10 CFR 50.55a

A subsidiary of Pinnacle West Capital Corporation

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102-05325-CKS/TNW/RJR
August 17, 2005

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

Dear Sirs:

Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 2, Docket No. STN 50-529
Unit 2 Second 10-Year Interval – Twelfth Refueling Outage Inservice Inspection Summary

Pursuant to 10 CFR 50.55a 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 in the enclosure PVNGS Unit 2 Inservice Inspection Report for the twelfth refueling outage. This refueling outage was conducted from April 2, 2005 through May 20, 2005.

This letter does not make any commitments to the NRC.

Please contact Thomas N. Weber at (623) 393-5764 if you have any questions or require additional information.

Sincerely,

Daniel G. Marks
for CKS

CKS/TNW/RJR/ca

Enclosure

cc: B. S. Mallett
M. B. Fields
G. G. Warnick

A047

ENCLOSURE 1

SECOND 10-YEAR ISI INTERVAL

SUMMARY REPORT

TWELFTH REFUELING OUTAGE

PALO VERDE NUCLEAR GENERATING STATION

UNIT 2

PALO VERDE NUCLEAR GENERATING STATION

UNIT 2 INSERVICE INSPECTION REPORT

TWELFTH REFUELING OUTAGE

ARIZONA PUBLIC SERVICE
5801 S. WINTERSBURG ROAD
TONOPAH, AZ 85354

PREPARED BY: _____ DATE: 7/12/05

REVIEWED BY: _____ DATE: 7-13-05

APPROVED BY: _____ DATE: 7-20-05

COMMERCIAL SERVICE DATE: 09/19/86

REPORT DATE: 07/12/05

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UNIT 2 INSERVICE INSPECTION REPORT

1. Introduction

This report is a summary of the Inservice Inspection (ISI) examinations performed during the twelfth refueling outage at the Palo Verde Nuclear Generating Station (PVNGS) Unit 2. This report also includes all applicable examinations conducted since the last refueling outage. This was the first refueling for Interval 2, Period 3, which was conducted from April 2, 2005 through May 20, 2005. Palo Verde Unit 2 began commercial operation on September 19, 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. Augmented High Energy Piping systems in accordance with PVNGS UFSAR Section 6.6.8.

This report is a summary of the ISI examinations performed during the Third Interval through May 20, 2005. All of the examination report numbers listed in Appendix "A" for the twelfth refueling and examinations performed since the last Summary Report are in bold print.

2. Examination Summary

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.

Visual examination of 2SG033H017 (ASME Class 2 Item F1.20 Zone 44) identified that the weld between the I-beam and beam attachment (clip assembly) failed. The apparent cause of the failure was high cycle fatigue. Work order 2789760 was issued to modify the support to reduce the weld stresses. CRDR 2786278 evaluated this condition, the results of the analysis determined that ASME Code Stress Allowables continued to be maintained for the "As-Found" condition.

Documentation of non-rejectable indications detected during the performance are maintained on file.

3. Examination Techniques

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

Visual - VT	VT-1	General Condition
	VT-2	Leakage
	VT-3	Structural Condition
Surface	PT	Liquid Penetrant
	MT	Magnetic Particle
Volumetric	UT	Ultrasonic
	RT	Radiography

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. Accessibility

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. Personnel

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

6. Equipment and Materials

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

7. Repairs and Replacements

One repair and no replacements were performed as a result of ISI examinations during U2R12. The repair was as follows and is further addressed in Section 2 of the Summary.

ZONE	WO / CRDR	ITEM SUMMARY #	DISCREPANCY
44	2786278 / 2789760	2-044-SG-033-H017	Weld failure at I-beam attachment repaired

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

APPENDIX A

INSERVICE INSPECTION
SUMMARY REPORT

APPENDIX A

Definition of Terms

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

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

AHE -	Augmented high energy systems piping
B -	ASME Class 1 systems
BFLYWH -	Reactor coolant pump flywheels
C -	ASME Class 2 systems
F -	ASME Class 1 and 2 supports

Zone No - Area designation per PVNGS design

Comp/Sys - Component or system description

Insp Per - Inspection period

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

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

Item ID - Item identification per ISI program/zone drawings

Reports (VOL) - Volumetric exam report number

(SURF) - Surface exam report number

(VIS) - Visual exam report number

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

Definition of terms continued

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
AHE 5.51	47 MS SG1	One	12	12	47-1	99-2342	99-2324		
& 5.52					47-2	99-2343	99-2324		
					47-4	99-2438	99-2202		
					47-8	99-2439	99-2202		
					47-12	99-2440	99-2202		
					47-16	99-2441	99-2202		
					47-20	99-2442	99-2202		
					47-24	00-2476	00-2473		
					47-25	99-2344	99-2202		
					47-28	99-2297	99-2284		
					47-29	99-2298	99-2284		
					47-30	99-2345	99-2202		
	50 MS (West) SG2	Three	12	0	50-16	UT-05-039			
					50-20	UT-05-041			
					50-24	UT-05-042			
					50-25	UT-05-043			
					50-28	UT-05-045			
	51 Atmos Dump SG1	One	13	13	51-1	99-2286	99-2285		
					51-2	99-2287	99-2082		
					51-3	99-2288	99-2082		
					51-4	99-2289	99-2082		
					51-5	99-2290	99-2082		
					51-6	99-2291	99-2082		
					51-7	00-2209	00-2211		
					51-8A	00-2210	00-2212		
					51-8B	99-2292	99-2082		
					51-9	99-2293	99-2082		
					51-40	99-2294	99-2082		
					51-85	99-2295	99-2285		
					51-86	99-2296	99-2285		
		Two	14	14	51-26	UT-03-142	MT-03-112		
					51-27	UT-03-143	MT-03-113		
					51-28	UT-03-144	MT-03-121		
					51-29	UT-03-145	MT-03-120		
					51-30	UT-03-147	MT-03-114		
					51-31	UT-03-148	MT-03-115		
					51-32	UT-03-150	MT-03-097		
					51-33	UT-03-151	MT-03-094		
					51-34	UT-03-152	MT-03-090		
					51-37	UT-03-153	MT-03-074		
					51-39	UT-03-155	MT-03-111		
					51-87	UT-03-161	MT-03-075		
					51-88	UT-03-157	MT-03-086		
					51-89	UT-03-156	MT-03-088		
	53 Steam to Aux FW	One	10	10	53-11	99-2299	99-2083		
					53-12	99-2300	99-2083		
					53-13	99-2301	99-2154		PSE
					53-14	99-2302	99-2083		
					53-15	99-2303	99-2083		
					53-21	99-2304	99-2083		
					53-22	99-2305	99-2083		
					53-23	99-2306	99-2083		
					53-24	99-2307	99-2154		PSE
					53-25	99-2308	99-2083		
		Two	9	9	53-2	UT-02-093	MT-02-012		
					53-4	UT-02-094	MT-02-016		
					53-5	UT-02-095	MT-02-011		
					53-6	UT-02-096	MT-02-017		
					53-7	UT-02-097	MT-02-010		
					53-8	UT-02-098	MT-02-009		
					53-9	UT-02-099	MT-02-014		

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
AHE5.51 & 5.52					53-1	UT-02-092 UT-03-180	MT-02-013 MT-03-070		
					53-10	UT-02-100	MT-02-008		
	56 FW SG1	One	6	6	56-1	00-2432	00-2425		
					56-4	00-2433	00-2425		
					56-6	00-2477	00-2425		
					56-7	00-2478	00-2425		
					56-9	00-2479	00-2425		
					56-11	00-2480	00-2425		
	57 FW SG2	Three	6	0	57-1	UT-05-046			
					57-4	UT-05-047			
	60 Dwncmr FW SG1	One	9	9	60-7	99-2525	99-2477		
					60-8	00-2192	00-2083		
					60-9	00-2193 00-2194	00-2083		
					60-11	00-2195 00-2196	00-2083		
					60-12	00-2197 00-2198	00-2083		
					60-14	99-2526 00-2199 00-2200	99-2477		
					60-15	99-2527	99-2477		
					60-16	99-2528	99-2477		
					60-17	99-2529	99-2477		
		Two	5	5	60-2	UT-03-177	MT-03-123		
					60-3	UT-03-178	MT-03-124		
					60-4	UT-03-179	MT-03-125		
					60-5	UT-03-181	MT-03-126		
					60-6	UT-03-182	MT-03-127		
	61 Dwncmr FW SG2	Three	14	4	61-14	UT-05-048	MT-05-008		
					61-15	UT-05-049	MT-05-009		
					61-16	UT-05-050	MT-05-010		
					61-17	UT-05-051	MT-05-011		
	66 Blowdown SG1	One	10	10	66-1	99-2427	99-2478		
					66-2	99-2428	99-2318		
					66-3	99-2429	99-2318		
					66-4	99-2430	99-2318		
					66-5	99-2431	99-2318		
					66-7	99-2432	99-2318		
					66-8	99-2433	99-2318		
					66-9	99-2434	99-2318		
					66-25	99-2479	99-2478		
					66-28	99-2435	99-2318		
		Two	6	6	66-10	UT-03-103	MT-03-102		
					66-11	UT-03-112	MT-03-103		
					66-12	UT-03-114	MT-03-104		
					66-13	UT-03-117	MT-03-110		
					66-14	UT-03-118	MT-03-098		
					66-15	UT-03-119	MT-03-099		
	67 Blowdown SG2	Two	6	6	67-7	UT-03-108	MT-03-101		
					67-8	UT-03-106	MT-03-105		
					67-9	UT-03-105	MT-03-106		
					67-10	UT-03-110	MT-03-107		
					67-11	UT-03-102	MT-03-108		
					67-12	UT-03-101	MT-03-109		
AHE 5.61	51 Atmos Dump SG1	Two	20	20	51-65	UT-03-141	MT-03-076		
					51-66	UT-03-158	MT-03-073		
					51-67	UT-03-168	MT-03-083		
					51-68	UT-03-169	MT-03-084		
					51-69	UT-03-170	MT-03-085		

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INSERVICE INSPECTION SUMMARY REPORT

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
AHE 5.61					51-70	UT-03-171	MT-03-087		
					51-71	UT-03-172	MT-03-089		
					51-72	UT-03-173	MT-03-091		
					51-73	UT-03-176	MT-03-092		
					51-74	UT-03-174	MT-03-093		
					51-75	UT-03-175	MT-03-095		
					51-76	UT-03-154	MT-03-096		
					51-77	UT-03-159	MT-03-072		
					51-78	UT-03-160	MT-03-071		
					51-79	UT-03-162	MT-03-069		
					51-80	UT-03-163	MT-03-078		
					51-81	UT-03-164	MT-03-079		
					51-82	UT-03-165	MT-03-080		
					51-83	UT-03-166	MT-03-081		
					51-84	UT-03-167	MT-03-082		
AHE 5.81	47 MS SG1	One	7	7	47-3	99-2356	99-2202		
& 5.82					47-7	99-2357	99-2202		
					47-11	99-2359	99-2202		
					47-15	99-2360	99-2202		
					47-19	99-2361	99-2202		
					47-23	99-2362	99-2202		
					47-27	99-2358	99-2284		
	48 MS SG1	Two	8(1)	8(1)	48-3	UT-03-137	MT-03-063		
					48-7	UT-03-138	MT-03-066		
					48-11	UT-03-135	MT-03-062		
					48-15	UT-03-136	MT-03-064		
					48-19	UT-03-139	MT-03-065		
					48-23	UT-03-134	MT-03-116		
					48-27	UT-03-133	MT-03-068		
					48-34	UT-03-183	MT-03-067		
					48-35	UT-03-132	MT-03-077		
	50 MS (West) SG 2	Three	7	0	50-15	UT-05-038			
					50-19	UT-05-040			
					50-27	UT-05-044			
B 1.22	2 Closure Head	One	0	0	2-4	99-2386 99-2387 99-2388 99-2389	99-2390		Accessible Areas
B 1.30	1 Reactor Vessel	One	50%	50%	1-14	*			Exam 0 to 180 deg
B 1.40	2 Closure Head	One	33%	33%	2-1	99-2382 99-2383 99-2384 99-2385	99-2390		Exam 0 to 120 deg
		Two	33%	33%	2-1	UT-02-076	MT-03-145		Exam 120° to 240° (15' to 32')
B 2.11 & 2.12	5 PZR	One	66%	66%	5-2	99-2276 99-2277 99-2278 99-2279	99-2193		Exam 0 to 240 deg
					5-3	99-2276 99-2277 99-2278 99-2279	99-2193		1' long seam for 5-2
		Two	66%	66%	5-8	UT-02-025			Exam 0° - 240° (0' - 19' 5")
					5-6	UT-02-030 UT-02-032 UT-02-035 UT-02-038			1' of long seam
	3 SG1	One	33%	33%	3-5	99-2227 99-2228 99-2229 99-2230			Exam 0 - 120 deg

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 2.31 & 2.32			2	2	3-3	99-2251 99-2252 99-2253 99-2254			
					3-10	99-2247 99-2248 99-2249 99-2250			
					3-11	99-2227 99-2232 99-2233 99-2234			
		Two	1	1	3-105	UT-03-040			PSE
	4 SG2	Two	0	0	4-105	UT-03-041			PSE
B 2.40	3 SG1	One	50%	50%	3-6	99-2231 99-2232 99-2233 99-2234			Exam 0 - 180 deg
		Two	0	0	3-106	UT-03-042			PSE
					3-107	UT-03-193 UT-03-043			PSE PSE
	4 SG2	Two	50%	50%	4-106	UT-03-044			PSE
					4-107	UT-03-045 UT-03-194			PSE PSE
B 3. 90	1 Reactor Vessel	One	2	2	1-15	*			*Seperate Report by Wesdyne. Exam completed in 2R7
					1-18	*			
B 3.100	1 Reactor Vessel	One	2	2	1-15	*			
					1-18	*			
B 3.110	5 PZR	One	2	2	5-9	00-2379 00-2380 00-2381 00-2382			
					5-11	00-2341 00-2342 00-2343 00-2344			
		Two	2	2	5-10	UT-02-036 UT-02-039 UT-02-033 UT-02-027			Limited UT exam
					5-13	UT-02-031 UT-02-034 UT-02-040 UT-02-037			Limited UT exam
B 3.120	5 PZR	One	2	2	5-9	00-2386 00-2387			
					5-11	00-2353 00-2357			
	5 PZR	Two	2	2	5-10	UT-02-067			Inner radius
					5-13	UT-02-066			Inner radius
B 3.130	3 SG1	One	1	1	3-9	99-2243 99-2244 99-2245 99-2246			
		Two	1	1	3-100	UT-03-046			PSE
					3-101	UT-03-047			PSE
					3-102	UT-03-048			PSE

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 3.130	4 SG2	One	1	1	4- 9	00-2516 00-2517 00-2518 00-2519			
		Two	1	1	4-100	UT-03-049			PSE
					4-101	UT-03-050			PSE
					4-102	UT-03-051			PSE
B 3.140	3 SG1	One	1	1	3- 9	00-2521 00-2523			
		Two	1	1	3-100	UT-03-052			PSE
					3-101	UT-03-053			PSE
					3-102	UT-03-054			PSE
	4 SG2	One	1	1	4- 9	00-2522 00-2524			
		Two	1	1	4-100	UT-03-055			PSE
					4-101	UT-03-056			PSE
					4-102	UT-03-057			PSE
B 4.11	2 Closure Head	Two	0	0	Vent Nozzles			VT-03-864	NRC Order EA-03-009
		Three	0	0	Vent Nozzles		*	VT-05-493	Aug. BMI (EA-03-009) *Separate Westinghouse report
B 4.12	2 Closure Head	One	8	8	CEDM			00-2569	
		Two	8	8	CEDM			VT-02-412 VT-03-859	All nozzles Exam each time.
		Three	9	9	CEDM-Nozzles	*	*	VT-05-491	Aug. all (EA-03-009) *Separate Westinghouse report
		Three	9	9	CEDM-Nozzles			VT-05-585	
B 4.13	1 Reactor Vessel	One	5	5	Instru			00-2569	
		Two	5	5	Instru			VT-02-410 VT-03-862	NRC Order EA-03-009, All nozzles Exam each time.
		Three	6	6	INST. NOZZLE			VT-05-490 VT-05-584 VT-05-589	+ Aug BMI all (BL 2003-002)
B 4.20	5 PZR	One	12	12	heaters			99-2522 00-2569	
		Two	12	12	heaters			VT-02-413 VT-03-858	PSE & Aug. All stdpipe & htr noz. CE IB 89-06
		Three	12	12	PZR-HEATERs			VT-05-494	Aug. All stdpipe & htr noz. CE IB 89-06
B 5.40	20 PZR Surge	One	2	2	5-34	00-2426 00-2427 00-2428 00-2520	00-2111		
	31 PZR Safeties				5-29	00-2383 00-2384 00-2385 00-2429 00-2099	00-2089		
	29 PZR Spray	Two	2	2	5-33	RT-02-001	PT-02-030		
	31 PZR Safeties				5-31	UT-02-062 UT-02-064 UT-02-063 UT-02-061	PT-02-028		93% coverage acceptable per code case N-490
	20 PZR Surge	Three	2	0	5-34	UT-05-024		VT-05-495	Aug UT, BMI VT (IN 04-11)
	29 PZR Spray				5-33	UT-05-033		VT-05-505	Aug UT, BMI VT (IN 04-11)
	31 PZR Safeties				5-29	RT-05-004		VT-05-506	Aug RT, BMI VT (IN 04-11)
					5-29	UT-05-034			Aug UT (IN 04-11)
					5-30	RT-05-005			
					5-30	UT-05-035		VT-05-507	Aug UT, BMI VT (IN 04-11)

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 5.40					5-31	RT-05-006			Aug RT (IN 04-11)
					5-31	UT-05-036		VT-05-508	Aug UT, BMI VT (IN 04-11)
					5-32	RT-05-007			
					5-32	UT-05-037		VT-05-509	Aug UT, BMI VT (IN 04-11)
B 6. 10	2 Closure Head	One	18	18	1 thru 18		99-2332	99-2333	
		Two	18	18	19 thru 36		MT-02-156	VT-03-815	
B 6. 30	2 Closure Head	One	18	18	1 thru 18	00-2296	99-2335		Stud #18 credited to interval 1
		Two	18	18	18 thru 36	UT-02-083	MT-02-154 MT-02-155		Stud # 18 credited to period 1
B 6. 50	2 Closure Head	One	18	18	1 thru 18			99-2334	
		Two	18	18	19 thru 36			VT-03-819	
B 6.180	16 RCP 1A	One	5	5	1 thru 5	00-2394		99-2444 00-2441	
		Two	5	5	6 thru 10	UT-03-089		VT-02-357 VT-03-542	UT 6-10 + Aug VT all (IEIN 80-27 & IEB 82-02)
		Three	6	6	11 thru 16	UT-05-001		VT-05-474	UT 11-16 + Aug VT all (IEIN 80-27 & IEB 82-02)
	17 RCP 1B	One	5	5	1 thru 5	00-2394		99-2447 00-2441	
		Two	5	5	6 thru 10	UT-03-090		VT-02-361 VT-03-543	UT 6-10 + Aug VT all (IEIN 80-27 & IEB 82-02)
		Three	6	6	11 thru 16	UT-05-002		VT-05-476	UT 11-16 + Aug VT all (IEIN 80-27 & IEB 82-02)
	18 RCP 2A	One	5	5	1 thru 5	00-2394		99-2446 00-2441	
		Two	5	5	6 thru 10	UT-03-092		VT-02-364 VT-03-545	UT 6-10 + Aug VT all (IEIN 80-27 & IEB 82-02)
		Three	6	6	11 thru 16	UT-05-003		VT-05-478	UT 11-16 + Aug VT all (IEIN 80-27 & IEB 82-02)
	19 RCP 2B	One	5	5	1 thru 5	00-2394		99-2445 00-2441	
		Three	6	6	11 thru 16	UT-05-004		VT-05-480	UT 11-16 + Aug VT all (IEIN 80-27 & IEB 82-02)
		Two	5	5	6 thru 10	UT-03-094	MT-02-022 MT-02-023 MT-02-024 MT-02-025 MT-02-026 MT-02-027 MT-02-028 MT-02-029 MT-02-030 MT-02-031 MT-02-032 MT-02-033 MT-02-034 MT-02-035 MT-02-036 MT-02-037	VT-03-546	UT 6-10 + Aug VT all (IEIN 80-27 & IEB 82-02)
B 6.190	19 RCP 2B	Interval	16	16	Flange			VT-02-414	
B 6.200	16 RCP 1A	One	5	5	1 thru 5			99-2444 00-2441	
		Two	5	5	6 thru 10			VT-02-358 VT-02-359	Exam all, credit for 5
	17 RCP 1B	One	5	5	1 thru 5			99-2447 00-2441	
		Two	5	5	6 thru 10			VT-02-360 VT-02-363	Exam all, credit for 5
	18 RCP 2A	One	5	5	1 thru 5			99-2446 00-2441	

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 6.200		Two	5	5	6 thru 10			VT-02-365 VT-02-362	Exam all, credit for 5
	19 RCP 2B	One	5	5	1 thru 5			99-2445 00-2441	
		Two	5	5	6 thru 10			VT-02-245 VT-02-366 VT-02-367	Exam all, credit for 5
B 7.20	5 PZR	One	20	20	20 studs			99-2260 00-2249	
		Two	20	20	20 studs		MT-02-148	01-2051 VT-02-262 VT-02-282 VT-03-799	Includes IEB082-02 supplemental examinations
		Three	20	20	20 studs			VT-05-473	IEB 82-02
B 7.30	3 SG1	One	40	40	40 studs			99-2258 00-2247	
		Two	40	40	40 studs		MT-02-149 MT-02-150	VT-02-263 VT-02-266 VT-02-278 VT-02-279 VT-03-547	Includes IEB082-02 supplemental examinations PSE
		Three	40	40	40 studs			VT-05-471	IEB 82-02
	4 SG2	One	40	40	40 studs			99-2259 00-2248	
		Two	40	40	40 studs		MT-02-151 MT-02-152	VT-02-265 VT-02-280 VT-02-281 VT-03-548	Includes IEB082-02 supplemental examinations PSE
		Three	40	40	40 studs			VT-05-472	IEB 82-02
B 7.50	31 PZR Safeties	One	1	1	PSV-200			99-2261 99-2373 00-2250	
					PSV-201			99-2261 99-2373 00-2250	
					PSV-202			99-2261 99-2373 00-2250	
					PSV-203			99-2261 99-2373 00-2250	

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 7.50		Two	1	1	PSV-200		MT-02-038 MT-02-039 MT-02-040 MT-02-041 MT-02-042 MT-02-043 MT-02-044 MT-02-045 MT-02-046 MT-02-047 MT-02-048 MT-02-049 MT-02-050 MT-02-051 MT-02-052 MT-02-053 MT-02-054 MT-02-055 MT-02-056 MT-02-057 MT-02-058 MT-02-059 MT-02-060 MT-02-061	VT-02-108 VT-02-109 VT-02-110 VT-02-111 VT-02-112 VT-02-113 VT-02-114 VT-02-115 VT-02-116 VT-02-117 VT-02-118 VT-02-119 VT-02-120 VT-02-121 VT-02-122 VT-02-123 VT-02-124 VT-02-125 VT-02-126 VT-02-127 VT-02-128 VT-02-129 VT-02-130 VT-02-131 VT-03-537	Includes IEB082-02 supplemental examinations
					PSV-201		MT-02-062 MT-02-063 MT-02-064 MT-02-065 MT-02-066 MT-02-067 MT-02-068 MT-02-069 MT-02-070 MT-02-071 MT-02-072 MT-02-073 MT-02-074 MT-02-075 MT-02-076 MT-02-077 MT-02-078 MT-02-079 MT-02-080 MT-02-081 MT-02-082 MT-02-083 MT-02-084 MT-02-085	VT-02-132 VT-02-133 VT-02-134 VT-02-135 VT-02-136 VT-02-137 VT-02-138 VT-02-139 VT-02-140 VT-02-141 VT-02-142 VT-02-143 VT-02-144 VT-02-145 VT-02-146 VT-02-147 VT-02-148 VT-02-149 VT-02-150 VT-02-151 VT-02-152 VT-02-153 VT-02-154 VT-02-155 VT-03-538	Includes IEB082-02 supplemental examinations

