL007
2. Item Description: Piping from Pressurizer 1MRCEX02 to PSV 1JRCEPSV203
3. N-5 Data Package Number: 1RC03-2 4. W.O. Number: 2967779
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL007 (PSV 203) to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.
8. ☐ ISI Flaw– NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   The weld overlay repair is a preemptive mitigation measure to prevent potential failure due to PWSCC. The suitability of this repair is fully discussed in DMWO 2940436
10. Repair/Replacement Work Organization: Welding Services Incorporated
11. Replacement Items Construction or reconciled Code/Edition: N/A
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Class 1, 2001 Edition, 2003 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial [signature] Date 5/10/07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [signature] Date 5/10/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [signature] Date 5/10/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [signature] Date 5/10/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.

18. Planner [signature] Signature 5/10/07 Date Printed Name: HERBERT L. GREEN

19. ISI [signature] Signature 5/21/07 Date Printed Name: FRED POTEET Log Entry [signature]

20. ANII [signature] Signature 5-21-07 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: Welding Services Incorporated

Date: 05/10/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2967779

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant System (RC)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 2001 Edition, 2003 Addenda

   (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)
RC pipe line	Pullman Power Products	1RC007S001	N/A	1PRCEL007	1979	Repaired	YES

7. Description of Work: Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL007 (PSV 203) to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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: DIWO 2967779- Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL007 (PSV 203) to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: SR. ISI ENGINEER Date: 7/5/07

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 5-21-07 to 7-5-07, 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: 7-5-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PRCEL018
2. Item Description: RC piping loop 1B header to Pressurizer 1MRCEX02
3. N-5 Data Package Number: 1RC01-1 4. W.O. Number: 2967789
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL018 to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   The weld overlay repair is a preemptive mitigation measure to prevent potential failure due to PWSCC. The suitability of this repair is fully discussed in DMWO 2940436
10. Repair/Replacement Work Organization: Welding Services Incorporated
11. Replacement Items Construction or reconciled Code/Edition: N/A
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Class 1, 2001 Edition, 2003 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial [illegible] Date 5/10/07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 5/10/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 5/10/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 5/10/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.

18. Planner [illegible] 5/10/07 Printed Name: HERBERT GREEN
    Signature Date
19. ISI [illegible] 5/21/07 Printed Name: FRED POTEET Log Entry 78
    Signature Date
20. ANII [illegible] 5-21-07 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: Welding Services Incorporated

Date: 05/10/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2967789

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant System (RC)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 2001 Edition, 2003 Addenda

   (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)
RC pipe line	Pullman Power Products	N9367	N/A	1PRCEL018	1979	Repaired	YES

7. Description of Work: Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL018 to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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: DIWO 2967789- Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL018 to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: SR. ISI ENGINEER Date: 7/5/07
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 5-21-07 to 7-5-07, 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: 7-5-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PRCEL028
2. Item Description: RC piping from Pressurizer 1MRCEX02 to Hot Leg
3. N-5 Data Package Number: 1RC01-2 4. W.O. Number: 2967794
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL028 to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   The weld overlay repair is a preemptive mitigation measure to prevent potential failure due to PWSCC. The suitability of this repair is fully discussed in DMWO 2940436

10. Repair/Replacement Work Organization: Welding Services Incorporated
11. Replacement Items Construction or reconciled Code/Edition: N/A
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Class 1, 2001 Edition, 2003 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial [signature] Date 5/10/07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [signature] Date 5/10/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [signature] Date 5/10/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [signature] Date 5/10/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.

18. Planner [signature] Signature 5/10/07 Date Printed Name: Herbert L. Green
19. ISI [signature] Signature 5/21/07 Date Printed Name: FRED POTEET Log Entry 78
20. ANII [signature] Signature 5-21-07 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

Date: 05/10/2007

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

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

Unit: 1

Work Order Number 2967794

3. Work Performed by: Welding Services Incorporated

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant System (RC)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 2001 Edition, 2003 Addenda

(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)
RC pipe line	Pullman Power Products	N5251	N/A	1PRCEL028	1977	Repaired	YES

7. Description of Work: Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL028 to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

N-416-2 ☐ 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: DIWO 2967794- Install a weld overlay (WOL) on Pressurizer Dissimilar Metal Weld (DMW) on line 1PRCEL028 to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: SR. ISI ENGINEER Date: 7/5/07
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 5-21-07 to 7-5-07, 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: 7-5-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PRCEL028
2.. Item Description: RC piping from Pressurizer 1MRCEX02 to Hot Leg
3. N-5 Data Package Number: 1RC01-2 4. W.O. Number: 2967797
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Install a weld overlay (WOL) on Dissimilar Metal Weld (DMW) on line 1PRCEL028 to Hot Leg to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

The weld overlay repair is a preemptive mitigation measure to prevent potential failure due to PWSCC. The suitability of this repair is fully discussed in DMWO 2940436

10. Repair/Replacement Work Organization: Welding Services Incorporated
11. Replacement Items Construction or reconciled Code/Edition: N/A
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Class 1, 2001 Edition, 2003 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial [illegible] Date 5/10/07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 5/10/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 5/10/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 5/10/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.

18. Planner [illegible] Signature 5/10/07 Date Printed Name: Herbert L. Green

19. ISI [illegible] Signature 5/21/07 Date Printed Name: FRED POTEET Log Entry [illegible]

20. ANI [illegible] Signature [illegible]21-07 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

Date: 05/10/2007

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

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

Unit: 1

Work Order Number 2967797

3. Work Performed by: Welding Services Incorporated

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant System (RC)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 2001 Edition, 2003 Addenda

(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)
RC pipe line	Pullman Power Products	N5279	N/A	1PRCEL028	1977	Repaired	YES

7. Description of Work: Install a weld overlay (WOL) on Dissimilar Metal Weld (DMW) on line 1PRCEL028 to Hot Leg to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

N-416-2 ☐ 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: DIWO 2967797- Install a weld overlay (WOL) on Dissimilar Metal Weld (DMW) on line 1PRCEL028 to Hot Leg to mitigate susceptibility to Primary Water Stress Corrosion Cracking (PWSCC) IAW DMWO 2940436.