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 7.50					PSV-202		MT-02-086 MT-02-087 MT-02-088 MT-02-089 MT-02-090 MT-02-091 MT-02-092 MT-02-093 MT-02-094 MT-02-095 MT-02-096 MT-02-097 MT-02-098 MT-02-099 MT-02-100 MT-02-101 MT-02-102 MT-02-103 MT-02-104 MT-02-105 MT-02-106 MT-02-107 MT-02-108 MT-02-109	VT-02-156 VT-02-157 VT-02-158 VT-02-159 VT-02-160 VT-02-161 VT-02-162 VT-02-163 VT-02-164 VT-02-165 VT-02-166 VT-02-167 VT-02-168 VT-02-169 VT-02-170 VT-02-171 VT-02-172 VT-02-173 VT-02-174 VT-02-175 VT-02-176 VT-02-177 VT-02-178 VT-02-179 VT-03-539	Includes IEB082-02 supplemental examinations
					PSV-203		MT-02-110 MT-02-111 MT-02-112 MT-02-113 MT-02-114 MT-02-115 MT-02-116 MT-02-117 MT-02-118 MT-02-119 MT-02-120 MT-02-121 MT-02-122 MT-02-123 MT-02-124 MT-02-125 MT-02-126 MT-02-127 MT-02-128 MT-02-129 MT-02-130 MT-02-131 MT-02-132 MT-02-133	VT-02-180 VT-02-181 VT-02-182 VT-02-183 VT-02-184 VT-02-185 VT-02-186 VT-02-187 VT-02-188 VT-02-189 VT-02-190 VT-02-191 VT-02-192 VT-02-193 VT-02-194 VT-02-195 VT-02-196 VT-02-197 VT-02-198 VT-02-199 VT-02-200 VT-02-201 VT-02-202 VT-02-203 VT-03-541	Includes IEB082-02 supplemental examinations
		Three	2	2	PSV-200			VT-05-576	Aug (IEB 82-002)
					PSV-202			VT-05-577	Aug (IEB 82-002)
	37 Charging	One	1	1	V-435			99-2113	
B 7.60	16 RCP 1A	One	5	5	1 thru 5			99-2444 00-2441	
		Two	5	5	6 thru 10			VT-03-512	Exam 16
	17 RCP 1B	One	5	5	1 thru 5			99-2447 00-2441	
		Two	5	5	6 thru 10			VT-02-257 VT-03-544	

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 7.60	18 RCP 2A	One	5	5	1 thru 5			99-2446 00-2441	
		Two	5	5	6 thru 10			VT-02-215 VT-02-216 VT-02-217 VT-02-218 VT-02-219 VT-02-220 VT-02-221 VT-02-222 VT-02-223 VT-02-224 VT-02-225 VT-02-226 VT-02-227 VT-02-228 VT-02-229 VT-02-230 VT-03-514	Exam all, credit for 5
	19 RCP 2B	One	5	5	1 thru 5			99-2445 00-2441	
		Two	5	5	6 thru 10			02-2001 VT 02-258	
B 7.70	21 SD Cooling A	One	1	1	UV-653			99-2321	
	22 SD Cooling B	One	1	1	UV-654			00-2324	
		Two	1	1	UV-652			VT-02-058	
	23 SI 1A	One	1	1	V-237			00-2567	
		Two	2	2	UV-634			VT-02-236	
					V-235			VT-02-237	
	24 SI 1B	One	1	1	V-543			99-2069	
		Two	2	2	V-245			VT-02-270	
					V-644			VT-02-242	
	25 SI 2A	One	1	1	V-540			99-2177	
		Two	1	1	V-217			VT-02-260	
	26 SI 2B	One	1	1	V-225			99-2091	
		Two	2	2	V-541			VT-02-320	
					V-624			VT-02-321	
	27 PZR Spray 1A	Two	1	1	V-100E			VT-02-371	
	28 PZR Spray 1B	One	2	2	V-241			99-2181 99-2372 00-2046	Reject Re-exam
					V-242			99-2182 99-2372 00-2046	Reject Re-exam
		Two	1	1	V-100F			VT-02-368	
	31 PZR Safeties	One	1	1	PSV-200			99-2505 00-2435	
		Two	1	1	PSV-202			VT-03-540	
	32 Drain 1A	One	2	2	V-234			99-2081	
					V-334			99-2081	
	33 Drain 1B	Two	2	2	V-235			VT-02-312	
					V-335			VT-02-311	
	34 Drain 2A	Two	2	2	V-233			VT-02-322	
					V-333			VT-02-323	
	37 Charging	One	1	1	PDV240			99-2346	
	38 Drain 1A	One	1	1	V-215			00-2097	
	39 HPSI A	One	1	1	V-523			00-2085	
		Two	2	2	V-522			VT-02-314	
					V-957			VT-02-313	
	40 HPSI B	Two	1	1	V-532			VT-02-324	
B 7.80	2 Closure Head	One	1	1	CEDM 92			00-2322	

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 7.80					CEDM 96			00-2322	
B 8.20	5 PZR	One	66%	66%	5-1	99-2394 99-2395 99-2396 99-2397	99-2193		Reject, Acceptable per MNCR 93-RC-2027
		Two	0	0	5-1	UT-02-056 UT-02-057 UT-02-058 UT-02-059	MT-02-018		Limited exam, Re-exam at 19 to 26 Rej - Acc per MNCR 93-RC-2027
B 8.30	3 SG1	One	33%	33%	3-1	99-2239 99-2240 99-2241 99-2242	99-2194		Exam 0 - 120 deg
		Two	33%	33%	3-104		MT-03-030		PSE
B 9.11	6 RCS Piping	One	7	7	1-27	*	00-2511		*Separate report by
& 9.12					1-30	*	00-2511		Wesdyne. Exams
					3-30	99-2215 99-2216 99-2217 99-2218	99-2548		
					4-30	99-2219 99-2220 99-2221 99-2222	99-2548		
					6-7	*	00-2511		completed in U2R7
					7-7	*	00-2511		
					17-2	00-2332	00-2290		
		Two	6	6	6-1	UT-03-189	MT-03-134		PSE
					7-1	UT-03-197	MT-03-144		PSE
					8-13	UT-03-146	MT-03-050		PSE
					8-16	UT-03-130	MT-03-059		PSE
					8-19	UT-03-200	MT-03-136		PSE
					10-13	UT-03-127	MT-03-052		PSE
					10-16	UT-03-129	MT-03-053		PSE
					10-19	UT-03-201	MT-03-138		PSE
					12-13	UT-03-104	MT-03-054		PSE
					12-16	UT-03-128	MT-03-055		PSE
					12-19	UT-03-196	MT-03-131		PSE
					14-13	UT-03-126	MT-03-056		PSE
					14-16	UT-03-149	MT-03-058		PSE
					14-19	UT-03-198	MT-03-135		PSE
					16-1	UT-02-120	MT-02-019		
					17-1	UT-02-116	MT-02-020		
					18-1	UT-02-121	MT-02-007		
					19-1	UT-02-079	MT-02-021		
					3-103	UT-03-187	MT-03-133		PSE
					4-103	UT-03-188	MT-03-132		PSE
	20 PZR Surge	One	1	1	20-1	00-2201	00-2111		
		Three	3	0	6-10	UT-05-025		VT-05-496	Aug BMI VT (IN 2004-11)
	21 SD Cooling A	One	3	3	6-11	00-2531 00-2532 00-2533 00-2535 00-2539	00-2112		
					21-18	00-2536 00-2537	00-2528		
					21-20	00-2534 00-2538	00-2113		
		Two	2	2	21-14	UT-02-125	PT-02-059		
					21-15	UT-02-126	PT-02-060		

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 9.11 & 9.12		Three	2	0	6-11	UT-05-026		VT-05-497	Aug UT & BMI VT (IN 2004-11), CC N-460
	22 SD Cooling B	One	2	2	22-11	00-2244 00-2245	00-2101		
					22-14	00-2246	00-2101		
		Two	3	3	7-9	UT-02-010 UT-02-011 UT-02-026	PT-02-017		
					22-1	UT-02-007	PT-02-016		
					22-17	UT-02-052	PT-02-041		
		Three	3	0	7-9	UT-05-027		VT-05-498	Aug UT, BMI VT (IN 04-11), CC N-460
	23 SI 1A	One	4	4	9-10	00-2234 00-2235 00-2236 00-2237	00-2100		
					23-1	00-2238	00-2100		
					23-2	00-2239	00-2100		
					23-4	00-2240 00-2241	00-2100		
		Two	0(1)	0(1)	23-6	UT-02-090 UT-02-091	PT-02-064		Limited UT exam, IN 97-19
		Three	2	0	9-10	UT-05-069		VT-05-499	Aug UT, BMI VT (IN 04-11)
	24 SI 1B	Two	3(1)	3(1)	24-14	UT-02-045 UT-02-050	PT-02-037		Limited UT exam
					24-16	UT-02-046 UT-02-048	PT-02-038		Limited UT exam
					24-19	UT-02-047 UT-02-051	PT-02-034		Limited UT exam
					24-6	UT-02-001 UT-02-003	PT-02-004		Limited UT exam, IN 97-19
		Three	3	0	11-10	UT-05-028		VT-05-500	Aug. BMI VT (IN 2004-11)
	25 SI 2A	One	2	2	25-26	99-2366	99-2078		
					25-29	99-2365	00-2084		
		Two	2(1)	2(1)	13-10	UT-02-112 UT-02-119 UT-02-122			
					25-1	UT-02-109	PT-02-058		
					25-4	UT-02-110 UT-02-113	PT-02-072		Limited UT exam
					25-6	UT-02-111 UT-02-114	PT-02-052		Limited UT exam, IN 97-19
		Three	1	0	13-10	UT-05-070		VT-05-501	Aug UT, BMI VT (IN 04-11)
	26 SI 2B	One	2	2	26-9	99-2367	99-2320		
					26-11	99-2368	99-2320		
		Two	1(1)	1(1)	26-17	UT-02-044 UT-02-049	PT-02-035		Limited UT exam
					26-6	UT-02-002 UT-02-004	PT-02-003		Limited UT exam, IN 97-19
		Three	3	0	15-9	UT-05-029		VT-05-502	Aug. BMI VT (IN 2004-11)
	28 & 29 PZR Spray	One	2	2	29-10	00-2114 00-2116	00-2088		
					29-11	00-2115 00-2117	00-2088		
		Two	1	1	29-1	UT-02-068 UT-02-124	PT-02-026		
		Three	2	2	29-1	UT-05-057	PT-05-021		PSE
					29-2	UT-05-058	PT-05-022		PSE Limited UT 50% TEE
					29-3	UT-05-059	PT-05-023		PSE Limited UT 50% TEE
					29-4	UT-05-060	PT-05-024		PSE
					29-5	UT-05-061	PT-05-026		PSE

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 9.11					29-14	UT-05-062	PT-05-027		PSE
& 9.12	31 PZR Safeties	One	1	1	31-1	00-2354	00-2089		
		Two	2	2	31-10	UT-02-029	PT-02-027		
					31-9	UT-02-028	PT-02-029		
	36 Letdown	Two	1	1	36-75	UT-02-106	PT-02-070		
B 9.21	27 PZR Spray 1A	One	4	4	9-11		00-2102		
& 9.22					27-42		00-2102		
					27-43		00-2102		
					27-44		00-2102		
		Two	3	3	27-10		PT-02-006		
					27-16		PT-02-008		
					27-8		PT-02-007		
		Three	4	0	9-11			VT-05-503	Aug. BMI VT (IN 04-11)
	28 PZR Spray 1B	One	4	4	28-31		99-2213		
					28-32		99-2213		
					28-39		99-2213		
					28-40		99-2213		
		Two	4	4	11-11		PT-02-040		
					28-11		PT-02-010		
					28-20		PT-02-011		
					28-9		PT-02-009		
		Three	3	0	11-11			VT-05-504	Aug. BMI VT (IN 04-11)
	30 Aux PZR Spray	One	2(2)	2(2)	30-1	00-2525 00-2529	00-2527		88-08 letter
					30-2	00-2526 00-2530	00-2527		88-08 letter
					30-7		99-2076		
					30-13		99-2076		
		Two	2	2	30-5		PT-02-074		
					30-6		PT-02-073		
		Three	0	0	30-1	UT-05-063	PT-05-028		PSE Limited UT 50% TEE
					30-2	UT-05-064	PT-05-029		PSE Limited UT 50% Valve
					30-7		PT-05-030		PSE
	32 Drain 1A	One	3	3	8-18		99-2079		
					32-1		99-2079		
					32-2		99-2079		
		Three	0	0	8-18			VT-05-510	Aug. BMI VT (IN 04-11)
	33 Drain 1B	Two	3	3	10-18		PT-02-051		
					33-1		PT-02-048		
					33-5		PT-02-049		
		Three	0	0	10-18			VT-05-511	Aug. BMI VT (IN 04-11)
	34 Drain 2A	Three	3	0	12-18			VT-05-512	Aug. BMI VT (IN 04-11)
	36 Letdown	One	4	4	36-8		99-2191		
					36-9		99-2191		
					36-28		99-2180		
					36-35		99-2180		
		Two	6	6	36-25		PT-02-065		
					36-26		PT-02-066		
					36-43		PT-02-067		
					36-44		PT-02-068		
					36-45		PT-02-069		
					36-80		PT-02-071		
		Three	9	0	14-18			VT-05-513	Aug. BMI VT (IN 04-11)
	37 Charging	One	5	5	37-41		99-2347		
					37-42		99-2347		
					37-43		99-2347		
					37-45		99-2347		
					37-47		99-2347		
		Two	7	7	13-11		PT-03-015		
					37-28		PT-03-014		

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 9.21					37-29		PT-02-053		
& 9.22					37-30		PT-02-054		
					37-32		PT-02-055		
					37-33		PT-02-056		
					37-34		PT-02-057		
		Three	6	0	13-11			VT-05-514	Aug. BMI VT (IN 04-11)
	38 Drain 1A	Two	1	1	38-1		PT-02-062		
	39 HPSI A	One	2	2	39-1		99-2080		
					39-5		99-2080		
		Two	3	3	39-12	UT-02-022	PT-02-013		
					39-13	UT-02-021	PT-02-014		
					39-24	UT-02-015 UT-02-016	PT-02-019		
	40 HPSI B	One	3	3	40-1		00-2103		
					40-2		00-2103		
					40-3		00-2103		
		Two	2	2	40-6	UT-02-019	PT-02-012		
					40-7	UT-02-020	PT-02-020		
B 9.31	6 RCS Piping	One	1	1	9-8	00-2330 00-2331	00-2289		
		Two	1	1	13-8	UT-02-118 UT-02-123	MT-02-006		
B 9.32	6 RCS Piping	One	1	1	8-17		99-2068		
		Two	1	1	13-9		MT-02-157		
	22 SD Cooling B	One	1	1	22-7A		00-2203		
B 9.40	30 Aux. Pzr Spray	Three	0	0	30-14		PT-05-031		PSE
					30-15		PT-05-032		PSE
	32 Drain 1A	One	1	1	32-6		99-2079		
	33 Drain 1B	Two	1	1	33-6		PT-02-050		
	34 Drain 2A	Two	1	1	34-6		PT-02-061		
	38 Drain 1A	One	1	1	38-5		00-2098		
B10.10	36 Letdown	One	1	1	RC-091-H005		99-2180		
					RC-091-H006		99-2180		
		Two	1	1	RC-091-H006		PT-02-005		
B12.20	19 RCP 2B	Interval	1	1	RCP 2B casing			VT-02-072	
B12.50	24 SI 1B	Interval	3	1	V-245			VT-03-698	
	25 SI 2A				V-540			VT-03-773	
B13.10	1 Reactor Vessel	One	100%	100%	Access areas			00-2556	
		Two	100%	100%	Access areas			VT-03-811	
B14.10	2 Closure Head	One	2	2	CEDM-10-76	00-2329	00-2335		
					CEDM-10-83	00-2329	00-2335		
					CEDM-9-76	00-2328	00-2335		
					CEDM-9-83	00-2328	00-2335		
		Two	2	2	CEDM-10-78	UT-02-088	PT-02-079		
					CEDM-10-88	UT-02-089	PT-02-081		
					CEDM-9-78	UT-02-086	PT-02-078		
					CEDM-9-88	UT-02-087	PT-02-080		
B15.10	2 Closure Head	Two	0	0	Head			VT-03-863	NRC Order EA-03-009
		Three	0	0	Head			VT-05-492	Aug. BMI (EA-03-009)
B15.10 Thru 15.70	RCS Piping	One	ALL	ALL	PressBound			*	* RR# 11 & 12 99-2410, 99-2522, 00-2001, 00-2042, 00-2043, 00-2047, 00-2077, 00-2191, 00-2150, 00-2213, 00-2262, 00-2512, 00-2564, 00-2569, 00-2573, 01-2001
		Two	ALL	ALL	PressBound			*	* RR# 11 & 12 VT-02-409, VT-03-501, VT-03-502, VT-03-813, VT-03-814, VT-03-856, VT-03-860, VT-03-869, VT-03-870, VT-03-875

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.10	.	Three	All	All	PressBound			VT-05-586	Each refueling outage
	20 PZR Surge	One	2	2	RC-028-H001			99-2151	
					RC-028-H002			99-2152	
		Two	2	2	RC-028-H842			VT-03-494	
					RC-028-H844			VT-03-495	
	21 SD Cooling A	One	7	7	RC-051-H001			00-2118	support deleted
					RC-051-H002			00-2119	
					RC-051-H003			00-2120	
					RC-051-H821			00-2121	
					SI-240-H010			99-2337	
					SI-240-H011			99-2338	
					SI-240-H013			99-2339	
		Two	7	7	RC-051-H004			VT-02-038	Deleted
					RC-051-H005			VT-02-037	
					SI-240-H002			VT-02-018	
					SI-240-H011			VT-03-788	PSE
					SI-240-H012			VT-02-017	
					SI-240-H822			VT-02-016	
					SI-240-H823			VT-02-039	
					SI-240-H824			VT-02-040	
	22 SD Cooling B	One	4	4	RC-068-H005			00-2104	
					RC-068-H006			00-2105	support deleted
					SI-193-H017			00-2106	
					SI-193-H019			00-2107	support deleted
		Two	4	4	SI-193-H008			VT-02-012	
					SI-193-H009			VT-02-014	
					SI-193-H020			VT-02-015	
					SI-193-H025			VT-02-013	
	23 SI 1A	One	2	2	SI-207-H003			00-2086	
					SI-207-H005			00-2087	support deleted
		Two	2	2	SI-207-H007			VT-02-243 VT-02-244	
					SI-207-H011			VT-02-235	
	24 SI 1B	One	2	2	SI-223-H003			99-2117	
					SI-223-H004			99-2523	support deleted
		Two	2	2	SI-223-H001			VT-02-241	
					SI-223-H002			VT-02-240	
	25 SI 2A	One	2	2	SI-156-H007			99-2094	support deleted
					SI-156-H009			99-2099	
		Two	1	1	SI-160-H001			VT-02-238	
	26 SI 2B	One	2	2	SI-179-H009			99-2524	support deleted
					SI-179-H011			99-2171	
		Two	3	3	SI-175-H021			VT-02-315	
					SI-175-H022			VT-02-317	
					SI-175-H023			VT-03-534	
	27 PZR Spray 1A	One	9	9	RC-062-H026			99-2153	
					RC-062-H027			99-2203	
					RC-062-H028			99-2155	
					RC-062-H029			99-2156	support deleted
					RC-062-H030			99-2157	
					RC-062-H031			99-2158	support deleted
					RC-062-H032			99-2159	
					RC-062-H033			99-2504	
					RC-062-H034			99-2160	support deleted
		Two	8	8	RC-016-H005			VT-02-344	
					RC-016-H006			VT-02-345	
					RC-016-H007			VT-02-346	
					RC-016-H015			VT-02-347	
					RC-062-H035			VT-02-348	
					RC-062-H036			VT-02-349	
					RC-062-H037			VT-02-350	

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.10					RC-062-H038			VT-02-351	
	28 PZR Spray 1B	One	8	8	RC-017-H024			99-2144	
					RC-017-H034			99-2145	
					RC-017-H036			99-2146	
					RC-017-H038			99-2147	
					RC-017-H039			99-2148	support deleted
					RC-017-H040			99-2149	
					RC-017-H041			99-2150	support deleted
					RC-017-H042			99-2503	
		Two	8	8	RC-017-H043			VT-02-379	
					RC-017-H044			VT-02-381	
					RC-017-H045			VT-02-380	
					RC-017-H046			VT-02-382	
					RC-018-H009			VT-02-383	
					RC-018-H010			VT-02-384	
					RC-018-H011			VT-02-385	
					RC-018-H012			VT-02-378	
	29 PZR Spray	One	2	2	RC-018-H016			00-2090	
					RC-018-H018			00-2091	
		Two	1	1	RC-018-H017			VT-02-411	
	32 Drain 1A	One	2	2	RC-060-H00A			99-2031	support deleted
					RC-060-H00B			99-2127	support deleted
	33 Drain 1B	Two	2	2	RC-058-H00A			VT-02-309	
					RC-058-H00B			VT-02-310	
	34 Drain 2A	Two	2	2	RC-096-H00A			VT-02-318	
					RC-096-H00B			VT-02-319	
	36 Letdown	One	9	9	RC-091-H001			99-2204	
					RC-091-H005			99-2197	
					RC-091-H006			99-2255	
					RC-091-H00B			99-2206	support deleted
					RC-091-H00D			99-2207	
					RC-091-H00E			99-2199	support deleted
					RC-091-H00Y			99-2208	
					RC-091-H00Z			99-2205	
					RC-091-H0AA			99-2209	
					RC-091-H0AK			99-2210	
		Two	10	10	RC-091-H002			VT-02-372	
					RC-091-H006			VT-02-019	
					RC-091-H00P			VT-02-376	
					RC-091-H00Q			VT-02-377	
					RC-091-H00R			VT-03-476	
					RC-091-H00S			VT-03-497	
					RC-091-H00T			VT-03-498	
					RC-091-H0AJ			VT-02-373	
					RC-091-H0AP			VT-02-374	
					RC-091-H0AQ			VT-02-375	
	37 Charging	One	14	14	CH-005-H002			99-2376	support deleted
					CH-005-H003			99-2377	
					CH-005-H007			99-2378	Expansion
					CH-005-H013			99-2379	Expansion
					CH-005-H025			99-2110	
					CH-005-H026			99-2348	support deleted
					CH-005-H027			99-2349	
					CH-005-H028			99-2350	
					CH-005-H030			99-2351	
					CH-005-H034			99-2352	
					CH-005-H035			99-2353	
					CH-005-H036			99-2354	
					CH-005-H042			99-2111 99-2506 00-2076	Reject Re-exam

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.10					CH-005-H043			99-2380	support deleted
					CH-005-H044			99-2381	
					CH-005-H0AA			99-2112	support deleted
		Two	9	9	CH-005-H013			VT-02-330	
					CH-005-H017			VT-02-332	
					CH-005-H018			VT-02-333	
					CH-005-H019			VT-02-329	
					CH-005-H020			VT-02-337 VT-02-339	
					CH-005-H021			VT-02-334 VT-02-338	
					CH-005-H022			VT-02-335	
					CH-005-H032			VT-02-336	
					CH-005-H037			VT-02-331	
	39 HPSI A	One	4	4	SI-248-H026			99-2089	support deleted
					SI-248-H027			99-2088	
					SI-248-H028			99-2087	
					SI-248-H030			99-2092	
		Two	5	5	SI-248-H017			VT-02-304	
					SI-248-H018			VT-02-305	
					SI-248-H019			VT-02-307	
					SI-248-H020			VT-02-308	
					SI-248-H029			VT-02-306	
	40 HPSI B	One	3	3	SI-199-H013			00-2108	
					SI-199-H014			00-2109	
					SI-199-H021			00-2110	support deleted
		Two	4	4	SI-199-H015			VT-02-326	
					SI-199-H016			VT-02-327	
					SI-199-H017			VT-02-328	
					SI-199-H018			VT-02-325	
F 1.40	3 SG1	One	1	1	3-40			99-2224	
		Two	0	0	3-140			VT-03-817	PSE
	4 SG2	Two	1	1	4-140			VT-03-818	PSE
	5 PZR	One	0	0	5-40			99-2225	
	16 RCP 1A	One	2	2	16-17			99-2448	
					16-18			99-2449	
		Two	4	4	16-12			VT-02-355	
					16-13			VT-02-388	
					16-14			VT-02-389	
					16-15			VT-02-390	
	17 RCP 1B	One	2	2	17-17			99-2450	
					17-18			99-2451	
		Two	4	4	17-12			VT-02-356	
					17-13			VT-02-391	
					17-14			VT-02-392	
					17-15			VT-02-393	
	18 RCP 2A	One	4	4	18-12			99-2452	
					18-13			99-2453	
					18-14			99-2454	
					18-15			99-2455	
		Two	2	2	18-17			VT-02-231 VT-02-232	
					18-18			VT-02-233 VT-02-234	
	19 RCP 2B	One	4	4	19-12			99-2456	
					19-13			99-2457	
					19-14			99-2458	
					19-15			99-2459	
		Two	2	2	19-17			VT-03-771	
					19-18			VT-03-772	

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
FLYWHL	16 RCP 1A	One	4	4	Flywheel	00-2202			
	17 RCP 1B				Flywheel	00-2164			
	18 RCP 2A				Flywheel	00-2253			
	19 RCP 2B				Flywheel	00-2254			
	16 RCP 1A	Two	4	4	Flywheel	UT-02-084			
	17 RCP 1B				Flywheel	UT-02-085			
	18 RCP 2A				Flywheel	UT-02-082			
	19 RCP 2B				Flywheel	UT-02-081			
C 1.10	41 SG1	One	1 (50%)	1 (50%)	41-3	00-2292 00-2293 00-2294 00-2295			exam 180 - 360 deg
			1 (50%)	1 (50%)	41-4	00-2279 00-2280 00-2281 00-2282			exam 180 - 360 deg
		Two	0	0	41-106	UT-03-059			PSE
					41-105	UT-03-058			PSE
	68 Regen HTEXCH	Three	3	3	68-3	UT-05-015			
		Three	3	3	68-5	UT-05-017			
		Three	3	3	68-7	UT-05-019			
	69 Letdown HTEXCH	One	50%	50%	69-1	99-2436			exam 0 - 180 deg
		Three	50%	50%	69-1	UT-05-022			180° - 360°
	84 SD Cooling A	Two	50%	50%	74-123	UT-03-107			
	87 SD HTEXCH B	Three	50%	50%	75-78	UT-05-067			180° - 360°
C 1.20	41 SG1	One	1 (50%)	1 (50%)	41-5	00-2230 00-2231 00-2232 00-2233			exam 180 - 360 deg
		Two	0	0	41-107	UT-03-060			PSE
		Three	2	2	68-4	UT-05-016			
					68-6	UT-05-018			
C 1.30	41 SG1	One	1 (50%)	1 (50%)	41-1	99-2235 99-2236 99-2237 99-2238			exam 0 - 180 deg
	41 SG1	Two	0	0	41-104	UT-03-061			PSE
	42 SG2	Two	1 (50%)	1 (50%)	42-104	UT-03-062			PSE
	68 Regen HTEXCH	Three	4	4	68-1	UT-05-013			
					68-2	UT-05-014			
					68-8	UT-05-020			
					68-9	UT-05-021			
	69 Letdown HTEXCH	One	50%	50%	69-2	99-2437			180° - 360°
		Three	50%	50%	69-2	UT-05-023			180° - 360°
	84 SD Cooling A	Two	50%	50%	74-124	UT-03-109			
	87 SD HTEXCH B	Three	50%	50%	75-79	UT-05-068			180° - 360°
C 2.21 & 2.22	41 SG1	One	1	1	41-16	00-2349 00-2350	00-2336		
		Two	4	4	41-102	UT-03-063 UT-03-073	MT-03-031		PSE Inner radius
					41-103	UT-03-064 UT-03-074	MT-03-032		PSE Inner radius
					41-109	UT-03-065	MT-03-033		PSE
					41-110	UT-03-066	MT-03-034		PSE
	42 SG2	One	1	1	42-16	00-2351 00-2352	00-2337		
		Two	0	0	42-100	UT-03-067	MT-03-035		PSE
					42-101	UT-03-068	MT-03-036		PSE

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
C 2.21 & 2.22					42-102	UT-03-069 UT-03-075	MT-03-037		PSE Inner radius
					42-103	UT-03-070 UT-03-076	MT-03-038		PSE Inner radius
					42-114	UT-03-071	MT-03-039 MT-03-041		PSE Inner radius RR # 8
					42-115	UT-03-072	MT-03-040 MT-03-042		PSE Inner radius RR # 8
	84 SD Cooling A	Two	1	1	74-122	UT-03-100 UT-03-113	MT-03-117		Inner radius
	87 SD HTEXCH B	Three	1	1	75-76	UT-05-066 UT-05-009	MT-05-007		Inner radius
C 3.10	41 SG1	One	1	1	41-42		00-2176		270 deg
		Two	1	1	41-112	UT-03-077	MT-03-043		PSE
					41-113	UT-03-078	MT-03-044		PSE
	68 Regen HTEXCH	Three	2	2	68-10		PT-05-001		
					68-11		PT-05-002		
C 3.20	43 MS SG1	One	1	1	SG-036-H017		99-2325 00-2175		
		Two	1	1	SG-036-H012		MT-02-142		
	44 MS SG1	Two	2	2	SG-033-H015		MT-02-141		
					SG-033-H016		MT-02-143		
	45 MS SG2	One	1	1	SG-042-H014		99-2326		
		Two	1	1	SG-042-H012		MT-02-144		
	46 MS SG2	Two	1	1	SG-045-H012		MT-02-153		
	54 FW SG1	One	0	0	SG-002-H001		99-2322		
	55 FW SG2	One	1	1	SG-005-H001		99-2323		
					SG-005-H009		00-2300 00-2311		
	62 Aux FW SG1	Two	1	1	AF-018-H001		PT-03-044		
	64 Blowdown SG1	One	3	3	SG-039-H015		00-2078		
					SG-039-H017		00-2079		
					SG-053-H001		00-2073		support deleted
		Two	2	2	SG-039-H001		MT-02-004		
					SG-053-H005		MT-02-003 PT-02-022		
	65 Blodown SG2	One	2	2	SG-048-H020		00-2080		
					SG-052-H001		00-2045		support deleted
		Two	3	3	SG-048-H014		MT-03-122		
					SG-048-H016		MT-02-005		
					SG-048-H026		MT-03-061		
	71 LPSI Discharge A	One	1	1	SI-087-H011		99-2200		
	76 CS Suction	One	1	1	SI-009-H004		99-2214		96% covrg , Accept. per code case N490
	77 CS Discharge A	Three	1	1	SI-079-H007		PT-05-003		
	80 CS Discharge B	Three	1	1	SI-119-H005		PT-05-004		
	83 SD Cooling A	Two	2	2	SI-087-H004		PT-03-043		
					SI-090-H001		PT-03-045		
	83 SD Cooling A	Three	2	2	SI-070-H001		PT-05-008		
					SI-070-H006		PT-05-009		
	86 SD Cooling B	Three	2	2	SI-072-H001		PT-05-010		
					SI-072-H012		PT-05-011		
	88 East Wrap	One	1	1	SI-072-H013		99-2398		
	89 East Wrap	One	1	1	SI-194-H014		99-2272		
	91 West Wrap	One	4	4	SI-070-H009		99-2178		
					SI-070-H011		99-2178		
					SI-070-H012		99-2178		
					SI-070-H016		99-2178		
	92 West Wrap	One	1	1	SI-241-H021		99-2179		
		Two	2	2	SI-239-H001		PT-03-026		
					SI-241-H016		PT-03-027		

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
C 3.20	93 West Wrap	Two	1	1	SI-089-H013		PT-03-047		
	94 LPSI A	Two	2	2	SI-070-H005		PT-03-038		
					SI-070-H008		PT-03-039		
	95 LPSI B	Three	1	1	SI-194-H006		PT-05-014		CC N-460
	99 LPSI to Loop 2B	Two	1	1	SI-174-H013		PT-02-046		
	100 LPSI A Suction	One	1	1	SI-369-H001		99-2319		
		Two	1	1	84-5		PT-03-063		
	101 LPSI B Suction	Three	1	1	85-5		PT-05-015		
	102 SI Suction A	One	3	3	SI-307-H002		00-2305		
					SI-307-H003		00-2378		
					SI-307-H015		00-2306		
	103 Refuel Suction A	Two	2	2	CH-142-H020		PT-02-024		
					CH-424-H006		PT-03-052		
	104 SI Suction B	Two	1	1	SI-308-H003		PT-02-076		
	105 Refuel Suction B	Three	3	3	CH-149-H002		PT-05-016		
			3	3	CH-149-H008		PT-05-017		
			3	3	CH-425-H006		PT-05-018		
	113 HPSI Discharge	One	1	1	SI-107-H022		00-2214		
C 3.30	72 LPSI Pump A	One	3	3	72-3A		99-2226		
					72-3B		99-2226		
					72-3C		99-2226		
	75 LPSI Pump B	Two	3	3	73-3A		PT-03-035		
					73-3B		PT-03-036		
					73-3C		PT-03-037		
	78 CS Pump A	Two	3	3	80-3A		PT-03-023		
					80-3B		PT-03-024		
					80-3C		PT-03-025		
	81 CS Pump B	Three	3	3	81-3A		PT-05-005		
	81 CS Pump B	Three	3	3	81-3B		PT-05-006		
	81 CS Pump B	Three	3	3	81-3C		PT-05-007		
	116 HPSI A Pump	One	4	4	116-1A		00-2558		
					116-1B		00-2558		
					116-1C		00-2558		
					116-1D		00-2558		
	117 HPSI Pump B	Two	4	4	117-1A		PT-03-017		
					117-1B		PT-03-022		
					117-1C		PT-03-021		
					117-1D		PT-03-020		
C 4.40	47 MS SG1	One	20	20	V-170	00-2393			
	48 MS SG1	One	20	20	V-180	00-2393			
	49 MS (East) SG2	Three	20	20	UV-171	UT-05-005			Installed
	50 MS (West) SG2	Three	20	20	UV-181	UT-05-006			Installed
	56 FW SG1	Two	20	20	V-132	UT-02-107			
			20	20	V-174	UT-02-108			
	57 FW SG1	Three	20	20	V-137	UT-05-007			Installed
			20	20	V-177	UT-05-008			Installed
C 5.11	54 FW SG1	Two	1	1	54-1	RT-03-005	PT-03-056		PSE
& 5.12					54-15	RT-03-004	PT-03-057		PSE
					54-20	RT-03-003	PT-03-050		PSE
					54-6	RT-03-006	PT-03-051		PSE
	55 FW SG2	Two	0	0	55-1	RT-03-007	PT-03-058		PSE
					55-15	RT-03-009	PT-03-059		PSE
					55-20	RT-03-010	PT-03-049		PSE
					55-6	RT-03-008	PT-03-048		PSE
	58 Aux & Dwncmr FW SG1	Two	1	1	58-1	RT-03-011	PT-03-060		PSE
	59 Aux & Dwncmr	Two	5	5	59-1	RT-03-012	PT-03-061		PSE
	FW SG2				59-16	UT-03-191	PT-03-054		PSE
					59-16-A	UT-03-190	PT-03-053		PSE
					59-16-C	UT-02-075 UT-03-192	PT-02-043 PT-03-055		PSE

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
C 5.11					59-34	UT-02-080	PT-02-042		
& 5.12		Three	0(3)	0(1)	59-13	UT-05-065	PT-05-033		PSE
	62 Aux FW SG1	Three	2	0	62- 6	UT-05-053			
					62-12	UT-05-054			
					62- 5	UT-05-052			
					62-13	UT-05-055			
	63 Aux & FW	One	1	1	63-4	00-2273 00-2274	00-2039		
	70 & 73 LPSI	One	1	1	70-58	99-2314	99-2264		
	Suction A & B	Two	1	1	70-56	UT-02-054	PT-02-036		
	82 & 85 SD	One	2	2	72-50	99-2271	99-2126		
	Cooling A & B				73-49	00-2152	00-2153		
	83 & 86 SD	One	4	4	74-105	99-2269	99-2059		
	Cooling A & B				74-19	99-2270	99-2022		
					74-21	99-2265	99-2263		
					74-22	99-2266	99-2263		
	88 & 91 East	One	6	6	74-44	99-2184	99-2178		
	& West Wrap				76-2	99-2183	99-2178		
					76-21	00-2259 00-2308	00-2224		
					77-7	00-2326 00-2327	00-2225		
					77-14	00-2260 00-2307 00-2325	00-2226		
					78-16	99-2355	99-2313		
		Two	1	1	77-16	UT-03-116	PT-03-029		Limited UT Exam
					77-8	UT-03-115	PT-03-028		No Credit
	94 & 95 SI A & B	One	1	1	74-40	00-2392	00-2345		
		Two	2	2	74-37	UT-02-055	PT-02-033 PT-03-040		
					74-38	UT-03-120	PT-03-041		
		Three	3	0	74-30	UT-05-056			
	96, 97, 98, 99 LPSI	One	3	3	78-45	99-2363	99-2077		
	1A,1B, 2A & 2B				78-47	99-2364	99-2077		
					79-23	00-2309 00-2310	00-2255		
		Two	2	2	77-22	UT-02-103	PT-02-047		
					77-27	UT-02-104 UT-02-105	PT-02-045		
	100 & 101 LPSI Suction A & B	Two	2	2	70-121	UT-02-127 UT-02-128	PT-02-063		
					84-3	UT-03-206	PT-03-062		Limited UT Exam
	102 SI Suction A	One	1	1	84-12	00-2355 00-2356	00-2340		
		Two	1	1	84-26	UT-02-053	PT-02-032 PT-03-042		
	103 Refuel Suction A	One	1	1	86-57	00-2430 00-2431	00-2346		
		Two	1	1	86-3	UT-02-024	PT-02-025		
	104 SI Suction B	One	1	1	85-46	00-2390 00-2391	00-2278		
		Two	1	1	85-31	UT-02-101	PT-02-077 PT-03-046		
	105 Refuel Suction B	One	1	1	87-23	00-2040	00-2048		
		Two	1	1	87-37	UT-02-023	PT-02-023		
C 5.21 & 5.22	106 & 107 HPSI	One	4	4	106-1	00-2485 00-2487	00-2263		
					106-21	00-2481 00-2482	00-2264		

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
C 5.21 & 5.22					107-11	00-2242 00-2243	00-2081		
					107-42	00-2514 00-2515	00-2082		
		Two	4	4	106-64	UT-03-124	PT-03-032		Limited UT Exam
					106-68	UT-03-125	PT-03-033		Limited UT Exam
					107-1	UT-03-097	PT-03-018		Limited UT Exam
					107-22	UT-03-099	PT-03-019		
	108 & 109 HPSI	One	2	2	109-4	00-2489	00-2396		
					109-21	00-2486 00-2488	00-2395		
	110 & 111 HPSI	One	2	2	110-6	00-2291	00-2222		
					110-39	00-2333 00-2388	00-2223		
		Two	2	2	110-17	UT-03-122	PT-03-030		Limited UT Exam
					110-52	UT-03-121	PT-03-031		Limited UT Exam
	112 & 113 HPSI	One	3	3	112-1	00-2165	00-2154		
					112-33	00-2166	00-2154		
					112-45	00-2167	00-2154		
	114 & 115 HPSI	One	1	1	115-13	00-2334 00-2389	00-2256		
		Two	1	1	115-20	UT-02-013 UT-02-014	PT-02-021		
	118 & 119 HPSI Recirc	Two	3	3	118-49	UT-02-017 UT-02-018	PT-02-018		
					119-52	UT-02-009 UT-02-012	PT-02-015		
					119-53	UT-03-123	PT-03-034		Limited UT Exam
C 5.30	106 & 107 HPSI	One	1	1	107-53		00-2092		
		Two	1	1	106-61		PT-02-031		
C 5.41 & 5.42	82 & 85 SD Cooling A & B	One	1	1	72-49A		99-2067		
	88 & 91 East & West Wrap	One	1	1	74-102		99-2178		
	96 - 99 LPSI 1A,1B, 2A & 2B	Two	1	1	76-79		PT-02-075		
C 5.51	43 MS SG1	One	1	1	43-2	99-2370	99-2312		
& 5.52	44 MS SG1	One	1	1	44-1	99-2369	99-2310		
		Two	2	2	44-5	UT-02-060	PT-02-140 MT-03-119		
					44-30	UT-02-043 UT-03-098	MT-02-015 MT-03-100		
	45 MS SG2	Two	0	0	45-2	UT-03-184	MT-03-128		
	46 MS SG2	One	1	1	46-25	99-2371	99-2311		
		Two	1	1	46-2	UT-03-185	MT-03-129		
	54 FW SG1	One	1	1	54-41	00-2434	00-2261		
		Two	1	1	54-100	UT-03-079	MT-03-045		PSE
					54-107	UT-03-080	MT-03-046		PSE
					54-11A	UT-02-042	MT-02-001		
	55 FW SG2	One	2	2	55-1	00-2074	00-2044		
					55-15	00-2075	00-2044		
		Two	1	1	55-100	UT-03-081	MT-03-047		PSE
					55-107	UT-03-082	MT-03-048		PSE
					55-26	UT-02-041	MT-02-002		
	58 Aux & Dwncmr	One	1(5)	1(5)	41-39	99-2393	99-2198		() Identifies augment Exam
	FW SG1				58-1	99-2392	99-2198		(IEB 079-13 & SER 83-07)
					58-12	99-2128	99-2023		
					58-13	99-2129	99-2023		
					58-16	99-2130	99-2023		
					58-16A	99-2131	99-2023		
		Two	0(4)	0(4)	41-111	UT-03-083	MT-03-049		PSE

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
C 5.51					58-12	UT-02-077	MT-02-146		
& 5.52					58-13	UT-02-069	MT-02-134		
					58-16	UT-02-070	MT-02-135		
					58-16A	UT-02-071	MT-02-136		
	59 Aux &	One	0(5)	0(5)	59-1	99-2391	99-2192		
	Dwncmr FW SG2				59-12	99-2132	99-2024		
					59-13	99-2133	99-2024		
					59-16	99-2134	99-2025		
					59-16A	99-2135	99-2024		
		Two	1(2)	1(2)	59-12	UT-02-078	MT-02-147		
					59-13	UT-02-072	MT-02-137		
					59-16	UT-02-073	MT-02-138		
					59-16A	UT-02-074	MT-02-139		
					59-25	UT-03-084	MT-03-060		
	64 Blowdown SG1	One	1	1	64-30	00-2347	00-2338		
		Two	1	1	64-1	UT-03-202	MT-03-137		PSE
					64-30	UT-03-203	MT-03-139		PSE
					64-80	UT-03-195	MT-03-130		PSE
	65 Blowdown SG2	One	1	1	65-28	00-2348	00-2339		
		Two	1	1	65-1	UT-03-204	MT-03-140		PSE
					65-28	UT-03-205	MT-03-143		PSE
					65-52	UT-02-102	MT-02-145		
C 6.10	116 & 117 HPSI	Interval	4	2	116-2		00-2557		
					117-1		PT-03-016		
C6.20	49 MS (East) SG2	Three	1	1	PSV-554		MT-05-005		
					PSV-556		MT-05-006		
	86 SD Cooling B	Three	1	1	V-464		PT-05-012		
	89 East Wrap	Three	1	1	UV-656		PT-05-013		
	106 HPSI A	Three	1	1	V-404		PT-05-019		CC N-460
	107 HPSI B	Three	1	1	V-478		PT-05-020		
C 7.10 thru C 7.70	Piping Systems	One	all	all	Press			*	* 00-2041, 00-2042, 00-2138, 00-2140, 00-2141, 00-2142, 00-2143, 00-2146, 00-2147, 00-2148, 00-2149, 00-2151, 00-2157, 00-2160, 00-2161, 00-2162, 00-2163, 00-2284, 00-2285, 00-2442, 00-2494, 00-2513, 00-2547, 00-2548, 00-2549, 00-2550, 00-2555, 00-2563, 00-2564, 00-2565, 00-2566, 00-2569, 00-2570, 00-2571, 00-2572, 00-2575, 01-2037 01-2050 01-2038 01-2036 01-2032 01-2022 01-2021 01-2020 01-2019 01-2018 01-2017 01-2016 01-2012 01-2003 01-2002 01-2001

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
C 7.10 thru C 7.70		Two	all	all	Press			*	* VT-02-409 VT-03-438 VT-03-439 VT-03-440 VT-03-443 VT-03-444 VT-03-445 VT-03-447 VT-03-462 VT-03-466 VT-03-467 VT-03-468 VT-03-499 VT-03-500 VT-03-501 VT-03-503 VT-03-504 VT-03-505 VT-03-506 VT-03-507 VT-03-508 VT-03-509 VT-03-551 VT-03-552 VT-03-553 VT-03-554 VT-03-556 VT-03-557 VT-03-630 VT-03-631 VT-03-632 VT-03-633 VT-03-645 VT-03-646 VT-03-700 VT-03-782 VT-03-783 VT-03-784 VT-03-787 VT-03-789 VT-03-790 VT-03-803 VT-03-806 VT-03-807 VT-03-808 VT-03-809 VT-03-810 VT-03-812 VT-03-813 VT-03-814 VT-03-816 VT-03-851 VT-03-852 VT-03-853 VT-03-854 VT-03-855 VT-03-861 VT-03-866 VT-03-867 VT-03-868 VT-03-870 thru VT-03-878
F 1.20 & 1.40	41 SG1	One	2	2	41-41			00-2323	
					41-42			00-2323 00-2185	
		Two	0	0	41-41			VT-03-836	PSE, Insulated
					41-42			VT-03-837	PSE, Insulated
	42 SG2	Two	2	2	42-41			VT-03-838	PSE, Insulated
					42-42			VT-03-839	PSE, Insulated
	43 MS SG1	One	3	3	SG-036-H017			00-2177	
					SG-036-H884			00-2178	
					SG-036-H885			00-2179	
		Two	2	2	SG-036-H011			VT-03-825	
					SG-036-H012			VT-02-395	
		Three	1	1	SG-036-H011			VT-05-521	Rej, RR #4
					SG-036-H011			VT-05-578	Re-exam / PSE
					SG-036-H012			VT-05-522	Expansion, Snubber Deleted
					SG-036-H016			VT-05-523	Expansion, RR #4
					SG-036-H017			VT-05-524	Expansion, RR #4
					SG-036-H884			VT-05-525	Expansion, RR #4
					SG-036-H885			VT-05-526	Expansion, RR #4
	44 MS SG1	One	2	2	SG-033-H017			00-2180	
					SG-033-H018			00-2181	support deleted
		Two	4	4	SG-033-H011			VT-03-826	
					SG-033-H015			VT-02-396	
					SG-033-H016			VT-02-397	
					SG-033-H881			VT-02-275	
					SG-033-H882			VT-02-274	
		Three	2	1	SG-033-H011			VT-05-527	Expansion, RR #4
					SG-033-H011			VT-05-579	PSE

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.20 & 1.40					SG-033-H015			VT-05-528	Expansion, Snubber Deleted
					SG-033-H016			VT-05-529	Expansion, RR #4
					SG-033-H017			VT-05-530	Rej, RR #4
					SG-033-H017			VT-05-580	Re-exam / PSE
					SG-033-H018			VT-05-531	Expansion, Snubber Deleted
					SG-033-H881			VT-05-532	Expansion, RR #4
					SG-033-H882			VT-05-533	Expansion, RR #4
	45 MS SG2	One	1	1	SG-042-H014			00-2182	support deleted
		Two	3	3	SG-042-H011			VT-03-510	
					SG-042-H012			VT-02-277	
					SG-042-H013			VT-02-276	
		Three	5	1	SG-042-H011			VT-05-534	Expansion, RR #4
					SG-042-H011			VT-05-581	PSE
	46 MS SG2	One	2	2	SG-045-H017			00-2183 00-2551	
					SG-045-H018			00-2184 00-2552	support deleted
		Two	4	4	SG-045-H011			VT-03-511	
					SG-045-H012			VT-02-354	
					SG-045-H887			VT-02-259	
					SG-045-H888			VT-02-256	
		Three	5	2	SG-045-H011			VT-05-535	Expansion, RR #4
					SG-045-H011			VT-05-582	PSE
					SG-045-H012			VT-05-536	Expansion, Snubber Deleted
					SG-045-H016			VT-05-537	Expansion, RR #4
					SG-045-H017			VT-05-538	Expansion, RR #4
					SG-045-H017			VT-05-583	PSE
	47 MS SG1	One	1	1	SG-206-H001			99-2336	
	48 MS SG1	Two	1	1	SG-207-H001			VT-03-685	
	49 MS (East) SG2	Three	1	1	SG-208-H001			VT-05-034	
	50 MS (West) SG2	Three	1	1	SG-209-H001			VT-05-035	
	51 Atmos	One	1	1	SG-059-H006			99-2090	
	Dump SG1	Two	1	1	SG-070-H006			VT-03-522	
	52 Atmos Dump SG2	Three	2	1	SG-084-H006			VT-05-036	
	53 Steam to	One	4	4	SG-081-H001			99-2072	
	Aux FW				SG-081-H002			99-2073	
					SG-083-H001			99-2074	
					SG-083-H002			99-2075	
		Two	2	2	SG-081-H004			VT-02-089	
					SG-083-H004			VT-02-090	
		Three	2	2	SG-081-H003			VT-05-037	
					SG-083-H003			VT-05-038	
	54 FW SG1	One	7	7	SG-002-H004			00-2312	
					SG-002-H005			00-2313	
					SG-002-H012			00-2562	
					SG-002-H013			00-2314	
					SG-002-H014			00-2315	
					SG-002-H015			00-2316	
					SG-002-H803			00-2540	
		Two	7	7	SG-002-H009			VT-03-520	
					SG-002-H010			VT-03-517	
					SG-002-H011			VT-02-008 VT-02-011	
					SG-002-H806			VT-03-518	
					SG-002-H811			VT-03-519	
					SG-013-H001			VT-03-515	
					SG-013-H802			VT-03-516	