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: SR. ISI ENGINEER Date: 7/5/07
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 5-21-07 to 7-5-07, 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: 7-5-07

ASME SECTION XI – REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 1PSGEV026
2.. Item Description: 2"-1500# Y- Globe Valve
3. N-5 Data Package Number: 1SG01-1 4. W.O. Number: 2979249
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Disassemble and inspect valve due to seat leakage. Rework / replace parts as necessary.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Not a failure of the ASME III pressure boundary. If disc is required to be replaced it will be due to normal wear

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1976 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial DMG Date 5-4-07 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☒ YES WJA 6-18-07 ☒ NO

Initial DMG Date 5-4-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 5-4-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMG Date 5-4-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Disc	APN 45050084	23500-1-19	N/A	MR 1220395

18. Planner [signature] 5-4-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI RPhrdap 5/4/07 Printed Name: RPhrdap Log Entry 5/4/07
Signature Date

20. ANII [signature] 5-4-07 Printed Name: R.G. HOESTROM
Signature Date

PV216-08NI (8-88) 73DP-9ZZ17 Rev 9

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: 6/17/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 2979249

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG: Main Steam 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	Kerotest	ASG3-10	N/A	1PSGEV026	1981	Repaired	YES
Disc	Flowserve	23500-1-19	N/A	1PSGEV026	2006	Replacement	YES

7. Description of Work: Disassemble valve, inspect and rework to correct seat leakage.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

N-416-2 ☐ 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# 2979249 for valve 1PSGEV026. Disassemble valve, inspect and rework to correct seat leakage. The stem/disc assembly was replaced to correct seat leakage.Existing valve was installed in 1996 under wo# 777528.

Pre-Pressured Test WO Review – ISI _____

ANII _____

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: ISI ENGINEER Date: 6-18-07

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 5-4-07 to 6-18-07, 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: 6-18-07

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

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

1. Manufactured and certified by Flowserve Corporation 1900 S. Saunders St. Raleigh, NC 27603 (name and address of NPT Certificate Holder)

2. Manufactured for Pinnacle West Capital Corp/Disbursement Accounting, MS 95/P.O Box 53940, Phoenix, AZ 85072-3940 (name and address of purchaser)

3. Location of installation APS-PALO VERDE/Arizona Public Service Palo Verde Plant/P.O. Box 52034, Phoenix AZ 85072-2034 (name and address)

4. Type

(drawing no.)	(mat'l. spec. no.)	(tensile strength)	(CRN)	(year built)
72599749 REV C	SA479, TP 316	N/A	N/A	2006

5. ASME Code, Section III, Division 1:

(edition)	(addenda date)	(class)	(Code Case no.)
1974	SUMMER 1976	2	1539-1 (N-30-1), 1976

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7. Remarks: STEM/DISK ASSY FOR A 1" 600# KEROTEST Y-GLOBE VALVE

8. Nom. thickness (in.) N/A Min. design thickness (in.) Per #4 Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) 23500-1-19	N/A	(26)	
(2) 23500-1-20	N/A	(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 1030 psi. Temp. 650 °F. Hydro. test pressure ——— (when applicable) at temp. °F

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

(11/05)

Certificate Holder's Serial Nos. 23500-1-19 through 23500-1-20

CERTIFICATION OF DESIGN

Design specifications certified by Amitava Bhattacharya (when applicable) P.E. State AZ Reg. no. 27603

Design report* certified by N/A (when applicable) P.E. State N/A Reg. no. N/A

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Parts conforms to the rules of construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1563 Expires 11-26-06

Date 11/9/06 Name Flowserve Corporation (NPT Certificate Holder) Signed (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, CT have inspected these items described in this Data Report on 11/9/06, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 11/9/06 Signed (Authorized Nuclear Inspector) Commissions NC #1421 [Nat'l. Bd. (incl. endorsements) and state or prov. and no.]

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JRCBHV0109
2. Item Description: PRESSURIZER VENT VALVE
3. N-5 Data Package Number: 1RC03-2 4. W.O. Number: 2991357
5. Original Construction Code Edition: 1977 Edition, Winter 1978 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: REWORK INTERNALS , REPLACE MAIN DISC
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   REWORK VALVE INTERNALS, NO FAILURE OF ASME SECTION III BOUNDARY
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: SECTION III CLASS 1 , 1989 EDITION
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial GEO Date 4/17/07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial GEO Date 4/17/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial GEO Date 4/17/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial GEO Date 4-17-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
MAIN DISC	204855-2	SN338	P0932	01212619-0005

18. Planner G Osmundson 4/17/07 Printed Name: Gerold Osmundson
    Signature Date
19. ISI RL B 4-17-07 Printed Name: R.L. Brown Log Entry RB
    Signature Date
20. ANII [illegible] 4-17-07 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: 06-27-2007

   Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

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

   Unit: 1

   Work Order Number 2991357

3. Work Performed by: Arizona Public Service Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

   Type of Code Stamp None

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: 1RC03-2

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1977 Edition, Winter 1978 Addenda, N/A 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)
Main Disc	Target Rock	338	N/A	1JRCBHV0109	2005	Replacement	Yes

7. Description of Work: Rework internals, replace main disc.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

   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 2991357 REPLACED MAIN DISC AND REASSEMBLED VALVE

Pre-Pressured Test WO Review – ISI N/A

ANII

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: ISI ENG Date: 6/27/07
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 4-17-07 to 6-27-07, 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: 6-27-07

FORM N-2 CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL NUCLEAR PARTS AND APPURTENANCES*
As Required by the Provisions of the ASME Code, Section III
Not to Exceed One Day's Production

1. Manufactured and certified by Target Rock.; 1966E Broadhollow Rd.; E. Farmingdale, NY 11735
(name and address of NPT Certificate Holder)

2. Manufactured for Arizona Public Service Co.; Phoenix, AZ 85072
(name and address of Purchaser)

3. Location of installation Palo Verde Nuclear Generating Station; Wintersburg Rd.; Tonopah, AZ
(name and address)

4. Type 204751-1 (drawing no.) SA564 630 (mat'l. spec. no.) 140 ksi (tensile strength) N/A (CRN) 2005 (year built)

5. ASME Code, Section III, Division 1: 1989 (edition) None (addenda date) 1 (class) None (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A (no.) Revision N/A Date N/A

7. Remarks: Main Disc (Part of Main & Pilot Disc Set p/n 204855-2)
Spare part for valve model no. 98F-001

Nom. Thickness (in.) N/A Min. design thickness (in.) N/A Dia. ID (ft & in.) N/A Length overall (ft & in.) N/A