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.20	54 FW SG1	Three	6	1	SG-002-H002			VT-05-539	Expansion
& 1.40					SG-002-H012			VT-05-540	Expansion
					SG-013-H001			VT-05-541	Expansion
	55 FW SG2	One	9	9	SG-005-H009			00-2297	
					SG-005-H010			00-2298	
					SG-005-H011			00-2299	
					SG-005-H012			00-2541	
					SG-005-H805			00-2542	
					SG-005-H809			00-2545	
					SG-005-H812			00-2361	
					SG-014-H001			00-2543	
					SG-014-H804			00-2544	
		Two	7	7	SG-005-H004			VT-02-246 VT-02-247	
					SG-005-H005			VT-02-248	
					SG-005-H006			VT-02-253 VT-02-249	
					SG-005-H007			VT-02-250 VT-02-254	
					SG-005-H008			VT-02-272	
					SG-005-H013			VT-02-273	
					SG-005-H014			VT-02-255 VT-02-251	
	56 FW SG1	Two	1	1	SG-202-H001			VT-03-626	
	57 FW SG1	Three	1	1	SG-205-H002			VT-05-039	
	58 Aux &	One	7	7	SG-008-H002			00-2317	
	Dwncmr SG1				SG-008-H003			00-2318	
					SG-008-H004			00-2319	
					SG-008-H005			00-2320	
					SG-008-H020			00-2321	
					SG-008-H901			00-2436	
					SG-008-H903			00-2437	
		Two	7	7	SG-008-H006			VT-02-340	
					SG-008-H007			VT-02-343 VT-02-341	
					SG-008-H008			VT-02-205	
					SG-008-H009			VT-02-208 VT-02-206	
					SG-008-H010			VT-02-207 VT-02-212 VT-03-521	
					SG-008-H011			VT-02-209 VT-03-549	
					SG-008-H017			VT-02-342 VT-03-550	
	58 Aux & Dwncmr	Three	8	1	SG-008-H004			VT-05-542	Expansion
	FW SG1				SG-008-H011			VT-05-543	Expansion
					SG-008-H015			VT-05-544	Expansion
	59 Aux &	One	6	6	AF-006-H001			99-2137	
	Dwncmr FW SG2				SG-011-H004			99-2507	Expansion
					SG-011-H008			99-2040	
					SG-011-H009			99-2041	
					SG-011-H010			99-2042	
					SG-011-H011			99-2043 99-2508	Reject Re-exam
					SG-011-H012			99-2044	
					SG-011-H016			99-2509	Expansion
		Two	6	6	SG-011-H013			VT-02-353	
					SG-011-H014			VT-02-214 VT-02-213	
					SG-011-H015			VT-02-210	

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.20					SG-011-H016			VT-02-204	
& 1.40					SG-011-H018			VT-02-352	
					SG-011-H019			VT-02-211	
	60 Dwncmr FW SG1	One	1	1	SG-200-H009			99-2086	
					SG-200-H013			99-2521	PSE
					SG-200-H014			99-2483	PSE
		Three	2	2	SG-200-H009			VT-05-040	
					SG-200-H013			VT-05-041	
					SG-200-H014			VT-05-042	
	61 Dwncmr FW SG2	One	0	0	SG-203-H013			99-2519	PSE
					SG-203-H014			99-2520	PSE
		Two	2	2	SG-203-H013			VT-03-781	
					SG-203-H014			VT-03-774	
		Three	1	1	SG-203-H008			VT-05-043	
	62 Aux FW SG1	One	1	1	AF-004-H003			99-2136	
		Two	1	1	AF-018-H001			VT-03-775	
		Three	2	2	AF-018-H002			VT-05-044	
					AF-018-H003			VT-05-045	
	63 Aux FW SG2	One	2	2	AF-006-H002			99-2138	
					AF-016-H001			99-2139	
		Two	2	2	AF-006-H003			VT-03-776	
					AF-006-H005			VT-03-777	
		Three	1	1	AF-006-H004			VT-05-046	
	64 Blowdown SG1	One	12	12	SG-039-H010			00-2049	
					SG-039-H011			00-2050	support deleted
					SG-039-H012			00-2051	
					SG-039-H013			00-2052	support deleted
					SG-039-H014			00-2063	support deleted
					SG-039-H015			00-2064	
					SG-039-H016			00-2065	
					SG-039-H017			00-2053	support deleted
					SG-039-H026			00-2054	
					SG-053-H001			00-2071	support deleted
					SG-053-H002			00-2072	support deleted
					SG-053-H007			99-2161	support deleted
					SG-053-H924			00-2062	
		Two	13	13	SG-039-H001			VT-02-003	
					SG-039-H002			VT-02-002	
					SG-039-H003			VT-02-032	
					SG-039-H004			VT-02-033	
					SG-039-H005			VT-02-034	
					SG-039-H006			VT-02-035	
					SG-039-H027			VT-02-036	
					SG-039-H038			VT-03-820	PSE
					SG-039-H922			VT-03-821	
					SG-053-H003			VT-02-041	
					SG-053-H004			VT-02-042	
					SG-053-H005			VT-02-043	
					SG-053-H006			VT-02-044	
					SG-053-H007			VT-02-045	
					SG-522-H001			VT-03-822	PSE
					SG-522-H002			VT-03-834	PSE
		Three	5	0	SG-522-H002			VT-05-545	Expansion
	65 Blowdown SG2	One	12	12	SG-048-H002			00-2066	support deleted
					SG-048-H003			00-2055	support deleted
					SG-048-H004			00-2056	
					SG-048-H019			00-2057	support deleted
					SG-048-H020			00-2058	support deleted
					SG-048-H021			00-2059	
					SG-048-H925			00-2060	
					SG-052-H001			00-2067	support deleted

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.20					SG-052-H002			00-2068	support deleted
& 1.40					SG-052-H003			00-2069	support deleted
					SG-052-H004			00-2070	
					SG-052-H923			00-2061	
		Two	11	11	SG-048-H013			VT-02-025	
					SG-048-H014			VT-02-024	
					SG-048-H015			VT-02-023	
					SG-048-H016			VT-02-026	
					SG-048-H017			VT-02-027	
					SG-048-H018			VT-02-022	
					SG-048-H022			VT-02-021	
					SG-048-H023			VT-02-028	
					SG-048-H024			VT-02-031	
					SG-048-H025			VT-02-030	
					SG-048-H026			VT-02-029	
					SG-523-H001			VT-03-835	PSE
					SG-523-H002			VT-03-823	PSE
					SG-523-H003			VT-03-827	PSE
					SG-523-H004			VT-03-824	PSE
	68 Regen HTEXCH	Three	2	2	68-10			VT-05-047	
					68-11			VT-05-048	
	70 LPSI Suction A	One	1	1	SI-067-H004			99-2223	
		Three	4	4	SI-241-H020			VT-05-049	RR #4
					SI-241-H022			VT-05-050	Snubber deleted
					SI-307-H016			VT-05-051	RR #4
					SI-307-H017			VT-05-052	RR #4
	71 LPSI Discharge A	One	1	1	SI-087-H011			99-2039	
		Two	5	5	SI-078-H001			VT-02-053	
					SI-078-H002			VT-02-052	
					SI-087-H001			VT-02-051	
					SI-087-H002			VT-02-050	
					SI-087-H003			VT-02-049	
		Three	1	1	SI-078-H003			VT-05-053	
	72 LPSI PUMP A	One	3	3	72-3A			99-2482	
					72-3B			99-2482	
					72-3C			99-2482	
	73 LPSI B Suction	Two	1	1	SI-308-H014			VT-02-289	
		Three	4	4	SI-034-H004			VT-05-054	RR #4
					SI-194-H001			VT-05-055	RR #4
					SI-308-H012			VT-05-056	RR #4
					SI-308-H013			VT-05-057	RR #4
	74 LPSI B	Three	6	6	SI-129-H001			VT-05-058	RR #4
	Discharge				SI-129-H002			VT-05-059	
					SI-129-H003			VT-05-060	RR #4
					SI-129-H004			VT-05-061	RR #4
					SI-129-H005			VT-05-062	RR #4
					SI-129-H006			VT-05-063	RR #4
	75 LPSI Pump B	Two	3	3	73-3A			VT-03-647	
					73-3B			VT-03-648	
					73-3C			VT-03-649	
	76 CS Suction A	One	1	1	SI-009-H004			99-2195	
		Three	3	3	SI-067-H001			VT-05-064	RR #4
					SI-067-H002			VT-05-065	RR #4
					SI-067-H003			VT-05-066	RR #4
	77 CS Discharge A	One	4	4	SI-079-H001			99-2169	
					SI-079-H002			99-2101	
					SI-079-H003			99-2102	
					SI-079-H004			99-2170	
		Two	3	3	SI-079-H005			VT-03-654	Insulated
					SI-079-H006			VT-03-665	Insulated
					SI-082-H002			VT-03-666	Insulated

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.20		Three	3	3	SI-079-H007			VT-05-067	RR #4
& 1.40					SI-079-H008			VT-05-068	RR #4
					SI-079-H009			VT-05-069	RR #4
	78 CS Pump A	Two	3	3	80-3A			VT-03-627	
					80-3B			VT-03-628	
					80-3C			VT-03-589 VT-03-629	
	79 CS Suction B	One	3	3	SI-034-H001			99-2162	
					SI-034-H002			99-2163	
					SI-034-H003			99-2164	
		Two	1	1	SI-033-H004			VT-03-600	Insulated
		Three	2	2	SI-034-H005			VT-05-070	
					SI-034-H006			VT-05-071	
	80 CS Discharge B	One	3	3	SI-119-H007			99-2267	
					SI-119-H008			99-2262	
					SI-119-H009			99-2268	
		Two	4	4	SI-119-H001			01-2004	
					SI-119-H002			VT-03-591	Insulated
					SI-119-H003			VT-03-605	Insulated
					SI-119-H004			VT-03-599	Insulated
		Three	3	3	SI-119-H005			VT-05-072	
					SI-119-H006			VT-05-073	
					SI-147-H001			VT-05-074	
	81 CS Pump B	Three	3	3	81-3A			VT-05-075	
					81-3B			VT-05-076	
					81-3C			VT-05-077	
	82 SD Cooling A	One	2	2	SI-078-H005			99-2093	
					SI-079-H010			99-2096	
		Three	1	1	SI-078-H004			VT-05-078	RR #4
	83 SD Cooling A	One	4	4	SI-087-H009			99-2095	
					SI-089-H001			99-2085	
					SI-089-H002			99-2098	
					SI-089-H003			99-2097	
		Two	3	3	SI-087-H004			VT-03-634	
					SI-090-H001			VT-03-635	
					SI-090-H002			VT-03-636	
		Three	12	12	SI-070-H001			VT-05-079	RR #4
					SI-070-H002			VT-05-080	RR #4
					SI-070-H003			VT-05-081	RR #4
					SI-070-H006			VT-05-082	
					SI-070-H007			VT-05-083	RR #4
					SI-082-H001			VT-05-084	RR #4
					SI-087-H005			VT-05-085	RR #4
					SI-087-H006			VT-05-086	RR #4
					SI-087-H007			VT-05-087	RR #4
					SI-087-H008			VT-05-088	RR #4
					SI-089-H005			VT-05-089	RR #4
					SI-090-H004			VT-05-090	RR #4
	85 SD Cooling B	One	3	3	SI-119-H010			99-2185	
					SI-123-H006			99-2186	
					SI-123-H007			99-2187	
		Two	6	6	SI-119-H011			VT-03-593	
					SI-119-H013			VT-03-595	
					SI-119-H014			VT-03-596	
					SI-123-H002			VT-03-601	Insulated
					SI-123-H005			VT-03-602	Insulated
					SI-123-H008			VT-03-603	Insulated
		Three	1	1	SI-123-H001			VT-04-322	PSE

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.20	86 SD Cooling B	One	3	3	SI-129-H010			99-2188	
& 1.40					SI-129-H011			99-2189	
					SI-129-H012			99-2190 99-2530	
		Two	7	7	SI-072-H005			VT-03-620	Insulated
					SI-072-H006			VT-03-621	Insulated
					SI-129-H007			VT-03-624 VT-03-699	Insulated Insulated
					SI-129-H008			VT-03-696	Insulated
					SI-129-H012			01-2005	
					SI-135-H001			VT-03-622	Insulated
					SI-135-H002			VT-03-623	Insulated
					SI-135-H003			VT-03-625	Insulated
		Three	15	15	SI-072-H001			VT-05-091	RR #4
					SI-072-H002			VT-05-092	RR #4
					SI-072-H003			VT-05-093	RR #4
					SI-072-H004			VT-05-094	RR #4
					SI-072-H012			VT-05-095	RR #4
					SI-129-H009			VT-05-096	RR #4
					SI-129-H013			VT-05-097	RR #4
					SI-134-H001			VT-05-098	RR #4
					SI-134-H002			VT-05-099	RR #4
					SI-134-H003			VT-05-100	RR #4
					SI-134-H005			VT-05-101	RR #4
					SI-134-H006			VT-05-102	RR #4
					SI-134-H007			VT-05-103	RR #4
					SI-134-H008			VT-05-104	RR #4
					SI-147-H002			VT-05-105	RR #4
	88 East Wrap	One	8	8	SI-072-H011			99-2317	
					SI-072-H013			99-2316	
					SI-072-H014			99-2315	
					SI-072-H021			00-2186	
					SI-072-H022			00-2187	
					SI-073-H001			00-2188	
					SI-073-H002			00-2189	
					SI-073-H003			00-2190	
		Three	6	6	SI-072-H015			VT-05-106	RR #4
					SI-072-H016			VT-05-107	RR #4
					SI-072-H017			VT-05-108	RR #4
					SI-072-H018			VT-05-109	RR #4
					SI-072-H019			VT-05-110	RR #4
					SI-072-H020			VT-05-111	RR #4
	89 East Wrap	One	4	4	SI-194-H012			99-2275	
					SI-194-H013			99-2274	
					SI-194-H014			99-2273	
					SI-194-H023			99-2309 99-2331	Reject Re-exam
		Three	1	1	SI-173-H001			VT-05-112	
					SI-194-H023			VT-05-113	
	90 East Wrap	Two	2	2	SI-134-H009			VT-03-612	Insulated
					SI-134-H10			VT-03-611	Insulated
	91 West Wrap	One	7	7	SI-070-H009			99-2165	
					SI-070-H010			99-2166	
					SI-070-H011			99-2114	
					SI-070-H012			99-2167	
					SI-070-H013			99-2115	
					SI-070-H015			99-2168	
					SI-070-H016			99-2116	
		Two	2	2	SI-071-H002			VT-03-597	
					SI-071-H003			VT-03-598	
		Three	1	1	SI-070-H014			VT-05-114	

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.20	92 West Wrap	One	5	5	SI-239-H003			99-2172	
& 1.40					SI-241-H012			99-2173	
					SI-241-H014			99-2174	
					SI-241-H015			99-2175	
					SI-241-H021			99-2176	
		Two	5	5	SI-239-H001			VT-03-604	
					SI-239-H002			VT-03-606	
					SI-241-H009			VT-03-581	
					SI-241-H011			VT-03-584	
					SI-241-H016			VT-03-585	Deleted
		Three	2	2	SI-002-H001			VT-05-115	Snubber Deleted
					SI-002-H005			VT-05-116	Snubber Deleted
	93 West Wrap	Two	2	2	SI-089-H010			VT-03-561	Insulated
					SI-089-H013			VT-03-563	
		Three	2	2	SI-089-H011			VT-05-117	RR #4
					SI-089-H012			VT-05-118	RR #4
	94 LPSI A	One	3	3	SI-089-H007			99-2399	
					SI-089-H008			99-2400	
					SI-089-H009			99-2401	
		Two	7	7	SI-070-H004			VT-03-655	Insulated
					SI-070-H005			VT-03-656	
					SI-070-H008			VT-03-769	
					SI-241-H006			VT-02-062	
					SI-241-H007			VT-02-061	
					SI-241-H008			VT-02-088	
					SI-241-H017			VT-02-075	
		Three	5	5	SI-089-H006			VT-05-119	RR #4
					SI-241-H002			VT-05-120	RR #4
					SI-241-H003			VT-05-121	
					SI-241-H004			VT-05-122	RR #4
					SI-241-H005			VT-05-123	RR #4
	95 LPSI B	One	6	6	SI-072-H008			99-2402	
					SI-072-H010			99-2403	
					SI-134-H011			99-2404	
					SI-134-H012			99-2405	
					SI-194-H003			99-2406	support deleted
					SI-194-H005			99-2407	
					SI-194-H006			99-2408	Expansion
		Two	10	10	SI-072-H007			VT-02-047 VT-02-059	
					SI-072-H009			VT-02-046	
					SI-194-H004			VT-03-663	Insulated
					SI-194-H007			VT-03-664	Insulated
					SI-194-H008			VT-03-661	Insulated
					SI-194-H009			VT-03-671 VT-03-770	Insulated
					SI-194-H010			VT-03-672 VT-03-674	Insulated Insulated
					SI-194-H011			VT-03-673	Insulated
					SI-194-H015			VT-03-675	Insulated
					SI-194-H021			VT-03-662	Insulated
		Three	3	3	SI-134-H004			VT-05-124	RR #4
					SI-194-H002			VT-05-125	RR #4
					SI-194-H006			VT-05-126	RR #4
	96 LPSI to Loop 1A	One	3	3	SI-202-H007			99-2467	
					SI-202-H008			99-2468	support deleted
					SI-202-H009			99-2469	support deleted
		Two	7	7	SI-202-H002			VT-03-535	
					SI-202-H003			VT-02-081	
					SI-202-H004			VT-02-080	
					SI-202-H006			VT-02-079	

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.20					SI-202-H010			VT-02-077	Deleted
& 1.40					SI-202-H011			VT-02-078	Deleted
					SI-202-H015			VT-02-082	
	97 LPSI to Loop 1B	One	10	10	SI-220-H008			00-2438	
					SI-220-H009			99-2470	
					SI-220-H010			99-2471	
					SI-220-H011			99-2472	support deleted
					SI-220-H012			99-2473	
					SI-220-H013			99-2474	
					SI-220-H014			99-2475	support deleted
					SI-220-H015			99-2476	
					SI-220-H019			99-2480	
					SI-220-H022			99-2481	support deleted
		Two	7	7	SI-220-H001			VT-02-298	
					SI-220-H016			VT-02-299	
					SI-220-H017			VT-02-300	
					SI-220-H018			VT-02-301	
					SI-220-H020			VT-03-536	
					SI-220-H021			VT-02-302	Deleted
					SI-220-H028			VT-02-303	
	98 LPSI to Loop 2A	One	2	2	SI-155-H005			99-2100	
					SI-155-H006			99-2084	
		Two	5	5	SI-155-H001			VT-02-087	
					SI-155-H002			VT-02-084	
					SI-155-H003			VT-02-085	Deleted
					SI-155-H004			VT-02-086	
					SI-155-H007			VT-02-083	
	99 LPSI to Loop 2B	Two	5	5	SI-174-H007			VT-02-404	Deleted
					SI-174-H008			VT-02-405	
					SI-174-H009			VT-02-406	Deleted
					SI-174-H010			VT-02-407	
					SI-174-H013			VT-02-408	
	100 LPSI A Suction	One	2	2	SI-241-H019			99-2340	
					SI-369-H001			99-2341	
		Two	1	1	84-5			VT-03-828	
	101 LPSI B Suction	One	0	0	SI-194-H026			99-2443	Expansion
		Three	6	1	85-5			VT-05-127	
	102 SI Suction A	One	6	6	SI-307-H002			00-2301	
					SI-307-H003			00-2302	
					SI-307-H004			00-2303	support deleted
					SI-307-H005			00-2258	
					SI-307-H008			00-2257	
					SI-307-H015			00-2304	
		Two	7	7	SI-008-H001			VT-02-055	
					SI-008-H002			VT-02-054	
					SI-008-H003			VT-02-056	
					SI-008-H004			VT-02-057	
					SI-307-H006			VT-02-060	
					SI-307-H007			VT-02-063	
					SI-307-H014			VT-02-048	
		Three	7	7	SI-008-H005			VT-05-128	RR #4
					SI-009-H001			VT-05-129	
					SI-009-H002			VT-05-130	RR #4
					SI-009-H005			VT-05-131	RR #4
					SI-307-H009			VT-05-132	Snubber Deleted
					SI-307-H010			VT-05-133	RR #4
					SI-307-H011			VT-05-134	Snubber Deleted
	103 Refuel Suction A	One	6	6	CH-142-H013			99-2409	
					CH-142-H014			99-2411	
					CH-142-H015			99-2412	
					CH-142-H019			99-2413	

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.20					CH-142-H022			99-2414	
& 1.40					CH-424-H001			99-2415	
		Two	6	6	CH-142-H008			VT-02-064	
					CH-142-H020			VT-02-065	
					CH-142-H021			VT-02-067	
					CH-424-H002			VT-02-066	
					CH-424-H003			VT-02-068	
					CH-424-H006			VT-03-697	RR#4
		Three	6	6	CH-142-H001			VT-05-135	
					CH-142-H002			VT-05-136	
					CH-142-H003			VT-05-137	
					CH-142-H004			VT-05-138	
					CH-142-H005			VT-05-139	Snubber Deleted
					CH-142-H006			VT-05-140	
	104 SI Suction B	One	7	7	SI-033-H001			99-2460	support deleted
					SI-033-H002			99-2461	support deleted
					SI-033-H003			99-2462	
					SI-308-H005			99-2463	
					SI-308-H008			99-2464	
					SI-308-H010			99-2465	support deleted
					SI-308-H011			99-2466	
		Two	7	7	SI-308-H001			VT-02-284	
					SI-308-H002			VT-02-285	
					SI-308-H003			VT-02-297	
					SI-308-H004			VT-02-296	
					SI-308-H006			VT-02-286	Deleted
					SI-308-H007			VT-02-287	Deleted
					SI-308-H015			VT-02-288	
		Three	6	6	SI-031-H001			VT-05-141	RR #4
					SI-031-H002			VT-05-142	RR #4
					SI-031-H003			VT-05-143	Snubber Deleted
					SI-031-H004			VT-05-144	RR #4
					SI-031-H005			VT-05-145	RR #4
					SI-308-H009			VT-05-146	RR #4
	105 Refuel Suction B	One	7	7	CH-149-H009			00-2168	
					CH-149-H010			00-2169	
					CH-149-H012			00-2170	
					CH-149-H013			00-2171	
					CH-149-H014			00-2172 00-2559	
					CH-149-H021			00-2173	
					CH-149-H028			00-2174	
		Two	7	7	CH-149-H001			VT-02-400	Expansion
					CH-149-H002			VT-02-401	Expansion
					CH-149-H003			VT-02-402	Expansion
					CH-149-H004			VT-02-283 VT-02-387	Reject, PSE replacement
					CH-149-H005			VT-02-294	
					CH-149-H006			VT-02-293	
					CH-149-H007			VT-02-295	
					CH-149-H008			VT-02-398	Expansion
					CH-149-H021			VT-02-399	Expansion
					CH-149-H025			VT-02-292	
					CH-149-H026			VT-02-291	
					CH-149-H027			VT-02-290	
		Three	8	8	CH-149-H001			VT-05-147	
					CH-149-H002			VT-05-148	
					CH-149-H003			VT-05-149	
					CH-149-H004			VT-05-150	
					CH-149-H008			VT-05-151	
					CH-425-H001			VT-05-152	

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.20					CH-425-H006			VT-05-153	RR #4
& 1.40					CH-425-H007			VT-05-154	Snubber Deleted
					CH-425-H008			VT-05-155	Snubber Deleted
	106 HPSI A	One	8	8	SI-099-H001			00-2265	
					SI-099-H002			00-2266	
					SI-100-H001			00-2267	
					SI-100-H002			00-2268	
					SI-100-H003			00-2269	
					SI-100-H005			00-2270	
					SI-100-H034			00-2271	
					SI-106-H001			00-2272	
		Two	7	7	SI-100-H009			VT-03-667	Insulated
					SI-100-H010			VT-03-668	Insulated
					SI-100-H011			VT-03-669	
					SI-105-H00B			VT-03-653	Insulated
					SI-105-H00C			VT-03-652	Insulated
					SI-105-H00D			VT-03-651	Insulated
					SI-105-H00E			VT-03-650	Insulated
		Three	7	7	SI-100-H004			VT-05-571	
					SI-100-H006			VT-05-156	RR #4
					SI-100-H007			VT-05-157	RR #4
					SI-100-H008			VT-05-158	RR #4
					SI-100-H015			VT-05-159	RR #4
					SI-100-H016			VT-05-160	RR #4
					SI-100-H036			VT-05-161	RR #4
	107 HPSI B	One	6	6	SI-107-H003			00-2093	
					SI-107-H011			00-2094	
					SI-107-H012			00-2095	
					SI-112-H00C			00-2560	
					SI-112-H00G			00-2561	
					SI-112-H00H			00-2096	
		Two	6	6	SI-107-H005			VT-03-588	
					SI-107-H006			VT-03-590	Insulated
					SI-107-H007			VT-03-586	Insulated
					SI-107-H008			VT-03-592	Insulated
					SI-107-H009			VT-03-587	Insulated
					SI-107-H010			VT-03-594	Insulated
		Three	6	6	SI-107-H001			VT-05-162	RR #4
					SI-107-H002			VT-05-163	RR #4
					SI-107-H004			VT-05-164	RR #4
					SI-107-H046			VT-05-165	RR #4
					SI-107-H048			VT-05-166	RR #4
					SI-112-H00D			VT-05-572	RR #4
	108 HPSI Discharge	One	11	11	SI-100-H022			99-2416	
					SI-100-H023			99-2417	
					SI-100-H024			99-2418	
					SI-100-H025			99-2419	
					SI-100-H026			99-2420	
					SI-100-H027			99-2421	
					SI-100-H028			99-2422	
					SI-100-H029			99-2423	
					SI-100-H031			99-2424	
					SI-100-H032			99-2425	
					SI-100-H035			99-2426	
		Two	11	11	SI-100-H012			VT-03-676	Insulated
					SI-100-H013			VT-03-679	Insulated
					SI-100-H018			VT-03-681	Insulated
					SI-100-H019			VT-03-682	Insulated
					SI-100-H020			VT-03-683	Insulated
					SI-100-H021			VT-03-684	Insulated
					SI-118-H00A			VT-03-686	Insulated

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.20					SI-118-H00B			VT-03-691	Insulated
& 1.40					SI-118-H00D			VT-03-692	Insulated
					SI-118-H00R			VT-03-694	Insulated
					SI-118-H00S			VT-03-687	Insulated
		Three	11	11	SI-118-H00D			VT-05-167	
					SI-118-H00E			VT-05-168	
					SI-118-H00F			VT-05-169	
					SI-118-H00G			VT-05-170	
					SI-118-H00H			VT-05-171	
					SI-118-H00J			VT-05-172	
					SI-118-H00K			VT-05-173	
					SI-118-H00L			VT-05-174	
					SI-118-H00M			VT-05-175	
					SI-118-H00N			VT-05-176	
					SI-118-H00P			VT-05-177	
					SI-118-H00Q			VT-05-178	
	109 HPSI Discharge	One	7	7	SI-107-H013			00-2422	
					SI-107-H014			00-2423	
					SI-107-H015			00-2474	
					SI-107-H016			00-2475	
					SI-107-H021			00-2424	
					SI-107-H047			00-2439	
					SI-107-H050			00-2440	support voided
		Two	7	7	SI-107-H019			VT-03-693	
					SI-107-H020			VT-03-695	
					SI-107-H025			VT-03-677	
					SI-107-H026			VT-03-689	
					SI-107-H027			VT-03-690	
					SI-107-H028			VT-03-688	
					SI-107-H029			VT-03-678	
		Three	7	7	SI-107-H030			VT-05-180	RR #4
					SI-107-H031			VT-05-179	RR #4
					SI-107-H032			VT-05-181	RR #4
					SI-107-H034			VT-05-182	RR #4
					SI-107-H035			VT-05-183	RR #4
					SI-107-H036			VT-05-184	RR #4
					SI-107-H037			VT-05-185	RR #4
	110 HPSI Discharge	One	7	7	SI-103-H00B			00-2219	
					SI-103-H00D			00-2220	
					SI-103-H00E			00-2221	
					SI-218-H001			00-2215	
					SI-218-H002			00-2216	
					SI-218-H003			00-2217	
					SI-218-H004			00-2218	
		Two	7	7	SI-107-H039			VT-03-637	
					SI-107-H041			VT-03-638	
					SI-107-H042			VT-03-639	
					SI-107-H043			VT-03-640	
					SI-107-H044			VT-03-641	
					SI-107-H045			VT-03-642	Insulated
					SI-107-H049			VT-03-643	Insulated
		Three	6	6	SI-103-H00A			VT-05-186	RR #4
					SI-107-H00A			VT-05-187	RR #4
					SI-110-H00A			VT-05-188	RR #4
					SI-218-H00A			VT-05-189	RR #4
					SI-218-H00B			VT-05-190	RR #4
					SI-236-H00B			VT-05-191	RR #4
	111 HPSI Discharge	One	3	3	SI-100-H00A			00-2228	
					SI-100-H00B			00-2227	
					SI-100-H037			00-2229	
		Two	4	4	SI-236-H001			VT-03-657	Insulated

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.20					SI-236-H002			VT-03-658	Insulated
& 1.40					SI-236-H003			VT-03-659	Insulated
					SI-236-H004			VT-03-660	Insulated
		Three	3	3	SI-100-H030			VT-05-192	RR #4
					SI-100-H038			VT-05-193	RR #4
					SI-100-H040			VT-05-194	RR #4
	112 HPSI Discharge	One	3	3	SI-176-H001			00-2155	
					SI-176-H002			00-2443	
					SI-176-H003			00-2156	
		Two	3	3	SI-100-H017			VT-03-613	Insulated
					SI-102-H00A			VT-03-614	Insulated
					SI-102-H00B			VT-03-615	Insulated
		Three	4	4	SI-101-H00A			VT-05-195	RR #4
					SI-101-H00B			VT-05-196	RR #4
					SI-101-H00C			VT-05-197	RR #4
					SI-101-H00D			VT-05-198	RR #4
					SI-157-H001			VT-05-199	RR #4
					SI-157-H005			VT-05-200	RR #4
					SI-157-H006			VT-05-201	RR #4
					SI-157-H009			VT-05-202	RR #4
	113 HPSI Discharge	One	5	5	SI-107-H022			00-2204	
					SI-107-H024			00-2205	
					SI-157-H002			00-2206	
					SI-157-H003			00-2207	
					SI-157-H004			00-2208	
		Two	4	4	SI-108-H00A			VT-03-616	Insulated
					SI-109-H00A			VT-03-617	Insulated
					SI-157-H00A			VT-03-618	Insulated
					SI-176-H00A			VT-03-619	Insulated
	115 HPSI Loop	Two	3	3	SI-157-H010			VT-02-076	Deleted
	2A & 2B				SI-157-H011			VT-02-074	
					SI-176-H004			VT-02-073	
	116 HPSI A Pump	One	4	4	116-1A			00-2554	
					116-1B			00-2554	
					116-1C			00-2554	
					116-1D			00-2554	
	117 HPSI Pump B	Two	4	4	117-1A			VT-03-607	
					117-1B			VT-03-608	
					117-1C			VT-03-609	
					117-1D			VT-03-610	
	118 HPSI A Recirc	Three	24	24	SI-106-H002			VT-05-203	
					SI-106-H003			VT-05-204	
					SI-106-H004			VT-05-205	
					SI-106-H005			VT-05-206	
					SI-106-H006			VT-05-207	
					SI-106-H007			VT-05-208	
					SI-106-H008			VT-05-209	
					SI-106-H008			VT-05-574	PSE, RR #4
					SI-106-H009			VT-05-210	
					SI-106-H010			VT-05-211	
					SI-106-H011			VT-05-212	
					SI-106-H012			VT-05-213	
					SI-106-H013			VT-05-214	RR #4
					SI-106-H014			VT-05-215	RR #4
					SI-106-H015			VT-05-216	
					SI-106-H016			VT-05-217	
					SI-106-H018			VT-05-218	
					SI-106-H019			VT-05-219	
					SI-106-H020			VT-05-220	
					SI-106-H021			VT-05-221	
					SI-106-H022			VT-05-223	

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

ASME Item	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
F 1.20					SI-106-H023			VT-05-224	
& 1.40					SI-106-H024			VT-05-225	
					SI-106-H025			VT-05-226	
					SI-106-H026			VT-05-570	
	119 HPSI B Reclrc	Three	30	30	SI-114-H001			VT-05-227	RR #4
					SI-114-H002			VT-05-228	RR #4
					SI-114-H003			VT-05-229	RR #4
					SI-114-H004			VT-05-230	RR #4
					SI-114-H005			VT-05-231	RR #4
					SI-114-H006			VT-05-232	RR #4
					SI-114-H007			VT-05-233	RR #4
					SI-114-H008			VT-05-234	RR #4
					SI-114-H009			VT-05-235	RR #4
					SI-114-H010			VT-05-236	RR #4
					SI-114-H012			VT-05-237	RR #4
					SI-114-H013			VT-05-238	RR #4
					SI-114-H014			VT-05-239	RR #4
					SI-114-H015			VT-05-241	RR #4
					SI-114-H016			VT-05-242	RR #4
					SI-114-H017			VT-05-243	RR #4
					SI-114-H018			VT-05-244	RR #4
					SI-114-H021			VT-05-245	RR #4
					SI-114-H022			VT-05-246	RR #4
					SI-114-H025			VT-05-247	RR #4
					SI-114-H026			VT-05-248	RR #4
					SI-114-H027			VT-05-249	RR #4
					SI-319-H00A			VT-05-250	
					SI-319-H00B			VT-05-251	
					SI-319-H00C			VT-05-252	
					SI-319-H00D			VT-05-253	
					SI-319-H00E			VT-05-254	
					SI-319-H00F			VT-05-255	
					SI-319-H00G			VT-05-256	
					SI-319-H00H			VT-05-257	

APPENDIX B

INSERVICE INSPECTION
CODE LIMITATIONS

APPENDIX B

UNIT 2 - REFUELING OUTAGE TWELVE

CODE LIMITATIONS

ASME Item	Zone / Component	ITEM ID	Report Number(s)
B9.11	29 Pressurizer Spray	29-2	UT-05-058
B9.11	29 Pressurizer Spray	29-3	UT-05-059
B9.21	30 Aux Pressurizer Spray	30-1	UT-05-063
B9.21	30 Aux Pressurizer Spray	30-2	UT-05-064

Limitation Single-sided Austenitic weld examinations estimated at 50% coverage, based on ASME Appendix VIII PDI demonstration.

APPENDIX C

NIS-1 FORMS

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 - *2*

4. OWNERS' CERTIFICATE OF AUTHORIZATION - *NONE*

5. COMMERCIAL SERVICE DATE - *September 19, 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 2. 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 4-2-2005 TO 5-20-2005

8. INSPECTION INTERVAL FROM 3-18-1997 TO 3-17-2007

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 one rejectable condition documented during this outage was corrected in accordance with PVNGS work control practices and ASME Section XI. One support was damaged. Section 2 Examination Summary of the summary report addresses this condition.

11. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN

The rejectable portion of the support was replaced in accordance with ASME Section XI and APS Work Control procedures.

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 7/21/05 SIGNED: ARIZONA PUBLIC SERVICE COMPANY BY Michael Melton

CERTIFICATE 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 12-16-03 TO 5-20-05, AND STATE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE OWNER HAS PERFORMED EXAMINATIONS AND TAKEN CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT IN ACCORDANCE WITH THE REQUIREMENTS OF THE ASME CODE, SECTION XI. BY SIGNING THIS CERTIFICATE NEITHER THE INSPECTOR NOR HIS EMPLOYER MAKES ANY WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE EXAMINATIONS AND CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT. FURTHERMORE, NEITHER THE INSPECTOR NOR HIS EMPLOYER SHALL BE LIABLE IN ANY MANNER FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE OR A LOSS OF ANY KIND ARISING FROM OR CONNECTED WITH THIS INSPECTION.

INSPECTOR [signature] COMMISSIONS NB 9685 "A.N.I.C" Az 264

NAT'L BOARD, STATE, PROVINCE

DATE 7-21-05

APPENDIX D

NIS-2 FORMS

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2RC018H00A
2. Item Description: Pipe Support
3. N-5 Data Package Number: 2RC03-1B 4. W.O. Number: 219436
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rotate Item 3, 180° and replace 1" U-Bolt IAW drawing 13-RC-018-H-00A
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 components. Modification to increase clearance of support from pipe weld.

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
    am 5/10/05
    Initial ___ Date 5/2/05 If required, include a step in the W.O. to perform Preservice Inspection
15. ASME Section XI Pressure Test Required: ☐ YES ☒ NO
    Initial ___ Date 5/2/05 If required, include a step in the W.O. for ISI & ANII Inspection.
    Initial ___ Date 5/2/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
    Initial ___ Date 5/2/05 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.
Hanger 2RC018H00A U-Bolt	APN ~~00090604~~ 4314000201	N/A	MGO/92707	~~MR~~ P.O. 60223694

18. Planner ___ 5/2/05 Printed Name: Herbert L. Green
    Signature Date
19. ISI Alan Morrow 5/2/05 Printed Name: Alan Morrow Log Entry am
    Signature Date
20. ANII ___ 5-2-05 Printed Name: R.G. Hocstron
    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: 05/02/2005

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 219436

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant System

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)
Pipe Support	N/A	N/A	N/A	2RC018H00A	2005	Replacement	NO

7. Description of Work: Rotate Item 3, 180° and replace 1" U-Bolt IAW drawing 13-RC-018-H-00A and work order 219436

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: Rotate Item 3, 180° and replace 1" U-Bolt IAW drawing 13-RC-018-H-00A work order 219436.

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: Alan Monow ISI Engineer Date: 5/10/05
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 5-2-05 to 5-10-05, 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 Hylton
Inspectors Signature

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

Date: 5-10-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2PRCEV244
2. Item Description: 4" Pressurizer Spray Check Valve
3. N-5 Data Package Number: 2RC03-1B 4. W.O. Number: 219436
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: To Remove the 4" Check Valve 2PRCEV244 and replace adjacent piping per Eng-DM 219184
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 Check Valve internals were removed during Start-up testing and Maintenance has a long history of problems with the body to bonnet seal, Reference Eng-DM 219184 Evaluation.

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 KVS Date 6/3/04 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 6/3/04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial KVS Date 6/3/04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial KVS Date 6/3/04 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

3/4/05

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
4" Pipe	APN 00053306	HT# 30549	~~30594~~	MR 863835
4" Elbow	APN 00054113		1218B	MR 863835
4" Reducing Tee	APN 00054469		1219B	MR 863835
2" Pipe	APN 43510642		3707H	MR 863835
1" Weldolet	APN 43541147		3139ANA	MR 863835
4" PIPE	APN 00053306		D810607	MR 586952

18. Planner Karl V. Savage 6/3/04 Printed Name: Karl V. Savage
    Signature Date
19. ISI R P Indap 6/9/04 Printed Name: R. P. INDAP
    Signature Date
20. ANII R G Hagstrom 6-9-04 Printed Name: R.G. HAGSTROM
    Signature Date

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

1. Owner: Arizona Public Service Company, et. al. Date: 05/19/2004

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 219436

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

Authorization No. N/A

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
4" Pipe	N/A	N/A	N/A	2PRCEL018	2005	Replacement	NO
4" Elbow	N/A	N/A	N/A	2PRCEL018	2005	Replacement	NO
4" Reducing Tee	N/A	N/A	N/A	2PRCEL108	2005	Replacement	NO
2" Pipe	N/A	N/A	N/A	2PRCEL018	2005	Replacement	NO

7. Description of Work: Removal of Pressurizer Spray Check Valve 2PRCEV244 and replace adjacent Piping

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

Other ☐ Pressure _____ psi Test Temperature _____ °F

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

FORM NIS-2 (Back)

9. Remarks: Work Order 219436, Removal of Pressurizer Spray Check Valve 2PRCEV244 and replaced adjacent Piping and vent valve assembly. Reference Eng-DM 219184, EDC# 1998-00651.

pre pressure test w.o. Review - ISI Alan Morrow
ANII [signature]

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Morrow ISI Engineer Date: 5/16/05
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~~ VIRGINIA 5-14-05 and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, 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 4098 ANI w/A 5-14-05
~~NB 9685 "N" "I" AZ264~~ 5-14-05
National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2PRCEL032 2. Code Class ASME Section III Class 1
3. Item Description: Reactor Vessel to Steam Generator #1 hot leg piping
4. N-5 Data Package Number: 2RC01-1A 5. W.O. Number: 2448544
6. Original Construction Code Edition: 1974 Edition, Summer 1974 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1974 Addenda
8. Work Description: Perform modification of ASME Section III, Class 1 RTD nozzles IAW DMWO 2376926.
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:
Potential cracking of existing nozzle inconel 600 mat. Being replaced with inconel 690. See DMWO 2376926 for complete evaluation.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 1 1974 w/ Summer 1974
13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 1, 1974 w/Winter 1975
14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO
Initial ___ Date 2/15/02 If required, include a step in the W.O. to perform Preservice Inspection
16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO
Initial ___ Date 2/15/02 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial ___ Date 2/15/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial ___ Date 2/15/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
2JRCBTW0112HB Inconel 690 Nozzle	APN# 00067199	N/A 13		MR#952874
2JRCBTW0112HB Inconel 690 Thermowell	APN# 00067116	N/A 13		MR#952874
2JRCDTW0112HD Inconel 690 Nozzle	APN# 00067199	N/A 12		MR#952879
2JRCDTW0112HD Inconel 690 Thermowell	APN# 00067116	N/A 12		MR#952879

19. Planner ___ 2/15/02 Printed Name: Herbert Glover
Signature Date
20. ISI RPEndap 3/15/02 Printed Name: Ramakant P. Endap
Signature Date
21. ANII ___ 3-18-02 Printed Name: Robert G. Hogstrom
Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2PRCEL032 2. Code Class ASME Section III Class 1
3. Item Description: Reactor Vessel to Steam Generator #1 hot leg piping
4. N-5 Data Package Number: 2RC01-1A 5. W.O. Number: 2448544
6. Original Construction Code Edition: 1974 Edition, Summer 1974 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1974 Addenda
8. Work Description: Perform modification of ASME Section III, Class 1 RTD nozzles IAW DMWO 2376926.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA-4150:
see page 1
11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 1 1974,w/ Summer 1974
13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 1, 1974 w/Winter 1975
14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO
Initial ___ Date 2/19/02 If required, include a step in the W.O. to perform Preservice Inspection
16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO
Initial ___ Date 2/15/02 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial ___ Date 2/15/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial ___ Date 2/15/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
2JRCCTW0112HC Inconel 690 Nozzle	APN# 00067199	N/A 5		MR# 952878
2JRCCTW0112HC Inconel 690 Thermowell	APN# 00067116	N/A 5		MR# 952878
2JRCATW0112HA Inconel 690 Nozzle	APN# 00067199	N/A 3		MR# 952873
2JRCATW0112HA Inconel 690 Thermowell	APN# 00067116	N/A 3		MR# 952873
2JRCETW0111X Inconel 690 Nozzle	APN# 00067199	N/A 11		MR# 952881
2JRCETW0111X Inconel 690 Thermowell	APN# 00067116	N/A 11		MR# 952881

19. Planner ___ (Signature) 2/15/02 (Date) Printed Name: Herbert Good
20. ISI ___ (Signature) 3/15/02 (Date) Printed Name: Ramakant P. Indap
21. ANII ___ (Signature) 3-18-02 (Date) Printed Name: R.G. Hogstron

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. Date: 02/15/2002

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2448544

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

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: Reactor Coolant System, line number 2PRCEL032, Spool S-001.

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 74 Addenda, _____ Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
RCS Hot Leg #1	Combustion Engineering	771-301	N/A	2PRCEL032	1980	Repaired	YES

7. Description of Work: Perform modification of ASME Section III, Class 1 RTD nozzles IAW DMWO 2376926.

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)

W.O. 2448544

9. Remarks Perform modification to RTD nozzles 2JRCCTW0112HC, 2JRCATW0112HA, 2JRCETW0111X, 2JRCBTW0112HB and 2JRCDTW0112HD iaw DMWO 2376926.

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: RPrindap, Consulting Metallurgical Engineer Date: 5/4/2005
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 3-18-02 to 5-6-05, 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 Fyten
Inspectors Signature

Commissions NB 9685 "A.N.I.C" Az 264
National Board, State, Province, and Endorsements

Date: 5-6-2005

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2PRCEL063 2. Code Class ASME Section III Class 1
3. Item Description: Reactor Vessel to Steam Generator #2 hot leg piping
4. N-5 Data Package Number: 2RC01-1A 5. W.O. Number: 2448549
6. Original Construction Code Edition: 1974 Edition, Summer 1974 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1974 Addenda
8. Work Description: Perform modification of ASME Section III, Class 1 RTD nozzles IAW DMWO 2376926.
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:
Potential cracking of existing Inconel 600 nozzle. Therefore it is being replaced with Inconel 690. See DMWO 2376926 for complete evaluation.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 1 1974,w/ Summer 1974
13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 1, 1974 w/Winter 1975
14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO
Initial ___ Date 2/19/02 If required, include a step in the W.O. to perform Preservice Inspection
16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO
Initial ___ Date 2/19/02 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial ___ Date 2/19/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial ___ Date 2/19/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
2JRCCTW0122HC Inconel 690 Nozzle	APN# 00067199	~~N/A~~ 16		MR# 952858
2JRCCTW0122HC Inconel 690 Thermowell	APN# 00067116	~~N/A~~ 16		MR# 952858
2JRCATW0122HA Inconel 690 Nozzle	APN# 00067199	~~N/A~~ 14		MR# 952856
2JRCATW0122HA Inconel 690 Thermowell	APN# 00067116	~~N/A~~ 14		MR# 952856
2JRCETW0121X Inconel 690 Nozzle	APN# 00067199	~~N/A~~ 4		MR# 952860
2JRCETW0121X Inconel 690 Thermowell	APN# 00067116	~~N/A~~ 4		MR# 952860

19. Planner [signature] Signature 2/19/02 Date Printed Name: HERBERT GREEN
20. ISI [signature] Signature 3/15/02 Date Printed Name: R. P. INDAP
21. ANII [signature] Signature 3-18-02 Date Printed Name: R.G. HOGSTRON

ASME SECTION XI – REPAIR / REPLACEMENT page 2 of 2

1. Component ID 2PRCEL063 2. Code Class ASME Section III Class 1
3. Item Description: Reactor Vessel to Steam Generator #2 hot leg piping
4. N-5 Data Package Number: 2RC01-1A 5. W.O. Number: 2448549
6. Original Construction Code Edition: 1974 Edition, Summer 1974 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1974 Addenda
8. Work Description: Perform modification of ASME Section III, Class 1 RTD nozzles IAW DMWO 2376926.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA-4150:
See page 1
11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 1 1974,w/ Summer 1974
13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 1, 1974 w/Winter 1975
14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO
Initial ___ Date 2/19/02 If required, include a step in the W.O. to perform Preservice Inspection
16. ASME Section XI Pressure Test Required: ☐ YES ☒ NO
Initial ___ Date 2/19/02 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial ___ Date 2/19/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial ___ Date 2/19/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
2JRCBTW0122HB Inconel 690 Nozzle	APN# 00067199	~~N/A~~ 8		MR# 952857
2JRCBTW0122HB Inconel 690 Thermowell	APN# 00067116	~~N/A~~ 8		MR# 952857
2JRCDTW0122HD Inconel 690 Nozzle	APN# 00067199	~~N/A~~ 10		MR# 952859
2JRCDTW0122HD Inconel 690 Thermowell	APN# 00067116	~~N/A~~ 10		MR# 952859

19. Planner ___ Signature 2/19/02 Date Printed Name: Herbert Glean
20. ISI ___ Signature 3/15/02 Date Printed Name: R.P. INDAP
21. ANII ___ Signature 3-18-02 Date Printed Name: R.G. Hogstron

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. Date: 02/15/2002

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2448549

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

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: Reactor Coolant System, line number 2PRCEL063, Spool S-001.

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 74 Addenda, _____ Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
RCS Hot Leg #2	Combustion Engineering	771-501	N/A	2PRCEL063	1980	Repaired	YES

7. Description of Work: Perform modification of ASME Section III, Class 1 RTD nozzles IAW DMWO 2376926.

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)

W.O. 2448549

9. Remarks Perform modification to RTD nozzles 2JRCCTW0112HC, 2JRCATW0112HA, 2JRCETW0111X, 2JRCBTW0112HB and 2JRCDTW0112HD iaw DMWO 2376926.

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: RPrndap, Consulting Metallurgical Engineer Date: 5/4/2005
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 3-18-02 to 5-6-05, 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 Hyatt
Inspectors Signature

Commissions NB 9685 "A,N,I,C" Az 264
National Board, State, Province, and Endorsements

Date: 5-6-05 2005

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2JCHBHV0203
2. Item Description: PRESSURIZER AUX SPRAY VALVE
3. N-5 Data Package Number: 2RC03-1A 4. W.O. Number: 2571021
5. Original Construction Code Edition: 1977 EDITION, WINTER 1977 ADDENDA
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: REWORK VALVE INTERNALS AND REINSTALL 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:
   THERE HAS BEEN NO FAILURE OF THE CODE PRESSURE BOUNDARY

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: SEC III CL1,1974 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 GEO Date 1/18/05 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 1/18/05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial GEO Date 1/18/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial GEO Date 1/18/05 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.
MAIN DISC	450202S3	356		MP 926058
				PO 60185389
				WO 2571021

18. Planner G Osmundson 1/19/05 Printed Name: G. OSMUNDSON
    Signature Date
19. ISI R P Lindap 1/18/05 Printed Name: R. P LINDAP Log Entry RPL
    Signature Date
20. ANII R G Hogstrom 1-18-05 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. Date: 12/01/2004

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2571021

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: 2RC03-1A

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)
Main Disc	Target Rock	356	N/A	2JCHBHV0203	1983	Replacement	No

7. Description of Work: Rework valve internals and reinstall 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. Remarks: REWORK VALVE INTERNALS AND REINSTALL SEAL WELD WO 2571021

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: Adam Monow ISI Engineer Date: 5/11/05
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 4-18-05 to 5-11-05, 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 Hutton
Inspectors Signature

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

Date: 5-11-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2PCHNV379
2.. Item Description: CHN-D01A IOX RESIN SLUICE HDR SUPPLY
3. N-5 Data Package Number: 2CH01-1 4. W.O. Number: 2630480
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 body and gate due to internal damage of valve. (A complete valve assembly (APN 45002793) will be obtained from warehouse and the necessary replacemnet parts (body and gate) will be removed from valve assembly and installed. ONLY REPLACED GATE dmf 2-21-04
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:
Valve gate guide area damage due to galling. Replacement is a normal maintenance. No failure in the pressure retaining part. RPindap 1/23/04

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: ASME Section XI 1992 and 1992 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO, Per Bob Browning

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 ___DWS___ Date ___01/23/04__ If required, include a step in the W.O. for ISI & ANII Inspection.