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report:

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1) 316	NA	(26)	
(2) 319		(27)	
(3) 325		(28)	
(4) 333		(29)	
(5) 338		(30)	
(6) 343		(31)	
(7) ~~~		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure N/A psi. Temp. N/A °F Hydro. Test pressure 4810 psig (when applicable) at temp. °F Ambient

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

(12/88) This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

REPRINT (7/91)

Certificate Holder's Serial Nos. 204751-1 s/n 316, 319, 325, 333, 338 & 343

CERTIFICATION OF DESIGN

Design specifications certified by Jose Aguila Daza (when applicable) P.E. State AZ Reg. No. 24485

Design report* certified by W. R. D. Kerr (when applicable) P.E. State VA Reg. No. 024868

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) Parts conforms to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1948 Expires 12/12/2007

Date 4/21/2005 Name Target Rock (NPT Certificate Holder) Signed R. E. Glazier; QA Manager (authorized representative)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of New York and employed by OneBeacon America Insurance Co. of Boston, MA have inspected the pump, or valve, described in this Data Report on 4/21/2005 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 4/21/05 Signed (Authorized Inspector) Commissions NY 5102 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1MCHAX05
2. Item Description: Greer Hydraulics Suction Stabilizer
3. N-5 Data Package Number: 1CH04-3 4. W.O. Number: 3014269
5. Original Construction Code Edition: 1977 Edition, Winter 1977 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Disassembly of charging pump suction stabilizer for bladder replacement.
8. ☐ ISI Flaw NDE Method of Flaw Detection: n/a
   Report Number: n/a
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   Not a failure of the ASME III pressure boundary. The valve stem is a code part that is part of the bladder.
   Replacement is part of the button (wear plate) replacement
   Button is a non-ASME item.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec III Cl 2, 1977 Edition 1977 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial [illegible] Date 5-15-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [illegible] Date 5-15-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 5-15-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 5-15-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Suction Stabilizer	N/A	6117	N/A	N/A
Valve Stem	APN 45004042	1208A-17	56110	MR 1224488

18. Planner [signature] 5-15-07 Printed Name: DAVID M. GOODLET
    Signature Date
19. ISI [signature] 5-15-07 Printed Name: R.P. FIDAP Log Entry [illegible]
    Signature Date
20. ANII [signature] 5-15-07 Printed Name: C.W. 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: 5-18-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 3014269

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 NC, Class 2 1977 Edition, Winter 1977 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)
Suction Stabilizer	Greer Hydraulics	6117	N/A	1MCHAX05	1980	Repaired	YES
Valve Stem	Westinghouse	1208A-17	N/A	1MCHAX05	2003	Replacement	NO

7. Description of Work: Disassemble the suction stabilizer for bladder replacement.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 3014269 for suction stabilizer 1MCHAX05. The bladder replacement includes the stem as a code pressure retaining part. The bladder was replaced due to noise from the wear plate (button) at bottom of the bladder being loose.

Pre-Pressured Test WO Review – ISI N

ANII N/A

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.L. Browning RLB S/ENG Date: 5-18-07

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 5-15-07 to 5-18-07, 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: 5-18-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PCHEV335
2. Item Description: 2" - 1500 lb Borg Warner Gate Valve model 77580
3. N-5 Data Package Number: 1CH04-1 4. W.O. Number: 3017458
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Disassemble valve (seal weld) and rework to correct seat leakage.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
   Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   Not a failure of the ASME III pressure boundary. The seal weld is required to be replaced for valve disassembly and code parts such as bonnet or gate will be replaced as needed due to normal wear based upon inspection.
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

Initial DMG Date 6-18-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 6-18-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMG Date 6-18-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet seal weld	N/A	N/A	N/A	N/A
Gate	APN 45050154	1884	5B94	MR 1237738
~~Bonnet~~ N/A	APN ~~45060200~~ N/A			MR ~~1237738~~ N/A

18. Planner [signature] 6-18-07 Printed Name: DAVID M. GOODLET
    Signature Date
19. ISI [signature] 6-19-07 Printed Name: RL BROWNING Log Entry RLB
    Signature Date
20. ANII [signature] 6-19-07 Printed Name: R.G. HOLLSTROM
    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: 6/26/2007

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

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

Unit: 1

Work Order Number 3017458

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 System

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)
Valve	Borg Warner	26957	N/A	1PCHEV335	1978	Repaired	YES
Seal Weld	N/A	N/A	N/A	1PCHEV335	2007	Replacement	NO
Gate	Borg warner	1884	N/A	1PCHEV335	2007	Replacement	NO

7. Description of Work: Disassemble and rework to correct seat leakage.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ~~☒~~ Exempt ☒

RPE 6/26/07

N-416-2 ☐ 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# 3017458 foe valve 1PCHEV335. The bonnet seal weld will be replaced to allow for valve disasembly. Code parts such as gate was replaced due to wear.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: RPhrdap, ISI Engineer Date: 6-26-2007
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 6-19-07 to 6-26-07, 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: 6-26-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PCHEV334
2. Item Description: 2" - 1665 lb Borg Warner "Y" type check valve model 81630 & 1
3. N-5 Data Package Number: 1CH04-1 4. W.O. Number: 3017459
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Disassemble check valve (seal weld) and rework to correct seat leakage.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
   Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   Not a failure of the ASME III pressure boundary. The seal weld is required to be replaced for valve disassembly and code parts such as bonnet or disc will be replaced as needed due to normal wear based upon inspection.
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

15. ASME Section XI Pressure Test Required: ~~☒ YES~~ RPI 6/26/07 ☒ NO

Initial [illegible] Date 6-18-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 6-18-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 6-18-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet seal weld	N/A	N/A	N/A	N/A
Disc	APN 45020217	8051		MR 1237901
~~Bonnet~~ N/A	APN ~~45060008~~ N/A			~~MR 1237901~~ N/A

18. Planner [signature] 6-18-07 Printed Name: DAVID M. GOODLET
    Signature Date
19. ISI [signature] 6-19-07 Printed Name: R L BROCKMAN Log Entry RLB
    Signature Date
20. ANII [signature] 6-19-07 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: 6/26/2007