Initial ___DWS___ Date ___01/23/04__ 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial ___DWS___ Date ___01/23/04___ 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.
~~Body~~				
Gate	APN 45050746	225195SN 11	N/A	MR # 831677
~~Valve~~ dmf 2-21-04	~~APN 45002793~~			~~MR 825348~~

18. Planner DWShaffer 1/23/04 Printed Name: Dave Shaffer
Signature Date

19. ISI RPindap 1/23/04 Printed Name: R. P. INDAP
Signature Date

20. ANII RG Hagstrom 1-23-04 Printed Name: R G. Hagstrom
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. Date: 02/21/2004

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2630480

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: Volumn and chemical control

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)
Gate	Borg Warner	225195SN11	n/a	2PCHNV379	1992	Replacement	YES

7. Description of Work: Replaced valve gate.

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

Other ☐ Pressure _____ psi Test Temperature _____ °F

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

FORM NIS-2 (Back)

9. Remarks: WO# 2630480 for valve 2PCHNV379. Valve was disassembled and reworked to correct wear on gate guides. The gate was replaced and fitted to valve. Valve was then returned to service

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 2-24-04
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 1-23-04 to 2-24-04, 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 Hytrek
Inspectors Signature

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

Date: 2-24-04

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 2MRCEE01A - SN#212 2. Code Class ASME Section III, Class 1
3. Item Description Steam Generator #1
4. N-5 Package Number 2RC01-1A 5. W.O. Number 2664794
6. Original Construction Code Edition 1989 Edition & No Addenda
7. Original Installation Code Edition 1974 Edition & 1975 Winter Addenda
8. Work Description Install Westinghouse mechanical plugs in 2MRCEE01A "Cold Leg" tubes per Engineering DFWO# 2664786 evaluation and disposition.
9. ☑ ISI Flaw NDE Method of Flaw Detection Eddy Current Testing
Report Number
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
Evaluation Per Eng-DFWO# 2664786
11. Repair/Replacement Work Organization Westinghouse
12. Replacement Item Construction or reconciled Code/Edition 1989 Edition & No Addenda
13. Repair/Replacement Activity Construction Code/Edition 1974 Edition & 1975 Winter Addenda
14. ASME Section XI Code/Edition 1992 Edition & 1992 Addenda
15. Preservice Inspection Required. ☐ YES ☑ NO

BV (Initial) 04/14/05 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

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

BV (Initial) 04/14/05 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

BV (Initial) 04/14/05 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

BV (Initial) 04/14/05 (Date) 18. Include a step in the W.O. to record below all applicable numbers for replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
Tube Plugs	See attached list	See attached list	See attached list	See attached list

19. Planner Barbara Vidal (Signature) 4/14/05 (Date) Print Name Barbara Vidal

20. ISI Engineer R P Indap (Signature) 4/14/05 (Date) Print Name R.P. Indap Logerty-RRL

21. ANII RG Hockstrom (Signature) 4-14-05 (Date) Print Name R.G. Hockstrom

DFWO 2664786 and DIWO 2664794

Replacement Steam Generator (2MRCEE01A-SN212) Cold Leg, had mechanical plugs (part # 0307-1601) obtained via MR -733382 installed in the following locations:

Row	Column
40	87
46	111
47	104
48	103
49	110
141	102
141	112
154	91

All plugs were from heat NX3171HK.

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 04/14/05

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) 2664794 (Work Order Number)

3. Work Performed by Westinghouse (Name) Type Code Symbol Stamp None

Authorization No. N/A

911 W. Main St. Chattanooga, TN. 37402 (Address) Expiration Date N/A

4. Identification of System Reactor Coolant (RC)

5. (a) Applicable Construction Code ASME Sect.III CL.1 19 89 Edition, NO 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)
Steam Generator	Ansaldo	212	NA	2MRCEE01A	2002	Repaired	Yes
Tube Plugs	Westinghouse	NA	NA	NA	2005	Replacement	No

7. Description of Work Plug Steam Generator Cold Leg Tubes Per DFWO# 2664786

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: DIWO 2664794 Replacement Steam Generator (2MRCEE01A-s/n 212) Cold Leg, had mechanical plugs (part# 0307-1601) obtained via MR 733382 (All plugs are from Heat NX3171HK) installed in the following locations: Row 40 Column 87; Row 46 Column 111; Row 47 Column 104; Row 48 Column 103; Row 49 Column 110; Row 141 Column 102; Row 141 Column 112; Row 154 Column 91

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: RPmdap, Consulting Metallurgical Engineer Date: 5/4/05
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 ~~5-11-4~~ 4-15-05 to 5-4-05, 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: 5-4-05

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 2MRCEE01A - SN#212 2. Code Class ASME Section III, Class 1
3. Item Description Steam Generator #1
4. N-5 Package Number 2RC01-1A 5. W.O. Number 2664795
6. Original Construction Code Edition 1989 Edition & No Addenda
7. Original Installation Code Edition 1974 Edition & 1975 Winter Addenda
8. Work Description Install Westinghouse mechanical plugs in 2MRCEE01A "Hot Leg" tubes per Engineering DFWO# 2664788 evaluation and disposition.
9. ☑ ISI Flaw NDE Method of Flaw Detection Eddy Current Testing
Report Number
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
Evaluation Per Eng-DFWO# 2664788
11. Repair/Replacement Work Organization Westinghouse
12. Replacement Item Construction or reconciled Code/Edition 1989 Edition & No Addenda
13. Repair/Replacement Activity Construction Code/Edition 1974 Edition & 1975 Winter Addenda
14. ASME Section XI Code/Edition 1992 Edition & 1992 Addenda
15. Preservice Inspection Required. ☐ YES ☑ NO

BV (Initial) 04/14/05 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

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

BV (Initial) 04/14/05 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

BV (Initial) 04/14/05 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

BV (Initial) 04/14/05 (Date) 18. Include a step in the W.O. to record below all applicable numbers for replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
Tube Plugs	See attached list	See attached list	See attached list	See attached list

19. Planner Barbara Vidal (Signature) 4/14/05 (Date) Print Name Barbara Vidal

20. ISI Engineer R.P. Indap (Signature) 4/14/05 (Date) Print Name R.P. Indap Log Entry-RPI

21. ANII RG Hogstron (Signature) 4-14-05 (Date) Print Name R.G. Hogstron

DFWO 2664788 and DIWO 2664795

Replacement Steam Generator (2MRCEE01A-SN212) Hot Leg, had mechanical plugs (part # 0307-1601) obtained via MR -733382 installed in the following locations:

Row	Column
40	87
46	111
47	104
48	103
49	110
141	102
141	112
154	91

All plugs were from heat NX3171HK.

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 04/14/05

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) 2664795 (Work Order Number)

3. Work Performed by Westinghouse (Name) Type Code Symbol Stamp None

Authorization No. N/A

911 W. Main St. Chattanooga, TN. 37402 (Address) Expiration Date N/A

4. Identification of System Reactor Coolant (RC)

5. (a) Applicable Construction Code ASME Sect.III CL.1 19 89 Edition, NO 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)
Steam Generator	Ansaldo	212	NA	2MRCEE01A	2002	Repaired	Yes
Tube Plugs	Westinghouse	NA	NA	NA	2005	Replacement	No

7. Description of Work Plug Steam Generator Hot Leg Tubes Per DFWO# 2664788

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: DIWO 2664795 Replacement Steam Generator (2MRCEE01A-s/n 212) Hot Leg, had mechanical plugs (part# 0307-1601) obtained via MR 733382 (All plugs are from Heat NX3171HK) installed in the following locations: Row 40 Column 87; Row 46 Column 111; Row 47 Column 104; Row 48 Column 103; Row 49 Column 110; Row 141 Column 102; Row 141 Column 112; Row 154 Column 91

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 Pridgen, Consulting Metallurgical Engineer Date: 5/4/2005
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 4-14-05 to 5-4-05, 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 Lyons
Inspectors Signature

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

Date: 5-4-05

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 2MRCEE01B - SN#211 2. Code Class ASME Section III, Class 1

3. Item Description Steam Generator #2

4. N-5 Package Number 2RC01-1A 5. W.O. Number 2664806

6. Original Construction Code Edition 1989 Edition & No Addenda

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

8. Work Description Install Westinghouse mechanical plugs in 2MRCEE01B "Cold Leg" tubes per Engineering DFWO# 2664789 evaluation and disposition.

9. ☑ ISI Flaw NDE Method of Flaw Detection Eddy Current Testing

Report Number

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
Evaluation Per Eng-DFWO# 2664789

11. Repair/Replacement Work Organization Westinghouse

12. Replacement Item Construction or reconciled Code/Edition 1989 Edition & No Addenda

13. Repair/Replacement Activity Construction Code/Edition 1974 Edition & 1975 Winter Addenda

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

15. Preservice Inspection Required. ☐ YES ☑ NO

BV (Initial) 04/14/05 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

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

BV (Initial) 04/14/05 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

BV (Initial) 04/14/05 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

BV (Initial) 04/14/05 (Date) 18. Include a step in the W.O. to record below all applicable numbers for replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
Tube Plugs	See attached list	See attached list	See attached list	See attached list

19. Planner Barbara Vidal (Signature) 4/14/05 (Date) Print Name Barbara Vidal

20. ISI Engineer R P Indap (Signature) 4/14/05 (Date) Print Name R.P. Indap Log entry-RRR

21. ANII R G Hogstrom (Signature) 4-15-05 (Date) Print Name R.G. Hogstrom

DFWO 2664789 and DIWO 2664806

211 RPE 5/4/05

Replacement Steam Generator (2MRCEE01B-SN~~212~~) Cold Leg, had mechanical plugs (part # 0307-1601) obtained via MR -733382 installed in the following locations:.

Row	Column
114	69
21	76
29	80
48	91
43	92
44	111
106	117

All plugs were from heat NX3171HK.

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 04/14/05

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) 2664806 (Work Order Number)

3. Work Performed by Westinghouse (Name) Type Code Symbol Stamp None

Authorization No. N/A

911 W. Main St. Chattanooga, TN. 37402 (Address) Expiration Date N/A

4. Identification of System Reactor Coolant (RC)

5. (a) Applicable Construction Code ASME Sect.III CL.1 19 89 Edition, NO 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)
Steam Generator	Ansaldo	211	NA	2MRCEE01B	2002	Repaired	Yes
Tube Plugs	Westinghouse	NA	NA	NA	2005	Replacement	No

7. Description of Work Plug Steam Generator Cold Leg Tubes Per DFWO# 2664789

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: DIWO 2664806 Replacement Steam Generator (2MRCEE01B-s/n 211) Cold Leg, had mechanical plugs (part# 0307-1601) obtained via MR 733382 (All plugs are from Heat NX3171HK) installed in the following locations: Row 114 Column 69; Row 21 Column 76; Row 29 Column 80; Row 48 Column 91; Row 43 Column 92; Row 44 Column 111; Row 106 Column 117

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 Rhodes, Consulting Metallurgical Engineer Date: 5/4/2005
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 4-15-05 to 5-4-05, 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: 5-4-05

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 2MRCEE01B - SN#211 2. Code Class ASME Section III, Class 1
3. Item Description Steam Generator #2
4. N-5 Package Number 2RC01-1A 5. W.O. Number 2664807
6. Original Construction Code Edition 1989 Edition & No Addenda
7. Original Installation Code Edition 1974 Edition & 1975 Winter Addenda
8. Work Description Install Westinghouse mechanical plugs in 2MRCEE01B "Hot Leg" tubes per Engineering DFWO# 2664790 evaluation and disposition.
9. ☑ ISI Flaw NDE Method of Flaw Detection Eddy Current Testing
Report Number
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
Evaluation Per Eng-DFWO# 2664790
11. Repair/Replacement Work Organization Westinghouse
12. Replacement Item Construction or reconciled Code/Edition 1989 Edition & No Addenda
13. Repair/Replacement Activity Construction Code/Edition 1974 Edition & 1975 Winter Addenda
14. ASME Section XI Code/Edition 1992 Edition & 1992 Addenda
15. Preservice Inspection Required. ☐ YES ☑ NO

BV (Initial) 04/14/05 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

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

BV (Initial) 04/14/05 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

BV (Initial) 04/14/05 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

BV (Initial) 04/14/05 (Date) 18. Include a step in the W.O. to record below all applicable numbers for replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
Tube Plugs	See attached list	See attached list	See attached list	See attached list

19. Planner Barbara Vidal (Signature) 4/14/05 (Date) Print Name Barbara Vidal

20. ISI Engineer [signature] (Signature) 4/14/05 (Date) Print Name R.P. INDAP Legerty-MRC

21. ANII [signature] (Signature) 4-14-05 (Date) Print Name R.G. HAGSTROM

DFWO 2664790 and DIWO 2664807

211 RPF 5/4/05

Replacement Steam Generator (2MRCEE01B-SN~~212~~) Hot Leg, had mechanical plugs (part # 0307-1601) obtained via MR -733382 installed in the following locations:

Row	Column
114	69
21	76
29	80
48	91
43	92
44	111
106	117

All plugs were from heat NX3171HK.

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 04/14/05

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) 2664807 (Work Order Number)

3. Work Performed by Westinghouse (Name) Type Code Symbol Stamp None

Authorization No. N/A

911 W. Main St. Chattanooga, TN. 37402 (Address) Expiration Date N/A

4. Identification of System Reactor Coolant (RC)

5. (a) Applicable Construction Code ASME Sect.III CL.1 19 89 Edition, NO 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)
Steam Generator	Ansaldo	211	NA	2MRCEE01B	2002	Repaired	Yes
Tube Plugs	Westinghouse	NA	NA	NA	2005	Replacement	No

7. Description of Work Plug Steam Generator Hot Leg Tubes Per DFWO# 2664790

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: DIWO 2664807 Replacement Steam Generator (2MRCEE01B-s/n 211) Hot Leg, had mechanical plugs (part# 0307-1601) obtained via MR 733382 (All plugs are from Heat NX3171HK) installed in the following locations: Row 114 Column 69; Row 21 Column 76; Row 29 Column 80; Row 48 Column 91; Row 43 Column 92; Row 44 Column 111; Row 106 Column 117

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: RPmdap, Consulting Metallurgical Engineer Date: 5-4-2005
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 4-14-05 to 5-4-05, 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 Lytton
Inspectors Signature

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

Date: 5-4-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2PC005H015
2. Item Description: B TRAIN SDC SUCTION VALVE FROM CONTAINMENT RECIRC SUMP
3. N-5 Data Package Number: 2PC02-1 4. W.O. Number: 2664893
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 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:

   No failure-the snubber passed Surveillance Testing, was replaced as a precautionary measure due to marginal results of the testing.

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 NF Cl 3, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☒ NO 4/12/05

Initial J.D. Date 4-19-05 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☒ YES 4/19/05 ☒ NO

Initial J.D. Date 4-19-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D. Date 4-19-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D. Date 4-19-05 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.
Snubber	APN 45350024	18742	N/A	MR 967160

18. Planner [signature] 4-19-05
    Signature Date Printed Name: James I. Davis

19. ISI Alan Morrow 4/19/05 Printed Name: Alan Morrow Log Entry am
    Signature Date

20. ANII [signature] 4-19-05 Printed Name: RG Hagstrom
    Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. Date: 04/29/2005

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2664893

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

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: SI: Safety Injection

5. (a) Applicable Construction Code ASME Section III NF, Class 3 1974 Edition, Winter 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)
Snubber	PSA	18742	n/a	2PC005H015	1981	Replacement	YES

7. Description of Work: Replace snubber for precautionary reasons.

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 2664893 replaced the snubber on support 2PC005H015 after Surveillance testing. Although the snubber passed its ST, the results were marginal and the snubber was replaced as a precautionary measure.

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: Alan Monour Sr ISI Engineer Date: 4/29/05
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 4-19-05 to 4-29-05, 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 Upton
Inspectors Signature

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

Date: 4-29-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2SI106H008
2.. Item Description: snubber
3. N-5 Data Package Number: 2SI9-2 4. W.O. Number: 2664897
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: SNUBBER 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:

Replaced due failure of ST..

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 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 MJS Date 4-14-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MJS Date 4-14-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MJS Date 4-14-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial MJS Date 4-14-05 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.
SNUBBER	PSA-1/4W	20941	n/a	2664897

18. Planner MJS 4-14-05 Printed Name: Martin J. Sullivan
Signature Date

19. ISI Alan Morrow 4/15/05 Printed Name: Alan Morrow Log Entry am
Signature Date

20. ANII RG Hogstrom 4-15-05 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. Date: 04/14/2005

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2664897

3. Work Performed by: Arizona Public Service 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, 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)
Snubber	Pacific scientific	20941	n/a	2SI106H008	81	Replacement	YES

7. Description of Work: Snubber replaced due to failing the ST.

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: Replaced snubber 2SI106H008 due to failing the ST w.o.2664897.

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 P Fordap, Consulting Metallurgical Engineer Date: 5/4/2005
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 4-15-05 to 5-5-05, 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 Hyton
Inspectors Signature

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

Date: 5-5-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2CH034H00A
2. Item Description: Item 70 on Line 2PCHNL034
3. N-5 Data Package Number: 2CH14-2 4. W.O. Number: ~~2686498~~ & 2687065 PPE 3/2/04
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove Item 70 and reinstall.
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 to component Item 70 removed to facilitate maintenance to downstream components.

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 2, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial MEM Date 2/26/04 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MEM Date 2/20/04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MEM Date 2/26/04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial MEM Date 2/26/04 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.
2CH034H00A	ITEM 70	N/A	N/A	N/A

18. Planner Glenn E. Moore 2-26-04
    Signature Date Printed Name: Glenn E. Moore
19. ISI Fred Poteet 2/26/04
    Signature Date Printed Name: FRED POTEET
20. ANII Robert Hogstrom 2-26-04
    Signature Date Printed 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. Date: 02/27/2004

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2687065

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

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)
Item 70	n/a	n/a	n/a	2CH034H00A	n/a	Replacement	NO

7. Description of Work: Re-installed (weld) the hanger item 70 pipe restraint.following maintenance inspection.

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: Support 2CH034H00A item 70 pipe restraint was removed under wo# 2686498 for piping inspection. The item 70 will be in-installed under DIWO# 2687065.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monroe PSI Engineer Date: 3/2/04
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 2-26-04 to 3-2-04, 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: 3-2-04

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 2MRCEE01A - SN#212 2. Code Class ASME Section III, Class 1
3. Item Description Steam Generator #1
4. N-5 Package Number 2RC01-1A 5. W.O. Number 2687154
6. Original Construction Code Edition 1989 Edition & No Addenda
7. Original Installation Code Edition 1974 Edition & 1975 Winter Addenda
8. Work Description Install CE roll plugs in 2MRCEE01A "Cold Leg" tubes Per Engineering DFWO# 2685754 evaluation and disposition.
9. ☑ ISI Flaw NDE Method of Flaw Detection Eddy Current Testing
Report Number
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
Evaluation Per Eng-DFWO# 2685754
11. Repair/Replacement Work Organization Westinghouse
12. Replacement Item Construction or reconciled Code/Edition 1989 Edition & No Addenda
13. Repair/Replacement Activity Construction Code/Edition 1974 Edition & 1975 Winter Addenda
14. ASME Section XI Code/Edition 1992 Edition & 1992 Addenda
15. Preservice Inspection Required. ☐ YES ☑ NO
DWS (Initial) 02/27/04 (Date) If required, include a step in the W.O. to perform Preservice Inspection.
16. ASME Section XI Pressure Test Required ☐ YES ☑ NO
DWS (Initial) 02/27/04 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.
DWS (Initial) 02/27/04 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
DWS (Initial) 02/27/04 (Date) 18. Include a step in the W.O. to record below all applicable numbers for replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
Tube Plugs	0307-1601	40013385-93	NX3171HK	733382

19. Planner D W Shaffer (Signature) 02/27/04 (Date) Print Name David Shaffer
20. ISI Engineer D B Hansen (Signature) 2-28-04 02/27/04 (Date) Print Name D B Hansen
21. ANII R. Hogstrom by D B Hansen 2-28-04 (Signature) 02/27/04 (Date) Print Name D B Hansen

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 02/23/04

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) 2687154 (Work Order Number)

3. Work Performed by Westinghouse (Name) Type Code Symbol Stamp None

Authorization No. N/A

911 W. Main St. Chattanooga, TN. 37402 (Address) Expiration Date N/A

4. Identification of System Reactor Coolant (RC)

5. (a) Applicable Construction Code ASME Sect.III CL.1 1989 Edition, N/A 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 Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Steam Generator	Ansaldo	212	161	2MRCEEO1A	2002	Repaired	Yes

7. Description of Work Plug Steam Generator Cold Leg Tubes Per DIWO# 2687154

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 DIWO #2687154, See Eng-DFWO # 2685754 for tubes plugged.

The following is the tube plug information:

ASME SECTION XI-REPAIR/REPLACEMENT

COMP. ID	ROW	COL	PART NO.	SERIAL NO.	HEAT NO.	MR NO.
2MRCEE01A-SN212	156	143	0307-1601	40013385-93	NX3171HK	733382

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] Sr. Consulting Engr (Owner or Owner's Designee, Title) Date 02/29/04

CERTIFICATE 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 2-28-04 to 2-22-04, 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,1,C" Az 264 (National Board, State, Province, and Endorsements)

Date 2-29-04

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 2MRCEE01A - SN#212 2. Code Class ASME Section III, Class 1
3. Item Description Steam Generator #1
4. N-5 Package Number 2RC01-1A 5. W.O. Number 2687155
6. Original Construction Code Edition 1989 Edition & No Addenda
7. Original Installation Code Edition 1974 Edition & 1975 Winter Addenda
8. Work Description Install CE roll plugs in 2MRCEE01A "Hot Leg" tubes Per Engineering DFWO# 2685754 evaluation and disposition.
9. ☑ ISI Flaw NDE Method of Flaw Detection Eddy Current Testing
Report Number
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
Evaluation Per Eng-DFWO# 2685754
11. Repair/Replacement Work Organization Westinghouse
12. Replacement Item Construction or reconciled Code/Edition 1989 Edition & No Addenda
13. Repair/Replacement Activity Construction Code/Edition 1974 Edition & 1975 Winter Addenda
14. ASME Section XI Code/Edition 1992 Edition & 1992 Addenda
15. Preservice Inspection Required. ☐ YES ☑ NO

DWS (Initial) 02/27/04 (Date) If required, include a step in the W.O. to perform Preservice Inspection.

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

DWS (Initial) 02/27/04 (Date) If required, include a step in the W.O. for ISI & ANII Inspection.

DWS (Initial) 02/27/04 (Date) 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

DWS (Initial) 02/27/04 (Date) 18. Include a step in the W.O. to record below all applicable numbers for replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
Tube Plugs	0307-1601	40013385-94	PX3171HK	733382

19. Planner D W Shaffer (Signature) 02/27/04 (Date) Print Name David Shaffer

20. ISI Engineer D B Hansen (Signature) 2-28-04 (Date) Print Name D B Hansen

21. ANII R. Hogstrom by D B Hansen (Signature) 2-28-04 (Date) Print Name D B Hansen

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 02/29/04

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) 2687155 (Work Order Number)

3. Work Performed by Westinghouse (Name) Type Code Symbol Stamp None

Authorization No. N/A

911 W. Main St. Chattanooga, TN. 37402 (Address) Expiration Date N/A

4. Identification of System Reactor Coolant (RC)

5. (a) Applicable Construction Code ASME Sect.III CL.1 1989 Edition, N/A 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 Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Steam Generator	Ansaldo	212	161	2MRCEE01A	2002	Repaired	Yes

7. Description of Work Plug Steam Generator Hot Leg Tubes Per DIWO #2687155

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 DIWO #2687155, See ENG-DFWO #2685754 for tubes plugged.