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

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

Unit: 1

Work Order Number 3017459

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 System

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)
Valve	Borg Warner	31766	N/A	1PCHEV334	1978	Repaired	YES
Seal Weld	N/A	N/A	N/A	1PCHEV334	2007	Replacement	NO
Disc	Borg Warner	8051	N/A	1PCHEV334	2007	Replacement	NO

7. Description of Work: Disassemble and rework to correct seat leakage.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☒

RPI 6/26/07

N-416-2 ☐ 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# 3017459 foe valve 1PCHEV334. The bonnet seal weld will be replaced to allow for valve disasembly. Code parts such as disc was replaced due to wear.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: RPhrdap, ISI Engineer Date: 6/26/07
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 6-19-07 to 6-26-07, 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: 6-26-07

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 1SG042H011
2.. Item Description: Steam Generator #2 Main Steam Line Constant Spring Hanger
3. N-5 Data Package Number: 1SG02-1 4. W.O. Number: 3021090
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the damaged load coupling and anti-friction collar..
8. ☒ ISI Flaw NDE Method of Flaw Detection: VT
Report Number: 07-VT-1150
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

CRDR# 2887685 provides the evaluation and suitability of this replacement.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial DMG Date 6-4-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 6-4-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 6-4-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMG Date 6-4-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Load Coupling	APN 00096412	2006-182	N/A	MR 1231398
Anti-Friction Collar	APN 00095950	N'A	PL-526	MR 1231398

18. Planner [signature] 6-4-07 Printed Name: DAVID M. GODDLET
Signature Date

19. ISI [signature] 6/4/07 Printed Name: R.P. JINDAP Log Entry RPJ
Signature Date

20. ANII [signature] 6-4-07 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: 6-3-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 3021090

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG: Main Steam System

5. (a) Applicable Construction Code ASME Section III NF, 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)
Hanger	ITT Grinnell	G2503	N/A	1SG042H011	1983	Repaired	YES
Load Coupling	Anvil	2006-182	N/A	1SG042H011	2006	Replacement	YES
Anti-Friction Collar	Anvil	N/A	N/A	1SG042H011	2006	Replacement	NO

7. Description of Work: Replace the load coupling and anti-friction collar.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 3021090 for hanger 1SG042H011. The load coupling was found broken. CRDR# 2887685 is evaluating the condition and provides for the replacement of the load coupling and anti-friction collar.

Pre-Pressured Test WO Review – ISI N/A

ANII

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: ISI ENG Date: 6-22-07

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 6-4-07 to 6-22-07, 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: 6-22-07

FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured by Anvil International, Inc. - 160 Frenchtown Rd. No.Kingstown, RI 02852
(name and address of NPT Certificate Holder)

2. Manufactured for Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address of Purchaser)

3. Location of installation Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address)

4. Type: C.S.S. (describe) | DRS 80 Rev.0 (Design Report or Load Capacity Data Sheet) | 2006 (year built)

5. ASME Code, Section III, Division 1: 1974 (edition) | Winter 1975 (addenda date) | 2 (class) | N/A (Code Case no.)

6. Identification

	(a) Component Support I.D. No.	(b) Material Specification No.	(c.) Canadian Registration No.	(d) Applicable Drawings With Last Rev. & Date	(e) National Board No.
(1)	2006- 182	Note 1	N/A	BH1586/A 2/3/05	N/A
(2)	2006- 183	Note 1	N/A	BH1586/A 2/3/05	N/A
(3)	2006- 184	Note 1	N/A	BH1586/A 2/3/05	N/A
(4)	2006- 185	Note 1	N/A	BH1586/A 2/3/05	N/A
(5)					
(6)					
(7)					
(8)					
(9)					
(10)					

7. Remarks:

Note 1: SA36, SA106 GR.B,

Note 2: Material Supplied to ASME Section II, 1992 Edition, 1993 Addenda

PO#: 500305883
SO#: 41-76968

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data 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.

(12/88) This form (E00075) may be obtained from the Order Dept., ASME. 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Component Support I.D. Nos. 2006-182 through 2006-185

CERTIFICATE OF DESIGN

Design Specification certified by H. R. Sonderegger P.E. State R.I. Reg. no 3537

Design Report certified by Ronald T. Wisniewski P.E. State R.I. Reg. no 4108

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2802 Expires 9/29/2007

Date 11-17-06 Name Anvil International, Inc. (NPT Certificate Holder) Signed [illegible]

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Rhode Island and employed by H.S.B. C.T. of Hartford, C.T. have inspected the component supports described in this Data Report on 11/17/06, and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports in accordance with the ASME Code, Section III, Division 1.

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

Date 11/17/06 Signed [illegible] (Authorized Inspection) Commissions RI 862 & B.N.I (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1MEWBE01 2. ASME Section III Class 3
3. Item Description: ESSENTIAL COOLING WATER HEAT EXCHANGER
4. N-5 Data Package Number: 1EW02-1 5. W.O. Number: 3022004
6. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Perform Base Material Weld Repairs on the Channel Head Covers of the essential Cooling
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:

Base Material Weld Repairs on the Channel Head Covers of the essential Cooling, as Identified by ,Engineering.

Repaired Areas to be Covered/Protected with Coating

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 3, 1974 Edition 1975 Winter 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 NBW Date 6-2-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial NBW Date 6-2-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial NBW Date 6-2-07 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial NBW Date 6-2-07 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.
1MEWBE01	N/A	N/A	N/A	N/A

19. Planner Mike Newell For JAMES I DAVIS 6-2-07 Printed Name: James I Davis
Signature Date

20. ISI [signature] 6/2/07 Printed Name: FRED POTEET
Signature Date

21. ANII [signature] 6-2-07 Printed Name: RG HOLSTROM
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: 06/02/2007

   Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

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

   Unit: 1

   Work Order Number 3022004

3. Work Performed by: Arizona Public Service

   Type of Code Stamp None

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: Essential Cooling Water (EW)

5. (a) Applicable Construction Code ASME Section III ND, Class 3 1974 Edition, Winter 1975 Addenda, N/A 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)
EW Heat Exchanger	Struther Wells Corporation	17606329132	14441	1MEWBE01	1978	Repaired	YES

7. Description of Work: Base Material Weld repair of Channel Heads & Channel head Covers of EW Heat Exchanger

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 3022004 performed Base Material repair on Base Material Weld repair of Channel Heads & Channel head Covers of EW Heat Exchanger, as Identified by Engineering.

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: [signature] IS; ENGINEER Date: 6-8-07

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 6-2-07 to 6-8-07, 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: 6-8-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1SG045H011
2.. Item Description: Steam Generator #2 Main Steam Line Constant Spring Hanger
3. N-5 Data Package Number: 1SG02-1 4. W.O. Number: 3022219
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the damaged load coupling and anti-friction collar..
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
CRDR# 2887685 provides the evaluation and suitability of this replacement.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial DMG Date 6-3-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 6-3-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 6-3-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMG Date 6-3-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Load Coupling	APN 00096412	2006-185	N/A	MR 1231779
Anti-Friction Collar	APN 00095950	N/A	PL-526	MR 1231779

18. Planner [signature] 6-3-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI [signature] 6/4/07 Printed Name: R. P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 6-4-07 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: 6-3-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 3022219

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG: Main Steam System

5. (a) Applicable Construction Code ASME Section III NF, 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)
Hanger	ITT Grinnell	G2504	N/A	1SG045H011	1982	Repaired	YES
Load Coupling	Anvil	2006-185	N/A	1SG045H011	2006	Replacement	YES
Anti-Friction Collar	Anvil	N/A	N/A	1SG045H011	2006	Replacement	NO

7. Description of Work: Replace the load coupling and anti-friction collar.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 3022219 for hanger 1SG045H011. The load coupling was found broken. CRDR# 2887685 is evaluating the condition and provides for the replacement of the load coupling and anti-friction collar.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: RPhdep, ISI Engineer Date: 6-22-2007
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 6-4-07 to 6-22-07, 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: 6-22-07

FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured by Anvil International, Inc. - 160 Frenchtown Rd. No.Kingstown, RI 02852
(name and address of NPT Certificate Holder)

2. Manufactured for Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address of Purchaser)

3. Location of installation Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address)

4. Type: C.S.S. (describe) DRS 80 Rev.0 (Design Report or Load Capacity Data Sheet) 2006 (year built)

5. ASME Code, Section III, Division 1: 1974 (edition) Winter 1975 (addenda date) 2 (class) N/A (Code Case no.)

6. Identification

	(a) Component Support I.D. No.	(b) Material Specification No.	(c.) Canadian Registration No.	(d) Applicable Drawings With Last Rev. & Date	(e) National Board No.
(1)	2006- 182	Note 1	N/A	BH1586/A 2/3/05	N/A
(2)	2006- 183	Note 1	N/A	BH1586/A 2/3/05	N/A
(3)	2006- 184	Note 1	N/A	BH1586/A 2/3/05	N/A
(4)	2006- 185	Note 1	N/A	BH1586/A 2/3/05	N/A
(5)					
(6)					
(7)					
(8)					
(9)					
(10)					

7. Remarks:

Note 1: SA36, SA106 GR.B,

Note 2: Material Supplied to ASME Section II, 1992 Edition, 1993 Addenda

PO#: 500305883
SO#: 41-76968

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data 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.

(12/88) This form (E00075) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Component Support I.D. Nos. 2006-182 through 2006-185

CERTIFICATE OF DESIGN

Design Specification certified by H. R. Sonderegger P.E. State R.I. Reg. no 3537

Design Report certified by Ronald T. Wisniewski P.E. State R.I. Reg. no 4108

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2802 Expires 9/29/2007

Date 11-17-06 Name Anvil International, Inc. (NPT Certificate Holder) Signed [illegible]

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Rhode Island and employed by H.S.B. C.T. of Hartford, C.T. have inspected the component supports described in this Data Report on 11/17/06, and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports in accordance with the ASME Code, Section III, Division 1.

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

Date 11/17/06 Signed [illegible] (Authorized Inspection) Commissions RI 862 A B.N.I (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1SG033H011
2.. Item Description: Steam Generator #1 Main Steam Line Constant Spring Hanger
3. N-5 Data Package Number: 1SG01-1 4. W.O. Number: 3022220
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the load coupling and anti-friction collar as part of CRDR 2887685 evaluation.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a failure of the ASME III pressure boundary or supports. Replacement is a preventive measure. RPI 6/4/07

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial DMG Date 6-3-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 6-3-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 6-3-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMG Date 6-3-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Load Coupling	APN 00096412	2006-183	N/A	MR 1231790
Anti-Friction Collar	APN 00095950	N/A	PL-526	MR 1231790

18. Planner [signature] 6-3-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI [signature] 6/4/07 Printed Name: R. P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 6-4-07 Printed Name: RL 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: 6-3-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 3022220

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG: Main Steam System

5. (a) Applicable Construction Code ASME Section III NF, 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)
Hanger	ITT Grinnell	G2501	N/A	1SG033H011	1983	Repaired	YES
Load Coupling	Anvil	2006-183	N/A	1SG033H011	2006	Replacement	YES
Anti-Friction Collar	Anvil	N/A	N/A	1SG033H011	2006	Replacement	NO

7. Description of Work: Replace the load coupling and anti-friction collar.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 3022220 for hanger 1SG033H011. The load coupling and anti-friction collar are being replaced for CRDR# 2887685 evaluation.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: RPhnda, ISI Engineer Date: 6-22-07
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 6-4-07 to 6-22-07, 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: 6-22-07

FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured by Anvil International, Inc. - 160 Frenchtown Rd. No.Kingstown, RI 02852
(name and address of NPT Certificate Holder)

2. Manufactured for Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address of Purchaser)

3. Location of installation Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address)

4. Type: C.S.S. (describe) DRS 80 Rev.0 (Design Report or Load Capacity Data Sheet) 2006 (year built)

5. ASME Code, Section III, Division 1: 1974 (edition) Winter 1975 (addenda date) 2 (class) N/A (Code Case no.)

6. Identification

	(a) Component Support I.D. No.	(b) Material Specification No.	(c.) Canadian Registration No.	(d) Applicable Drawings With Last Rev. & Date	(e) National Board No.
(1)	2006- 182	Note 1	N/A	BH1586/A 2/3/05	N/A
(2)	2006- 183	Note 1	N/A	BH1586/A 2/3/05	N/A
(3)	2006- 184	Note 1	N/A	BH1586/A 2/3/05	N/A
(4)	2006- 185	Note 1	N/A	BH1586/A 2/3/05	N/A
(5)					
(6)					
(7)					
(8)					
(9)					
(10)					

7. Remarks:

Note 1: SA36, SA106 GR.B,

Note 2: Material Supplied to ASME Section II, 1992 Edition, 1993 Addenda

PO#: 500305883
SO#: 41-76968

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data 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.