The following is the tube plug information:

ASME SECTION XI-REPAIR/REPLACEMENT

COMP. ID	ROW	COL	PART NO.	SERIAL NO.	HEAT NO.	MR NO.
2MRCEE01A-SN212	156	143	0307-1601	40013385-94	NX3171HK	733382

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] Sr. Consulting Engr (Owner or Owner's Designee, Title) Date 02/29/04

CERTIFICATE 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 2-28-04 to 2-29-04, 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 2-29-04

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 2PSGEL011 2. Code Class ASME Section III Class 2
3. Item Description Pipe Spool
4. N-5 Package Number 2SG02-2 5. W.O. Number 2689066
6. Original Construction Code Edition 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda
8. Work Description Replacement of Pipe spool due to Flow Accelerated Erosion Corrosion, DIDM 2689065 EDC# 2004-00228

9. ☐ ISI Flaw NDE Method of Flaw Detection N/A
Report Number N/A

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
Replacement of Eroded piping with Stainless Steel as Described in DIDM 268906, EDC# 2004-00228. There was no failure of the Code Pressure boundry.

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition Sec.III Cl2/'74 Edition '75 Summer Addenda
13. Repair/Replacement Activity Construction Code/Edition Sec.III Cl.2/'74 Edition '75 Winter Addenda
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☑ YES ☐ NO
KOS Initial 8/25/04 Date If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required ☑ YES ☐ NO
KOS Initial 8/25/04 Date If required, include a step in the W.O. for ISI & ANII Inspection.
KOS Initial 8/25/04 Date 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
KOS Initial 8/25/04 Date 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
8" Stainless Steel Pipe	APN 00061187		455385	MR# 873435
8" S.S. Elbow 90 Deg.	APN 00067691		MBHZ-1	MR# 873435
8" Carbon Steel Pipe	APN 00064731		C66845	P.O. 5002678 40
8" Stainless Pipe	APN 00061187		385840	MR# 753958

19. Planner Karl V. Savage 8/25/2004 Print Name Karl V. Savage
Signature Date

20. ISI Engineer [signature] 9/15/04 Print Name Ramakant P. Indap
Signature Date

21. ANII [signature] 9-15-04 Print 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: 05/04/2005

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2689066

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: SG

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)
8" Pipe Spool	N/A	N/A	N/A	2PSGEL011	2005	Replacement	No

7. Description of Work: Replaced pipe spool due to flow accelerated corrosion of the original piping.

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 2689066. Replaced 8" Spool S-004 of Line 2PSGEL011 with Stainless Steel.

Per Pressure Test Review of Work Order: 1st: Alan Monow
2nd: RG Hylton

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/16/05
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~~ Virginia and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, 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.

William T Baker
Inspectors Signature

Commissions: NB 8098 ANI VA 5-1405
~~NB 9685 "N" "I" AZ264~~
National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page of

1. Component ID 2JECALV0015
2.. Item Description: ECWS Expansion Tank Level Control Valve
3. N-5 Data Package Number: 2EC01-4 4. W.O. Number: 2691433
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace main disc and seal weld 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 ASME boundry. Trouble shoot and rework seat leakage. Replace bonnet to body seal weld.

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 7/21/04 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 7/21/04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial GEO Date 7/21/04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial GEO Date 7/21/04 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.

18. Planner G Osmundson 7/21/04 Printed Name: G OSMUNDSON
Signature Date

19. ISI Fred Potet 7/21/04 Printed Name: F. POTEET
Signature Date

20. ANII RG Hostrom 7-21-04 Printed Name: R.G. HOOSTRON
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. Date: 08/17/04

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2691433

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: 2-EC01-4

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)
Valve	Target Rock	3	N/A	2JECALV015	1978	Repaired	Yes

7. Description of Work: Reworked (lapped) main disc & replaced seal weld to correct seat leakage.

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

Other ☐ Pressure _____ psi Test Temperature _____ °F

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

FORM NIS-2 (Back)

9. Remarks: WO# 2691433, Reworked (lapped) main disc and replace seal weld to correct seat leakage.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R P Nolan, Consulting Metallurgical Engineer Date: 8/17/04
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 7-21-04 to 8-17-04, 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: 8-17-04

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2JCHNPSV0115
2. Item Description: CROSBY RELIEF VALVE
3. N-5 Data Package Number: 2CH03-4A 4. W.O. Number: 2692100
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: 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 presure boudary. Spare valve is being installed to expedite 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 _____ Date 1-4-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial _____ Date 1-4-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial _____ Date 1-4-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial _____ Date 1-4-05 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.
2JCHNPSV0115	APN 45000473	N61177-00-0001	N/A	277 1446

18. Planner _____ 1-4-05 Printed Name: DAVID GOOLDET
    Signature Date

19. ISI _____ 1-7-05 Printed Name: Alan Morrow Log Entry _____
    Signature Date

20. ANII _____ 1-11-05 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. Date: 01/04/2004

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2692100

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: CHEMICAL AND VOLUME CONTROL

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Summer 1976 Addenda, ____ Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
VALVE	CROSBY	N61177-00-0001	n/a	2JCHNPSV 0115	1978	Replacement	YES

7. Description of Work: 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: VALVE 2JCHNPSV0115 WAS REPLACED WITH A SPARE VALVE UNDER 2692100 TO EXPIDITE WORK ACTIVITY.

Pre-Pressured Test WO Review – ISI Alan Monow

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: Alan Monow ISI Engineer Date: 5/16/05

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~~ Virginia and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, 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. 5-14-05

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

5-14-05

William E. Hilton

Inspectors Signature

Commissions: NB 5098 ANI ~~NB 9685 "N" "T" AZ264~~

National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2JCHNPSV0345
2. Code Class ASME Section III Class 2
3. Item Description: Crosby relief valve
4. N-5 Data Package Number: 2CH13-1
5. W.O. Number: 2692107
6. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Remove valve and replace with tested spare.
9. ☐ ISI Flaw — NDE Method of Flaw Detection: — Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Not a pressure boundary failure. Valve is being replaced with spare to minimize maintenance outage time.

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

Initial DMS Date 4-17-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMS Date 4-17-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMS Date 4-17-05 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMS Date 4-17-05 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.
2JCHNPSV0345	APN 45000476	N61180-00-0008	n/a	WO 2606004

19. Planner DMS David Goodlet 4-17-05 Printed Name: David Goodlet
Signature Date

20. ISI Alan Morrow 4/18/05 Printed Name: Alan Morrow
Signature Date

21. ANII RG Houstrom 4-18-05 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. Date: 4/17/2005

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2692107

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

   Authorization No. N/A

   Expiration Date N/A

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

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Summer 1976 Addenda, ____ Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Crosby	N61180-00-0008	n/a	2JCHNPSV0345	1980	Replacement	YES

7. Description of Work: Install spare 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: Valve 2JCHNPSV0345 was replaced with spare under wo# 2692107 to reduce maintenance down time.

Pre-Pressured Test WO Review – ISI Alan Morrow 4/22/05

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: Alan Morrow ISI Engineer Date: 5/16/05

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 of ~~Province~~ Virginia of ~~Arizona~~ and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, 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 8098 AUT NB-9685 "N" "I" ~~AZ264~~

National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2JSPAPSV0143
2. Item Description: PSV
3. N-5 Data Package Number: 2SP01-2 4. W.O. Number: 2692282
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:

   Replaced valve due to disc is stuck in the seat and will not lift. This valve is being replaced so it can be sent to target rock corp. for analysis.

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 MJS Date 4-9-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MJS Date 4-9-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MJS Date 4-9-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial MJS Date 4-9-05 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.
TARGET ROCK PSV	76Q-05	MJS RIL 4-13-05 12 24	n/a	2692282

18. Planner MJS 4-8-05 Printed Name: Martin J Sullivan
    Signature Date
19. ISI RLB 4-8-05 Printed Name: Robert L Brown Log Entry RLB
    Signature Date
20. ANII RG Hogstron 4-9-05 Printed Name: RG Hogstron
    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: 04/09/2005

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2692282

3. Work Performed by: Arizona Public Service 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 ND, 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)
SP PSV	target rock	24	n/a	2JSPAPSV143	2005	Replacement	YES

7. Description of Work: valve repalcement due to disc stuck into seat.

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

N-416-2 ☒ Other Pressure _____ psi Test Temperature _____ °F

4/15/05

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: Replaced the valve under w.o. 2692282. Removed valve will be sent to target rock corp. for analysis..

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: Alan Morrow ISI Engineer Date: 4/15/05
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 4-9-05 to 4-15-05, 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 Hylton
Inspectors Signature

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

Date: 4-15-05

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

1. Owner: Arizona Public Service Company, et. al. Date: 05/07/05

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2692582

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: 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	31505	1020	2PSIEV227	1978	Repaired	Yes
Bonnet	Borg Warner	15	N/A	2X63	1978	Replaced	Yes
Disc	Borg Warner	17	N/A	2X49	1978	Replaced	Yes
Bonnet	Borg Warner	12	N/A	2X60	1978	Replacement	Yes
Disc	Borg Warner	20	N/A	2X52	1978	Replacement	Yes

7. Description of Work: Replaced the bonnet/arm/disk 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. 2692582 replaced bonnet/arm/disc assembly, with reworked bonnet (s/n 12) arm and disk (s/n 20) assembly originally installed in 3PSIEV237 (Borg-Warner valve s/n 32620 N.B. 1075 built 1978) removed under W.O. 2607936 and reworked under W.O. 2748687.

Pre-Pressure Test Work Order Review: ISI : Alan Morrow

ANII : RB Hyatt

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Morrow ISI Engineer Date: 5/17/05

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 4-2-05 to 5-16-05, 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.

William E Huber

Inspectors Signature

Commissions: NB 8098 AVT

National Board, State, Province, and Endorsements

Date: 5-16-05 (17 with 5-17-05)

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2PCHNV807
2. Item Description: CHECK VALVE
3. N-5 Data Package Number: 2CH14-2 4. W.O. Number: 2692626
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: SEAL WELD BONNET AFTER REWORK OF SEAT AND 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:

   No failure to ASME Section III boundary. The bonnet seal weld replacement is for access to valve internals for ISI inspections.

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 DMG Date 8-31-2004 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 8-31-2004 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 8-31-2004 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMG Date 8-31-2004 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 seal weld	N/A	N/A	N/A	N/A

18. Planner [signature] 8-31-2004 Printed Name: DAVID GOODLET
    Signature Date

19. ISI [signature] 9/14/04 Printed Name: R. P. INDAP
    Signature Date

20. ANII [signature] 9-15-04 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: 08/26/2004

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2692626

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

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: CHEMICAL AND VOLUME CONTROL (CH)

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 seal weld	Borg Warner	57652	n/a	2PCHNV807	1980	Replacement	YES

7. Description of Work: SEAL WELD VALVE BONNET REMOVED FOR ISI INSPECTION

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: W.O. 2692626 For valve 2PCHNV807. Seal weld removed from bonnet so valve could be disassembled for ISI inspection

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Morrow ISI Engineer Date: 4/21/05
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 9-15-05 to 4-21-05, 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: 4-21-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2SI123H001
2.. Item Description: Pipe Support (Snubber)
3. N-5 Data Package Number: Not Available 4. W.O. Number: 2693355
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 snubber due to suspected binding.
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 snubber is being replaced for precautionary measures. This is a like for like replacement.

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 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☐ NO

Initial ___DWS__ Date __04/15/2004 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial ___DWS__ Date __04/15/2004 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial ___DWS__ Date __04/15/2004_ 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial ___DWS__ Date ___04/15/2004 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.
3 Kip Snubber	1801106-05	9219	N/A	

18. Planner DW Shaffer 4/15/04 Printed Name: David Shaffer
Signature Date

19. ISI RPIndap 4/15/04 Printed Name: R.P. Indap
Signature Date

20. ANII RG Signature ANII unavailable will be contacted later RPIndap 4/15/04
4-15-04 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: 04/15/2004

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2693355

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 (SI)

5. (a) Applicable Construction Code ASME Section III NF, Class 1 ~~1971~~ 1974 Edition, W'75 Addenda, _____ Code Case 12B-4-1604-1

   (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 Kip Snubber	PSA	9219	N/A	2SI123H001	1979	Replacement	YES

7. Description of Work: Replace 2SI123H001, no welding.

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

   Other ☐ Pressure _____ psi Test Temperature _____ °F

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

FORM NIS-2 (Back)

9. Remarks: WO #2693355. Replaced Snubber 2SI123H001 (SN 26261) for precautionary measures due to suspected binding. Replacement snubber (SN 9219) was removed for snubber reduction from 2CH424H002.

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 15/ ENG 4-16-04 Date: 4-16-04

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 4-15-04 to 4-16-04, 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.

RL Lytton

Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264

National Board, State, Province, and Endorsements

Date: 4-16-04

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2PSIEV235
2. Item Description: SIT 1A Discharge Check Valve
3. N-5 Data Package Number: 2RC01-1B 4. W.O. Number: 2695179
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 parts as required to correct identified deficiencies
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:

   ———

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 T.O Date 11-6-04 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial T.O Date 11-6-04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial T.O Date 11-6-04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial T.O Date 11-6-04 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.

18. Planner [signature] 11-6-04 Printed Name: James I. Davis
    Signature Date
19. ISI [signature] 11-15-04 Printed Name: R. P. JINDAL Log Entry RPR
    Signature Date
20. ANII [signature] 4-17-04 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. Date: 05/07/05

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2695179

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: 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	31500	987	2PSIEV235	1978	Repaired	Yes
Bonnet	Borg Warner	3	N/A	2X69	1978	Replaced	Yes
Disc	Borg Warner	10	N/A	2X42	1978	Replaced	Yes
Bonnet	Borg Warner	20	N/A	2X68	1978	Replacement	Yes
Disc	Borg Warner	21	N/A	2X53	1978	Replacement	Yes

7. Description of Work: Replaced the bonnet/arm/disk 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. 2695179 replaced bonnet/arm/disc assembly, with reworked bonnet (s/n 20 arm and disk (s/n 21) assembly originally installed in 3PSIEV225 (Borg-Warner valve s/n 32616 N.B. 1134 built 1978) removed under W.O. 2607933 and reworked under W.O. 2764996.

Pre-Pressure Test Work Order Review: ISI : Alan Morrow

ANII : [illegible]

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Morrow ISI Engineer Date: 5/16/05
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 4-2-05 to 5-16-05, 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.

William E Weeks Commissions: NB 8098 AN1
Inspectors Signature
National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2JCHNUV0500
2. Item Description: 3" Fisher 3-Way Control Valve model FS
3. N-5 Data Package Number: 2CH03-4A 4. W.O. Number: 2711158
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework valve to correct internal 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:

   Not a pressure boundary failure. The valve plug/stem assembly is being replaced to improve plug to seat sealing.

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 [illegible] Date 4-21-05 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 4-21-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 4-21-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial [illegible] Date 4-21-05 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.
Plug	APN 00072816	AD7914-1	3407	MR 920004

18. Planner [signature] 4-21-05 Printed Name: David Goodlet
    Signature Date
19. ISI [signature] 4-21-05 Printed Name: Alan Morrow Log Entry [signature]
    Signature Date
20. ANII [signature] 4-21-05 Printed Name: R.G. Hoogstra
    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: 4-21-2005

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2711158

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

Authorization No. N/A

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Plug	Fisher Controls	AD7914-1	n/a	2JCHNUV0500	2004	Replacement	YES

7. Description of Work: Overhaul valve 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# 2711158 on valve 2JCHNUV0500 was disassembled and inspected for seat leakage. The plug is being replaced to improve the seat condition.

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: Alan Monow ISI Engineer Date: 5/10/05
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 4-21-05 to 5-10-05, 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 Hylton
Inspectors Signature

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

Date: 5-10-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2MCHNE02
2.. Item Description: Letdown Heat Exchanger
3. N-5 Data Package Number: 2CH13-9 4. W.O. Number: 2716542
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 end cover gasket 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:

Not a ASME pressure boundary failure. The cover studs and nuts will be replaced if necessary due to radiological conserns or if mechanical galling is found.

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 9-20-04 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ~~☒ YES~~ RPS 9/29/04 ☒ NO

Initial DMG Date 9-20-04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 9-20-04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMG Date 9-20-04 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.
cover studs	APN 43115017	N/A	JBW, JNJ, K8S P396	902003
cover nuts	APN 43126001	N/A	151173 JWD	903897
			8650692	

18. Planner David Goodlet 9-20-04 Printed Name: David Goodlet
Signature Date

19. ISI R P Indap 9/29/04 Printed Name: R. P. INDAP Log Entry RPI
Signature Date

20. ANII RG Hogstrom 9-29-04 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. Date: 9/16/2004

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2716542

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)
cover studs	n/a	n/a	n/a	2MCHNE02	2004	Replacement	NO
cover nuts	n/a	n/a	n/a	2MCHNE02	2004	Replacement	NO

7. Description of Work: Replacement of cover gasket to correct leakage. Studs & nuts will be replaced as necessay.

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# 2716542 for 2MCHNE02 will remove the end cover from the heat exchanger for gasket replacement to correct small leakage. Studs & nuts will be replaced if necessary due to radiological concers or any mechanical galling.

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: Alan Morrow ISI Engineer Date: 4-15-05
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 9-24-04 to 4-15-05, 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 Lyotier
Inspectors Signature

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

Date: 4-15-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2MRCEX01
2. Item Description: Reactor Head Vent Orifice
3. N-5 Data Package Number: 2RC01-1A 4. W.O. Number: 2717779
5. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Relocate the Reactor Head Vent Orifice DMWO 2717767
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 Reactor head vent line orifice is being removed from flush with the vessel head and a new orifice is being fabricated and installed downstream of valve 2PRCEV212 per the DMWO. The head vent piping is being upgraded from ASME Class 2 to ASME Class 1. This will allow for NDE of the head vent nozzle to comply with NRC Order EA03-009. There was no failure of the Code boundry.

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 KVS Date 10/29/2004 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 10/29/2004 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial KVS Date 10/29/2004 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial KVS Date 10/29/2004 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.
Round Stock, SA479 TP316	APN 43640489			MR 893055

18. Planner [signature] 10/29/2004 Printed Name: Karl V. Savage
    Signature Date

19. ISI [signature] 11/03/04 Printed Name: R. P. INDAP Log Entry RPI
    Signature Date

20. ANII [signature] 11-12-04 Printed Name: R. G. HOUSTON
    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: 11/03/2004

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2717779

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

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: RC - Reactor Coolant

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)
Orifice	N/A	N/A	N/A	MR 893055	N/A	Replacement	NO

7. Description of Work: Relocate the head vent orifice and upgrade the vent piping from Class 2 to Class 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)

9. Remarks: Work Order 2717779. Relocated the Reactor Vessel Head vent orifice from flush with the inside surface of the head to the flange downstream of 2PRCEV212. This modification also upgraded the piping between the head and the new orifice from ASME Class 2 to Class 1.

Pre-Pressured Test WO Review – ISI Alan Monow

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: Alan Monow ISI Engineer Date: 5/11/05
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 11-12-04 to 5-11-05, 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: 5-11-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2PSIEV542
2. Item Description: HPSI / LPSI Header Loop Injection Check Valve
3. N-5 Data Package Number: 2RC01-1B 4. W.O. Number: 2721744
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 parts as required to correct identified deficiencies
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:

   ——

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 JWJ Date 11-19-04 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 11-19-04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 11-19-04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D Date 11-19-04 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	76557	19	—	WO 2764987
DISC	76865	5	—	WO 2764987

18. Planner J. I. Davis 11-19-04 Printed Name: James I. Davis
    Signature Date

19. ISI Alan Morrow 12-1-04 Printed Name: Alan Morrow Log Entry am
    Signature Date

20. ANII R.G. Hogstrom 12-1-04 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: 05/07/05

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2721744

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: 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	51028	1605	2PSIEV542	1979	Repaired	Yes
Bonnet	Borg Warner	14	N/A	3C62	1979	Replaced	Yes
Disc	Borg Warner	10	N/A	3L96	1979	Replaced	Yes
Bonnet	Borg Warner	19	N/A	3L97	1979	Replacement	Yes
Disc	Borg Warner	5	N/A	3L96	1979	Replacement	Yes

7. Description of Work: Replaced the bonnet/arm/disk 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. 2721744 replaced bonnet/arm/disc assembly, with reworked bonnet (s/n 19) arm and disk (s/n 5) assembly originally installed in 3PSIEV543 (Borg-Warner valve s/n 63871 N.B. 2287 built 1980) removed under W.O. 2716741 and reworked under W.O. 2764987.

Pre-Pressure Test Work Order Review: ISI : Alan Monow

ANII : [signature]

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Representative Date: 5/16/05
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~~ Virginia and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, 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: VA 6098 ANI
National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page ____ of ____

1. Component ID 2MDGAE05
2. Item Description: DG JACKET WATER COOLER
3. N-5 Data Package Number: 2DG01-2 4. W.O. Number: 2724392
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 FO THE BASE MATERIAL DUE TO EXCEEDING MINIMUM WALL THICKNESS, REPAIRED AREAS TO BE PROTECTED WITH COATINGS.
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 MH Date 4-8-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MH Date 4-8-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MH Date 4-8-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial MH Date 4-8-05 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.
2MDGAE05 REVERSING SPOOL	4-321-19-815-007	9-20016-01-4	N/A	2724392

18. Planner Martin Sullivan 4-8-05 Printed Name: Martin Sullivan
    Signature Date

19. ISI Alan Morrow 4/8/05 Printed Name: Alan Morrow Log Entry on
    Signature Date

20. ANII R G Hogstrom 4-8-05 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. Date: 04/08/2005

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2724392

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

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: 2MDGAE05

5. (a) Applicable Construction Code ASME Section III ND, 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)
DG "A"jacket water cooler	American Standard	9-20016-01-4	33117	2MDGAE05	1979	Repaired	YES

7. Description of Work: Weld build up of corroded reversing spool

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: WELD REPAIR OF BASE METAL ON THE REVERSING SPOOL W.O. # 2724392

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: Alan Monow ISI Engineer Date: 4/15/05
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 4-7-05 to 4-15-05, 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: 4-15-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page ____ of ____

1. Component ID 2MDGAE04
2. Item Description: DG LUBE OIL COOLER
3. N-5 Data Package Number: 2DG01-2 4. W.O. Number: 2724398
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 FO THE BASE MATERIAL DUE TO EXCEEDING MINIMUM WALL THICKNESS, REPAIRED AREAS TO BE PROTECTED WITH COATINGS.

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 MH Date 4-9-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MH Date 4-9-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MH Date 4-9-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial MH Date 4-9-05 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.
2MDGAE04 BAFFLE PLATE (INLET/OUTLET SPOOL)	4-305-19-815-008	9-20016-02-3	N/A	2724398

18. Planner MH 4-9-05 Printed Name: Martin Sullivan
    Signature Date
19. ISI RLB 4-9-05 Printed Name: Robert L Brown Log Entry RLB
    Signature Date
20. ANII RG Hogstrom 4-9-05 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. Date: 04/09/2005

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2724398

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

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: 2DG

5. (a) Applicable Construction Code ASME Section III ND, 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)
DG "A" lube oil cooler	American Standard	9-20016-02-3	33118	2MDGAE04	1979	Repaired	YES

7. Description of Work: Weld repair of the base metal on the inlet /outlet baffle. w.o. 2724398

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 repair of the base metal on the inlet/outlet baffle. w.o. 2724398

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: Allen Monow IST Engineer Date: 4/15/05
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 4-9-05 to 4-15-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R B Hylton
Inspectors Signature

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

Date: 4-15-05

ASME SECTION XI – REPAIR / REPLACEMENT

Component ID 2JSGEPSV0579

1. Item Description: Main Steam Safety valve: Dresser 6" 3707RAX-RT-25: 1250 psig

N-5 Data Package Number: 2SG01-1A 4. W.O. Number: 2724427

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:

Report Number:

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

Not a failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon 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 DwG Date 3-28-2005 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DwG Date 3-28-2005 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DwG Date 3-28-2005 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DwG Date 3-28-2005 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.
2JSGEPSV0579	APN 45003640	BS-08569	N/A	MR

18. Planner [signature] 3-28-05 Printed Name: David Goodlet
Signature Date

19. ISI [signature] 3/30/05 Printed Name: R. P. INDAP Log Entry RPI
Signature Date

20 TI [signature] 3-30-05 Printed Name: RG Hogstrom
Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2JSGEPSV0558
2. Item Description: Main Steam Safety valve; Dresser 6" 3707RAX-RT-25; 1315 psig
3. N-5 Data Package Number: 2SG02-1A 4. W.O. Number: 2724427
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:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   Not a failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon 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 DMG Date 3-28-2005 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 3-28-2005 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 3-28-2005 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMG Date 3-28-2005 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.
2JSGEPSV0558	APN 45003638	BS-08611	N/A	MR 97/461

18. Planner David Goodlet 3-28-05 Printed Name: David Goodlet
    Signature Date

19. ISI R.P. Indap 3/30/05 Printed Name: R.P. INDAP Log Entry RPI
    Signature Date

20. ANII R.G. Hogstrom 3-30-05 Printed Name: R.G. HOGSTROM
    Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2JSGEPSV0691
2. Item Description: Main Steam Safety valve; Dresser 6" 3707RAX-RT-25; 1315 psig
3. N-5 Data Package Number: 2SG01-1A 4. W.O. Number: 2724427
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:
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   Not a failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon 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 _____ Date 3-25-2005 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial _____ Date 3-28-2005 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial _____ Date 3-28-2005 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial _____ Date 3-28-2005 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.
2JSGEPSV0691	APN 45003638	BS-08586	N/A	MR 971462

18. Planner _____ 3-28-05 Printed Name: David Goodlet
    Signature Date
19. ISI _____ 3/30/05 Printed Name: R.P. INDAP Log Entry _____
    Signature Date
20. ANII _____ 8-30-05 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. Date: 03/28/2005

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2724427

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 - Main Steam

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Safety Valve	Dresser	BS-08569	n/a	2JSGEPSV579	1978	Replacement	YES
Safety Valve	Dresser	BS-08611	n/a	2JSGEPSV558	1980	Replacement	YES
Safety Valve	Dresser	BS-08586	n/a	2JSGEPSV691	1978	Replacement	YES

7. Description of Work: Replace three main steam safety valves with 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)

Remarks: WO# 2724427 will be used to replace three (3) Main Steam Safety valves 2JSGEPSV0691, 2JSGEPSV0579 and 2JSGEPSV0558 during 2R12.