(12/88) This form (E00075) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

Component Support I.D. Nos. 2006-182 through 2006-185

CERTIFICATE OF DESIGN

Design Specification certified by H. R. Sonderegger P.E. State R.I. Reg. no 3537

Design Report certified by Ronald T. Wisniewski P.E. State R.I. Reg. no 4108

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2802 Expires 9/29/2007

Date 11-17-06 Name Anvil International, Inc. (NPT Certificate Holder) Signed [illegible]

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Rhode Island and employed by H.S.B. C.T. of Hartford, C.T. have inspected the component supports described in this Data Report on 11/17/06, and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports in accordance with the ASME Code, Section III, Division 1.

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

Date 11/17/06 Signed [illegible] (Authorized Inspection) Commissions RI 862 4 B.N.I. (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1SG036H011
2.. Item Description: Steam Generator #1 Main Steam Line Constant Spring Hanger
3. N-5 Data Package Number: 1SG01-1 4. W.O. Number: 3022221
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the load coupling and anti-friction collar as part of CRDR 2887685 evaluation.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a failure of the ASME III pressure boundary or supports. Replacement is a preventive measure. RPIndap 6/4/07
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial DMG Date 6-3-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 6-3-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 6-3-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial DMG Date 6-3-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Load Coupling	APN 00096412	2006-184	N/A	MR 1231792
Anti-Friction Collar	APN 00095950	N/A	PL-526	MR 1231792

18. Planner [signature] 6-3-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI RPIndap 6/4/07 Printed Name: R. P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 6-4-07 Printed Name: R. G. HOGESTROM
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: 6-3-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 3022221

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG: Main Steam System

5. (a) Applicable Construction Code ASME Section III NF, 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)
Hanger	ITT Grinnell	G2502	N/A	1SG036H011	1983	Repaired	YES
Load Coupling	Anvil	2006-184	N/A	1SG036H011	2006	Replacement	YES
Anti-Friction Collar	Anvil	N/A	N/A	1SG036H011	2006	Replacement	NO

7. Description of Work: Replace the load coupling and anti-friction collar.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 3022221 for hanger 1SG036H011. The load coupling and anti-friction collar are being replaced for CRDR# 2887685 evaluation.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: RPProdrup, ISI Engineer Date: 6-22-07
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 6-4-07 to 6-22-07, 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.

RB Lytton
Inspectors Signature

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

Date: 6-22-07

FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured by Anvil International, Inc. - 160 Frenchtown Rd. No.Kingstown, RI 02852
(name and address of NPT Certificate Holder)

2. Manufactured for Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address of Purchaser)

3. Location of installation Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address)

4. Type: C.S.S. (describe) DRS 80 Rev.0 (Design Report or Load Capacity Data Sheet) 2006 (year built)

5. ASME Code, Section III, Division 1: 1974 (edition) Winter 1975 (addenda date) 2 (class) N/A (Code Case no.)

6. Identification

	(a) Component Support I.D. No.	(b) Material Specification No.	(c.) Canadian Registration No.	(d) Applicable Drawings With Last Rev. & Date	(e) National Board No.
(1)	2006- 182	Note 1	N/A	BH1586/A 2/3/05	N/A
(2)	2006- 183	Note 1	N/A	BH1586/A 2/3/05	N/A
(3)	2006- 184	Note 1	N/A	BH1586/A 2/3/05	N/A
(4)	2006- 185	Note 1	N/A	BH1586/A 2/3/05	N/A
(5)					
(6)					
(7)					
(8)					
(9)					
(10)					

7. Remarks:

Note 1: SA36, SA106 GR.B,

Note 2: Material Supplied to ASME Section II, 1992 Edition, 1993 Addenda

PO#: 500305883
SO#: 41-76968

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data 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.

(12/88) This form (E00075) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

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

Component Support I.D. Nos. 2006-182 through 2006-185

CERTIFICATE OF DESIGN

Design Specification certified by H. R. Sonderegger P.E. State R.I. Reg. no 3537

Design Report certified by Ronald T. Wisniewski P.E. State R.I. Reg. no 4108

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2802 Expires 9/29/2007

Date 11-17-06 Name Anvil International, Inc. (NPT Certificate Holder) Signed [illegible]

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Rhode Island and employed by H.S.B. C.T. of Hartford, C.T. have inspected the component supports described in this Data Report on 11/17/06, and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports in accordance with the ASME Code, Section III, Division 1.

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

Date 11/17/06 Signed [illegible] (Authorized Inspection) Commissions RI 862 ABNF (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIAV997
2. Item Description: Pressure lock prevention check valve for 1JSICUV0653
3. N-5 Data Package Number: PCWO 000717991 4. W.O. Number: 3022457
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Valve replacement.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   This valve is being replaced due to the bonnet cannot be removed from the body, there is no failure of the ASME pressure boundary.
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition, 1976 Summer Addenda.
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial MAK Date 6-17-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MAK Date 6-17-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MAK Date 6-17-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial MAK Date 6-17-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
valve	APN 45004448	E122P-3-4	N/A	MR 1237234

18. Planner MAK 6-17-07 Printed Name: Morton T. Sullivan
    Signature Date
19. ISI [signature] 6/17/07 Printed Name: BILL LEHMAN Log Entry
    Signature Date
20. ANII R. Hogstrom per tele com MAK 6-17-07 Printed Name:
    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 Co.

   5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Date: 06-27-2007

Sheet: 1 of 2

Unit: 1

Work Order Number 3022457

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1976 Addenda, N/A 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)
Check Valve	Borg Warner	96SN0403	N/A	1PSIAV997	1996	Replaced	Yes
Check Valve	Borg Warner	E122P-3-4	N/A	1PSIAV997	1998	Replacement	Yes

7. Description of Work: Replaced check valve, remove and replace cover to body seal weld.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

   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. W.O. 3022457 replaced check valve 1PSIAV997.

Pre-Pressure Test work order review - ISI : N/A

ANII : N/A

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: RL B ISI ENG Date: 6/27/07
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 6-17-07 to 6-27-07, 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.

RG Signature
Inspectors Signature

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

Date: 6-27-07

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

1. Manufactured by BW/IP International, Inc., Valve Division, 701 First St., Williamsport, PA
(Name and Address of Manufacturer)
2. Manufactured for Arizona Public Service Co., P.O. Box 53940, Mail Station 9540, Phoenix, AZ
(Name and Address of Purchaser or Owner)
3. Location of Installation Palo Verde, 5801 So. Wintersburg Rd., Tonopah, AZ 85354
(Name and Address)
4. Pump or Valve Valve. Nominal Inlet Size 1" (inch) Outlet Size 1"

	(a) Model No., Series No. or Type	(b) Manufacturers' Serial No.	(c) Canadian Registration No.	(d) Drawing No.	(e) Class	(f) Nat'l. Bd. No.	(g) Year Built
(1)	Y-Pattern Check	E-122P-3-1	N/A	7500000487 R/B	1	N/A	1998
(3)	Y-Pattern Check	E-122P-3-2	N/A	7500000487 R/B	1	N/A	1998
(4)	Y-Pattern Check	E-122P-3-3	N/A	7500000487 R/B	1	N/A	1998
(5)	Y-Pattern Check	E-122P-3-4	N/A	7500000487 R/B	1	N/A	1998
(6)							
(7)							
(8)							
(9)							
(10)							

5. 1"-1605# Y-Pattern CHeck Valve
(Brief description of service for which equipment was designed)

6. Design Conditions 2485 (Pressure) psi 700 (Temperature) °F or Valve Pressure Class 1605 (1)
7. Cold Working Pressure 3852 psi at 100°F.
8. Pressure Retaining Pieces

Mark No.	Material Spec. No.	Manufacturer	Remarks
(a) Castings			
N/A			
(b) Forgings			
Body S/N 10, 11	SA182-F316	BW/IP International, Inc. Pump Div.	
12, 13			
Cover HT.#715891	SA479-316	Carpenter Technology Corp.	
Disc HT.#713514	SA479-316	Carpenter Technology Corp.	
S/N 15, 16, 17			
18			

(1) For manually operated valves only.

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

FORM NPV-1 (Back)

Mark No.	Material Spec. No.	Manufacturer	Remarks
(c) Bolting			
N/A			
(d) Other Parts			
N/A			

9. Hydrostatic test 5800 psi.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components. Section III, Div. I., Edition 1974, Addenda Summer 1976 (Date), Code Case No. N/A, Date 6-24-98

Signed BW/IP International, Inc., Valve Division (Manufacturer) by Debra Loudenslager

Our ASME Certificate of Authorization No. N1712 to use the N (N) (NPV) symbol expires 4/15/01 (Date).

CERTIFICATION OF DESIGN

Design information on file at BW/IP International, Inc. Valve Div., Williamsport, PA

Stress analysis report (Class 1 only) on file at BW/IP International, Inc. Valve Division Williamsport, PA

Design specifications certified by (1) Vasken Najarian

PE State AZ Reg. No. 10746

Stress analysis certified by (1) Ronald S. Farrell

PE State PA Reg. No. 035216-E

(1) Signature not required. List name only.

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State ~~or Province~~ of Pennsylvania and employed by Commercial Union Insurance Co. of Boston, MA have inspected the pump, or valve, described in this Data Report on 7-7th 11-24 19 98, and state that to the best of my knowledge and belief, the Manufacturer has constructed this pump, or valve, in accordance with the ASME Code, Section III.

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

Date 11-24 19 98

Charles Young (Inspector)

Commissions Pennsylvania 2392 (Nat'l Bd., State, Prov. and No.)

Charles Young

ASME SECTION XI – REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 1PSGEV642
2.. Item Description: 8" - 900# Anchor Darling Pressure Seal Check Valve
3. N-5 Data Package Number: 1SG01 4. W.O. Number: ~~3025606~~ 3028129 6-14-07
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Repair / modify hinge pin joint IAW "DF" 3025597 & MNCR 92-SG-1036
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Not a failure of the ASME III pressure boundary. DFWO# 3025597 evaluated the modification of the hinge pin joints.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

Initial [illegible] Date 6-14-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 6-14-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial [illegible] Date 6-14-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Modified Hinge Pin Bonnet	APN 45060244	N/A	8897880	MR 1234617
Modified Hinge Pin Bonnet	APN 45060244	N/A	8897880	MR 1234617

18. Planner [signature] 6-14-07 Printed Name: DAVID M. GOODLET
Signature Date

19. ISI [signature] 6-14-07 Printed Name: R.P. INDAP Log Entry RPI
Signature Date

20. ANII [signature] 6-14-07 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: 6/20/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 3028129

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG: Main Steam 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)
Valve	Anchor Darling	2N1513	N/A	1PSGEV642	1979	Repaired	YES
Modified Hinge Pin Bonnet	Anchor Darling	N/A	N/A	1PSGEV642	2007	Replacement	NO
Modified Hinge Pin Bonnet	Anchor Darling	N/A	N/A	1PSGEV642	2007	Replacement	NO

7. Description of Work: Repaired hinge pin joint iaw DFWO# 3025597

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

   N-416-2 ☐ 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# 3028129 for valve 1PSGEV642. The hinge pin bonnet assembly was repaired to a welded configuration from a pressure seal design iaw DFWO# 3025597. The replacement hinge pin bonnets were machined and installed iaw the DFWO disposition.

Pre-Pressured Test WO Review – ISI RBhdap 6/21/07

ANII RB Hyton 6-22-07

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: ISI ENGINEER Date: 7-13-07

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 6-14-07 to 7-13-07, 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.

RB Hyton

Inspectors Signature

Commissions: **NB 9685 "N" "I" AZ264**

National Board, State, Province, and Endorsements

Date: 7-13-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSIAHV0687
2. Item Description: LPSI / CS from SDHX 'A' Crosstie Isolation Valve
3. N-5 Data Package Number: 1SI06-1 4. W.O. Number: 3028361
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove the bonnet studs and replace with corrosion resistant material per MEE 04002. Replace the nuts if required. .
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   Not a failure of the ASME pressure boundary. Inspection based upon dry boric acid at bonnet joint
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial N/A Date J.D 6-14-07 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial N/A Date J.D 6-14-07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 6-14-07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial J.D Date 6-14-07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Fabricated Bonnet Studs	APN 43115015	N/A	OP29	1236699
Bonnet Nuts	APN 43120053	N/A	HT301372HC-E6	1236699

18. Planner [signature] 6-14-07 Printed Name: JAMES I. DAVIS
    Signature Date
19. ISI [signature] 6/14/07 Printed Name: R.L. BROWNING Log Entry RLB
    Signature Date
20. ANII [signature] 6-14-07 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: 06/19/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 3028361

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

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)
Valve	Borg-Warner	28639	896	1JSIAHV0687	1978	Repaired	YES
Bonnet Studs	N/A	N/A	N/A	Heat# OP29	2007	Replacement	NO
Bonnet Nuts	N/A	N/A	N/A	Heat# 301372	2007	Replacement	NO

7. Description of Work: Replace the bonnet studs with corrosion resistant material.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 3028361replaced the bonnet bolting in valve 1JSIAHV0687 with corrosion resistant materials as allowed per MEE 04002.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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: ISI Eng Date: 6-19-07

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 6-19-07 to 6-19-07, 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: 6-19-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIAV434
2. Item Description: CHECK VALVE ON LPSI 'A' DISCHARGE
3. N-5 Data Package Number: 1SI07-7 4. W.O. Number: 3029281
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replacement of bonnet fasteners
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   Not a failure of the ASME pressure boundary. Inspection based upon dry boric acid at bonnet joint
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

15. 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 SJM Date 6/17/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial SJM Date 6/17/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet studs	APN ~~43160015~~ 43115015 SJM 6/19/07	N/A	OP29	1237284
Bonnet nuts	APN 43120053	N/A	301372HC-E6	1237226

18. Planner [signature] 6/17/07 Printed Name: _____
    Signature Date
19. ISI [signature] 6-18-07 Printed Name: WILEY AHLSTROM Log Entry N/A
    Signature Date
20. ANII R. Hogstrom per telecon [signature] 6-18-07 Printed Name: _____
    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: 06/17/2007

Sheet: 1 of 2

Unit: 1

Work Order Number ~~3029279~~ 3029281

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 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)
Valve	Borg Warner	24663	567	1PSIAV434	1977	Repaired	YES
Bonnet Studs	N/A	N/A	N/A	1PSIAV434	2007	Replacement	NO
Bonnet Nuts	N/A	N/A	N/A	1PSIAV434	2007	Replacement	NO

7. Description of Work: Remove and inspect bonnet bolting to perform ISI inspection. Replace if required.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 302928 i replaced the bonnet bolting in valve 1PSIAV434 as required based on ISI inspection.

Pre-Pressured Test WO Review – ISI N/A

ANII

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: ISI ENG Date: 6-19-07

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 6-18-07 to 6-19-07, 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: 6-19-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1JSIAHV0684
2. Item Description: CNTMT SPRAY PUMP A DISCHARGE TO SD CLG HX A VALVE
3. N-5 Data Package Number: 1SI06-01 4. W.O. Number: 3029330
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replacement of bonnet fasteners
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   Not a failure of the ASME pressure boundary. Inspection based upon dry boric acid at bonnet joint
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

15. ASME Section XI Pressure Test Required: ☒ YES ☒ NO 6-19-07

Initial SJM Date 6/16/07 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial SJM Date 6/16/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial SJM Date 6/16/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	6/14/07 Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet studs	SJM APN ~~43160015~~ 43115015		OP29	01237285-0001
Bonnet nuts	APN ~~43160015~~ 43120053 SJM 6/19/07		301372	01237222-0001

18. Planner [signature] Signature 6/17/07 Date Printed Name: _____
19. ISI [signature] Signature 6-18-07 Date Printed Name: WILEY AHLSTROM Log Entry WITA
20. ANII R. Hogstrom for Telecon [signature] Signature 6-18-07 Date Printed Name: _____

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: 06/16/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 3029330

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 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)
Valve	Borg Warner	28636	893	1JSIAHV0684	1978	Repaired	YES
Bonnet Studs	N/A	N/A	N/A	1JSIAHV0684	2007	Replacement	NO
Bonnet Nuts	N/A	N/A	N/A	1JSIAHV0684	2007	Replacement	NO

7. Description of Work: Remove and inspect bonnet bolting to perform ISI inspection. Replace if required.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 3029330 replaced the bonnet bolting in valve 1JSIAHV0684 as required based on ISI inspection.

Pre-Pressured Test WO Review – ISI: NS

ANII: NA

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] ISI Eng Date: 6/19/07

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 6-18-07 to 6-19-07, 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: 6-19-07

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 1PSIAV485
2. Item Description: Containment Spray Pump "A" Discharge Check Valve
3. N-5 Data Package Number: 1SI06-1 4. W.O. Number: 3029356
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replacement of bonnet fasteners
8. ☐ ISI Flaw NDE Method of Flaw Detection:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   Not a failure of the ASME pressure boundary. Inspection based upon dry boric acid at bonnet joint

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

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

15. 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 SJM Date 6/17/07 16. Include a step in the W.O. to verify NIS-2 Form has been completed by ISI & ANII prior to approving INP525 Status.

Initial SJM Date 6/17/07 17. Include a step in the W.O. to record below all applicable numbers for replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet studs	APN ~~43160015~~ 43150015	N/A	OP29	1237285
Bonnet nuts	APN 43120053	N/A	4V70	1237232

18. Planner [signature] 6/17/07 Printed Name: _____
    Signature Date

19. ISI [signature] 6-18-07 Printed Name: WILEY AHLSTROM Log Entry WOT
    Signature Date

20. ANII R. Hoystron for telecom [signature] 6-18-07 Printed Name: _____
    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: 06/17/2007

Sheet: 1 of 2

Unit: 1

Work Order Number 3029356

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 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)
Valve	Borg Warner	27306	605	1PSIAV485	1977	Repaired	YES
Bonnet Studs	N/A	N/A	N/A	1PSIAV485	2007	Replacement	NO
Bonnet Nuts	N/A	N/A	N/A	1PSIAV485	2007	Replacement	NO

7. Description of Work: Remove and inspect bonnet bolting to perform ISI inspection. Replace if required.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

   N-416-2 ☐ 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# 3029356 replaced the bonnet bolting in valve 1PSIAV485 as required based on ISI inspection.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

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 Eng Date: 6-19-07

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 6-18-07 to 6-19-07, 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: 6-19-07