Pre-Pressured Test WO Review – ISI Alan Morrow

ANII RA Hyatt

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Morrow ISI Engineer Date: 5/16/05
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~~ VIRGINIA and employed by ~~HSB CT~~ HSB of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, 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.

William E Huber

Inspectors Signature

Commissions: NB 8098 -ANI- 5-14-05 ~~NB 9685 "N" "I" AZ264~~
National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2MRCEP01A
2. Item Description: Reactor Coolant Pump
3. N-5 Data Package Number: 2RC02-4 4. W.O. Number: 2724496
5. Original Construction Code Edition: 1974 Edition
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Mechanical Seal replacement as part of normal maintenance.
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 boundry. Mechanical seal replacement as 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 BV Date 5/12/05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial BV Date 5/12/05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial BV Date 5/12/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial BV Date 5/12/05 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.
3rd Stage Seal Retainer	1663509	Q95-1869-SN-7	NA	NA

18. Planner Barbara Vidal 5/12/05 Printed Name: Barbara Vidal
    Signature Date
19. ISI Alan Morrow 5/12/05 Printed Name: Alan Morrow Log Entry am
    Signature Date
20. ANII RG Hogstron 5-12-05 Printed Name: R.G. HOGSTRON
    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: 5/12/2005

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2724496

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

Authorization No. N/A

Expiration Date N/A

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

5. (a) Applicable Construction Code ASME Section III NB, Class 1 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)
3rd Stage Seal Retainer	Sulzer	Q95-1869 SN-7	NA	2MRCEP01A	1985	Replacement	YES

7. Description of Work: Mechanical seal replacement as part of normal maintenance

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 2724496 - replacement of mechanical seals as part of normal maintenance.

Pre-Pressured Test WO Review – ISI alan Monow

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: alan Monow ISI Engineer ~~Supervisor~~ Date: 5/16/05

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~~ Virginia and employed by ~~HSB CT~~ Wyatt of **Hartford, Connecticut**, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, 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.

William E Huber

Inspectors Signature

Commissions: VA 8092 ANI VA 5-14-05 ~~NB 9685 "N" "I" AZ264~~

National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2JRCEPSV0200
2. Item Description: Pressurizer Safety Relief Valve
3. N-5 Data Package Number: 2RC03-2 4. W.O. Number: 2724921
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 Pressurizer Safety Valve with a reconditioned 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:

   No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08590

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition 1974 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 BV Date 11/16/04 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial BV Date 11/16/04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial BV Date 11/16/04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial BV Date 11/16/04 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.
2JRCEPSV0200	N/A	BS-08590	N/A	969316

18. Planner B Vidal 11/16/04 Printed Name: Barbara Vidal
    Signature Date
19. ISI Alan Morrow 11/19/04 Printed Name: Alan Morrow Log Entry an
    Signature Date
20. ANII [signature] 11-22-04 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: 11/16/04

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2724921

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC - Reactor Coolant 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-08590	N/A	2JRCEPSV0200 ~~2RCEPSV0200~~ am 5/16/05	1979	Replacement	YES

7. Description of Work: No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08590

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 # 2724921. No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08590

Pre-Pressured Test WO Review – ISI Alan Morrow

ANII RA Lytton

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Morrow ISI Engineer Date: 5/16/05

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 4-2-05 to 5-16-05, 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.

W Keller E Keller

Inspectors Signature

Commissions: NB 8098 AHI 5-14-05 ~~NB 9685 "N" "I" AZ264~~

National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2JRCEPSV0201
2. Item Description: Pressurizer Safety Relief Valve
3. N-5 Data Package Number: 2RC03-2 4. W.O. Number: 2724922
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 Pressurizer Safety Valve with a reconditioned 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:

   No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08566

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition 1974 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 BV Date 11/16/04 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial BV Date 11/16/04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial BV Date 11/16/04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial BV Date 11/16/04 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.
2JRCEPSV0201	N/A	BS-08566	N/A	969316

18. Planner B Vidal 11/16/04 Printed Name: Barbara Vidal
    Signature Date
19. ISI Alan Morrow 11/19/04 Printed Name: Alan Morrow Log Entry an
    Signature Date
20. ANII R.G. Hagstrom 11-22-04 Printed Name: R.G. HAGSTROM
    Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. Date: 11/16/04

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

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

5801 South Wintersburg Road.. Tonopah, Arizona 85354-7529 Work Order Number 2724922

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC - Reactor Coolant 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-08566	N/A	2JRLEPSV0201 ~~2RCEPSV0201~~ ann 5/10/05	1978	Replacement	YES

7. Description of Work: No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08566

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 # 2724922. No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08566

Pre-Pressured Test WO Review – ISI Allan Monow

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: Allan Monow ISI Engineer Date: 5/16/05

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 4-2-05 to 5-16-05, 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 9085 N I AZ264~~ NB 24984 N I AZ264

National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2JRCEPSV0202
2. Item Description: Pressurizer Safety Relief Valve
3. N-5 Data Package Number: 2RC03-2 4. W.O. Number: 2724923
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 Pressurizer Safety Valve with a reconditioned 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:

   No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08592

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition 1974 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 BV Date 11/16/04 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial BV Date 11/16/04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial BV Date 11/16/04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial BV Date 11/16/04 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.
2JRCEPSV0202	N/A	BS-08592	N/A	969316

18. Planner B Vidal 11/16/04 Printed Name: Barbara Vidal
    Signature Date
19. ISI Alan Morrow 11/19/04 Printed Name: Alan Morrow Log Entry am
    Signature Date
20. ANII RG Houston 11-22-04 Printed Name: R.G. Houston
    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: 11/16/04

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2724923

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

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: RC - Reactor Coolant 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-08592	N/A	2JRCEPSV0202 ~~2RCEPSV0202~~ 5/16/05	1979	Replacement	YES

7. Description of Work: No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08592

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 # 2724923 No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08592

Pre-Pressured Test WO Review – ISI Alan Monow

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: Alan Monow ISI Engineer Date: 5/16/05

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~~ VIRGINIA and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, 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 5098 "A" "N" "I" VA with ~~NB 9685 "N" "I" AZ264~~ 5-14-05

National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2JRCEPSV0203
2. Item Description: Pressurizer Safety Relief Valve
3. N-5 Data Package Number: 2RC03-2 4. W.O. Number: 2724924
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 Pressurizer Safety Valve with a reconditioned 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:

   No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08568

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition 1974 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 BV Date 11/16/04 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial BV Date 11/16/04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial BV Date 11/16/04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial BV Date 11/16/04 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.
2JRCEPSV0203	N/A	BS-08568	N/A	969316

18. Planner B Vidal 11/16/04 Printed Name: Barbara Vidal
    Signature Date

19. ISI Alan Morrow 11/19/04 Printed Name: Alan Morrow Log Entry am
    Signature Date

20. ANII [signature] 11-22-04 Printed Name: R.G. Huestron
    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: 11/16/04

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2724924

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

   Authorization No. N/A

   Expiration Date N/A

4. Identification of System: RC - Reactor Coolant 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-08568	N/A	1RCEPSV0203 ~~2RCEPSV0203~~ am 5/16/05	1978	Replacement	YES

7. Description of Work: No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08568

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 # 2724924. No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08568

Pre-Pressured Test WO Review – ISI Alan Monow

ANII RJ Hyton

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/16/05

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~~ Virginia and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-6-05 to 5-16-05, 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 8098 AN I 5-14-05 VA ~~NB 9685 "N" "I" AZ264~~

National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2PSIEV247
2.. Item Description: SIT 1B Discharge Check Valve to RC Loop 1B
3. N-5 Data Package Number: 2RC01-1B 4. W.O. Number: 2726216
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 parts as required to correct identified deficiencies
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:
Replaced bonnet, arm & disc assembly to improve operability of the valve & leak tightness. No structural failure. RR indap 5/4/05

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 11-6-04 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☒ YES ~~☒ NO~~ RRI 5/4/05

Initial J.D Date 11-6-04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 11-6-04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D Date 11-6-04 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 ASSY	75906	DISC SN 15	N/A	2748686
BONNET	75907 NC	9919-27		
		P66R1R2	N/A	2748686
		5WN243		
		P638		
		BONNET SN 14	N/A	2748686

18. Planner [signature] 11-6-04 Printed Name: James I. Davis
Signature Date

19. ISI Alan Morrow 12-1-04 Printed Name: Alan Morrow Log Entry ---
Signature Date

20. ANII [signature] 12-1-04 Printed Name: R G Houston
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: 05/07/05

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2726216

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: 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	31500	987	2PSIEV235	1978	Repaired	Yes
Bonnet	Borg Warner	23	N/A	2X69	1978	Replaced	Yes
Disc	Borg Warner	unknown am 5/16/05	N/A	2X42	1978	Replaced	Yes
Bonnet	Borg Warner	14	N/A	2X62	1978	Replacement	Yes
Disc	Borg Warner	15	N/A	2X47	1978	Replacement	Yes

7. Description of Work: Replaced the bonnet/arm/disk 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. 2726216 replaced bonnet/arm/disc assembly, with reworked bonnet (s/n 14 arm and disk (s/n 15) assembly originally installed in 3PSIEV227 (Borg-Warner valve s/n 32618 N.B. 1139 built 1978) removed under W.O. 2607928 and reworked under W.O. 2748686.

Pre-Pressure Test Work Order Review: ISI : Alan Monow

ANII : W.E. Allen 5-16-05

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/16/05
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~~ Virginia and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, 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.

W.E. Allen

Inspectors Signature

Commissions: NB 8098 ANI
National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page of

1. Component ID 2MEWBE01
3. Item Description: Essential Cooling Water Heat Exchanger "B" Spray Pond Side
4. N-5 Data Package Number: 2EW02-1 5. W.O. Number: 2733193
6. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: WELD BUILD-UP MATERIAL REPAIR OF DEFECTS IDENTIFIED IN EW "B" HEAT EXCH.
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:
WELD REPAIR REQUIRED AFTER INSPECTION OF THE METAL SURFACES PRIOR TO PERIODIC COATING, THERE WAS NO FAILURE OF THE CODE PRESSURE BOUNDRY.

11. Repair/Replacement Work Organization: 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 N/A Date 4/26/2005 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial KOS Date 4/25/2005 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial KOS Date 4/25/2005 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial KOS Date 4/26/2005 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.
2MEWBE01	N/A	N/A	N/A	N/A

19. Planner Karl V. Savage 4/25/2005 Printed Name: Karl V. Savage
Signature Date

20. ISI Wiley Ahlstrom 4-26-05 Printed Name: WILEY AHLSTROM
Signature Date

21. ANII RG Hogstrom 4-26-05 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. Date: 04/25/2005

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2733193

3. Work Performed by: Arizona Public Service 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: EW, ASME Section III, Class 3

5. (a) Applicable Construction Code ASME Section III ND, Class 3 1974 Edition, Winter '75 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)
2B EW Ht. Exh.	Struther Wells Corp.	17606329142	14533	2MEWBE01	1979	Repaired	YES

7. Description of Work: Weld Build-up, Material Repair.

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

Other ☐ Pressure _____ psi Test 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 2733197 Performed Weld Repair/Build-up of Eroded areas designated by Engineering in the Tube (Spray Pond) side of the EW Heat Exchanger. Pressure Test at Normal Operating Pressure.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/4/05
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 4-26-05 to 5-5-05, 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 Hatton
Inspectors Signature

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

Date: 5-5-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID BS-08592
2. Item Description: Reactor coolant system pressurizer relief valve to RDT
3. N-5 Data Package Number: N/A 4. W.O. Number: 2733478
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Overhaul and testing of spare pressurizer safety valves.
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 boundry. The spindle replacement was to correct normal wear, there was no stuctural failure.

10. Repair/Replacement Work Organization: NWS Technologies
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 SRB Date 04 01 2005 If required, include a step in the W.O. to perform Preservice Inspection

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

itial SRB Date 04 01 2005 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial SRB Date 04 01 2005 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial SRB Date 04 01 2005 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.
Spindle	APN 45560002	N/A	75903	MR 735255

18. Planner Scott Baize 04 01 2005 Printed Name: Scott R. Baize 4-1-05
    Signature Date

19. ISI R P Indap 04/05/05 Printed Name: R. P. Indap Log Entry RPI
    Signature Date

    ANII R G Houston 4-5-05 Printed Name: R.G. Houston
    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: 04/01/2005

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2733478

3. Work Performed by: NWS Technologies 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 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)
spindle	Dresser	N/A	N/A	2JRCEPSV0202	2005	Replacement	NO

7. Description of Work: Recondition and test spare pressurizer 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: WO#2733478 Replaced pressure safety valve spindle A/N 45560002. In the PSV serial # BS-08592

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 Hodapp, Consulting Metallurgical Engineer Date: 4/5/2005
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 4-5-05 to 4-5-05, 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: 4-5-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2JEWALV0091
2. Item Description: Essential Chill Water System Surge Tank "A" Level Makeup Valve.
3. N-5 Data Package Number: 2EW01-3 4. W.O. Number: 2744635
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 replace valve body / bonnet and perform internal rework.
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 in the ASME boundry. replacement is to correct seat leakage
   RPI 12/21/04

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 12/15/04 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 12/15/04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial GEO Date 12/15/04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial GEO Date 12/15/04 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.
76HH-001 Valve Body	00086699	7441		MR/00930716-0001 PO/5004279857.01.001 WO/2744635
~~Main Disc~~	~~4502-000497~~	~~21A~~		~~MR/00992497 WO PO/6020941~~ 2744635
Main Disc	4502-000497	21A		MR/00913062/WO PO/6020941 2744635
Bonnet	4506-0111	327		MR00928492-0002 PO/60185393 WO/2744635

18. Planner G Osmundson 12/15/04 Printed Name: G. OSMUNDSON
    Signature Date
19. ISI RPIndap 12/21/04 Printed Name: R.P. INDAP Log Entry RPI
    Signature Date
20. ANII RG Hogstrom 12-21-04 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: 2/3/2004

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2744635

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: 2EW01-3

5. (a) Applicable Construction Code ASME Section III NB, 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)
Valve	Target Rock	5	N/A	2JEWALV0091	1978	Replaced	Yes
Valve Body	Target Rock	7441	N/A	2JEWALV0091	2005	Replacement	Yes
Bonnet	Target Rock	327	N/A	2JEWALV0091	1990	Replacement	Yes
Main Disc	Target Rock	21A	N/A	2JEWALV0091	1991	Replacement	Yes

7. Description of Work: Remove/replace valve body & bonnet, rework valve internals, reinstall bonnet tack weld.

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

   Other ☐ Pressure 120 psi Test Temperature 70 °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: remove bonnet tack , remove internals, replace valve body and bonnet , rework valve internals and reinstall bonnet tack

W.O. 2744635

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 Pindera - Consulting Metallurgical Engineer Date: 2-3-2005
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 12-21-04 to 2-3-05, 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 Hyatton
Inspectors Signature

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

Date: 2-3-05

W.O. 2744635

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 206134-1 (drawing no.) | SA182 F316L (mat'l. spec. no.) | 75 ksi (tensile strength) | N/A (CRN) | 2005 (year built)

5. ASME Code, Section III, Division 1: 1974 (edition) | Winter 1975 (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: Valve Body, p/n 200928-1 with Sleeve p/n 102178-1 installed
Spare part for valve model no. 76HH-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
(1) 7441	NA
(2) ~ ~ ~	
(3)	
(4)	
(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 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 N/A psi. Temp. N/A °F Hydro. Test pressure 425 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)

W.O. 2744635

FORM N-2 (BACK - Pg. 2 of 2)

Certificate Holder's Serial Nos. 206134-1 s/n 7441

CERTIFICATION OF DESIGN

Design specifications certified by V. Najarian/A.I. Pressman (when applicable) P.E. State AZ Reg. No. 10746/10409

Design report* certified by Albert J. Bradicich (when applicable) P.E. State NY Reg. No. 025990

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 03/11/2005

Date 1/11/2005 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 1/11/2005 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 1/11/2005 Signed (Authorized Inspector) Commissions NY 5102 (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

204 0016533 P.O. 2744638

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

Pg. 1 of 1

*Revised 11-6-91

1. Manufactured and certified by Target Rock Corp., 1966E Broadhollow Rd, E. Farmingdale, NY 11735
(name and address of NPT Certificate Holder)

2. Manufactured for Arizona Public Service Co., Phoenix, Arizona
(name and address of purchaser)

3. Location of installation Palo Verde Nuclear Generating Station, Wintersburg, Arizona
(name and address)

4. Type	(drawing no.)	(mat'l. spec. no.)	(tensile strength)	(CRN)	(year built)
200861-1	SA 479 410 SA 479 316L	70 KSI	N/A	1990	

5. ASME Code, Section III:	(edition)	(addenda date)	(class)	(Code Case no.)
	1974	*~~S-76~~ Winter 1975	3	N/A

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

7. Remarks: Spare Parts for a completed valve - Model 76HH-001
Bonnet Ass'y

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)	324	N/A
(2)	323	N/A
(3)	325	N/A
(4)	327	N/A
(5)	330	N/A
(6)	333	N/A
(7)	342	N/A
(8)	N/A	N/A
(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)		

E. Bajada, QA. Manager 11/6/91
Date

W. A. Roland, ANI 11/6/91
Date

10. Design pressure N/A psi. Temp. N/A °F. Hydro. test pressure 425 (when applicable) at temp. °F AMB

*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 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.

P. 5 of 8

60155299

W.O. 2744635

FORM N-2 (back) 205

Mfr. Serial No. See Front

CERTIFICATION OF DESIGN

Design specifications certified by V. Najarian (when applicable) P.E. State AZ Reg. no. 10746

Design report* certified by _____ (when applicable) P.E. State _____ Reg. no. _____

CERTIFICATE OF SHOP 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.

NPT Certificate of Authorization No. 1948 Expires 12-12-92

Date 11/1/90 Name Target Rock Corporation (NPT Certificate Holder) Signed E. Bajada (authorized representative)
E. Bajada, Q.A. Manager

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New York and employed by Commercial Union Insurance Company of Boston, Mass. have inspected these items described in this Data Report on 11/1/90, 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 loss of any kind arising from or connected with this inspection.

Date 11/1/90 Signed William O. McCarthy (Authorized Inspector) Commissions N.Y. STATE COMMISSION NO. [illegible]
ALSO COMMISSIONED IN PENN., OHIO & CONN.
(Nat'l. Bd. incl. endorsements) state or prov. and no.)

W.O. 2744635

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 Corp., 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 NGS; Wintersburg, AZ 95343
(name and address)

4. Type 200931-1 (drawing no.) | SA-564 630 (mat'l. spec. no.) | 140,000 (tensile strength) | N/A (CRN) | 1991 (year built)

5. ASME Code, Section III: 1974 (edition) | Winter 1975 (addenda date) | 3 (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: Spare Parts for a completed valve assembly, Model Nos. 76HH-001 and 76HH-004, P/N 200931-1

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)	17A	N/A
(2)	18A	N/A
(3)	19A	N/A
(4)	20A	N/A
(5)	21A	N/A
(6)	22A	N/A
(7)	23A	N/A
(8)	N/A	N/A
(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)		

P.O. No. 6002000
QUALITY DOCUMENTS
PAGE 19 of 36

10. Design pressure N/A psi. Temp. N/A °F. Hydro. test pressure 305 psig (when applicable) at temp. °F AMB

*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.

W.O. 274635

FORM N-2 (back)

Mfr. Serial No. N/A

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) Part conforms to the rules of construction of the ASME Code, Section III.

NPT Certificate of Authorization No. 1948 Expires 12-12-92

Date 4/29/91 Name Target Rock Corporation (NPT Certificate Holder) Signed (authorized representative)

for E. Bajada, Q.A. Manager

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of New York and employed by Commercial Union Insurance Company of Boston, Mass. have inspected these items described in this Data Report on 4/30/91, 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.

Date 4/30/91 Signed William A. Ackard (Authorized Inspector) Commissions N.Y. STATE COMMISSION NO. 2288 COMMISSIONED IN PENN., OHIO & CONN. (Nat'l. Bd. (incl. endorsements) state or prov. and no.)

P.O. No. 60209410
QUALITY DOCUMENTS
PAGE 20 of 36

ASME SECTION XI – REPAIR / REPLACEMENT

Component ID 2JCHAHV0205

2. Item Description: Pressurizer aux spray control valve

3. N-5 Data Package Number: 2RC03-1A 4. W.O. Number: 2747369

5. Original Construction Code Edition: 1977 edition, winter 1977 addenda

6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda

7. Work Description: Remove valcor valve and replace with Target Rock iaw eng diwo 2747369

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:
Valve seat leakage unacceptable and being replaced with a valve with better design. RPE 2/10/05

10. Repair/Replacement Work Organization: Arizona Public Service

11. Replacement Items Construction or reconciled Code/Edition: Sec III Cl1, 1977 edition, 1977 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~~ RPE 2/10/05
Initial GEO Date 2/10/05 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 2/10/05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial GEO Date 2/10/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial GE Date 2/10/05 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.
valve	77L-003	8		MR 960198-1+2
CPLG	SA182-F304 6000		HT CODE-HVA	~~PO 3427009~~
				PO 4270090.
				01.403
				w/o 2747369
PIPE	SA376/312 TYPE 304		HT 30549	MR 863835
				P0500259216.01

18. Planner [signature] 2/10/05 Printed Name: G. OSMUNDSON
Signature Date

19. ISI [signature] 2/10/05 Printed Name: R. P. INDAP Log Entry RPE
Signature Date

20. ANII [signature] 2-10-05 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. Date: 05/13/05

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2747369

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: SP

5. (a) Applicable Construction Code 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)
Valve	Target Rock	8	N/A	2JCHAHV0205	1996	Replacement	Yes
Valve	Valcor	4	N/A	2JCHAHV0205	1983	Replaced	Yes

7. Description of Work: Remove Valcor Valve and replace with Target Rock 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)

) 2747369.Remove Valcor valve because of persistant seat leakage and replace it with Target Rock Valve.Additional welds made (described in W.O.) to facilitate field installation.

Pre-Pressure Test W.O. Review : ISI [signature] 5/13/05

ANII William E Hatten 5/13/05

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Morrow ISI Engineer Date: 5/16/05
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~~ Virginia and employed by HSB CT of Hartford. Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, 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.

William F Hatten
Inspectors Signature

Commissions: VA 5098 ANI
National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID S/N: BS-08611 2. Code Class ASME Section III Class 2
3. Item Description: Main Steam Safety Valve; Dresser - 6" 3707RAX-RT-25 1315 psig
4. N-5 Data Package Number: n/a 5. W.O. Number: 2757217
6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Maintenance overhaul & testing of spare valve. Code part replacement from other spare valves or from approved purchased spare parts based upon inspection results.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

No failure in the ASME Section III boundary. The disc will be replaced with preoxidized ASME SB637 OR ASTM B637 INCONEL X-750 material to enhance performance. The nozzle replacement is to correct seat leakage and there was no structual failure.

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

Initial DGG Date 3-29-2005 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DGG Date 3-29-2005 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DGG Date 3-29-2005 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DGG Date 3-29-2005 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.
DISC	Apn# 00064290	ADG51	N/A	MR# 943938
Nozzle	Apn# 45070022	ABC41	93261	PO# 609862

19. Planner [signature] 3-29-2005 Printed Name: David Goodlet
Signature Date

20. ISI [signature] 3-31-2005 Printed Name: R. P. Indap. - Log Entry Staff
Signature Date

21. ANII [signature] 4-2-05 Printed Name: R.G. Hogstrom
Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID S/N: BS-08569 2. Code Class ASME Section III Class 2
3. Item Description: Main Steam Safety Valve; Dresser - 6" 3707RAX-RT-25 1250 psig
4. N-5 Data Package Number: n/a 5. W.O. Number: 2757217
6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Maintenance overhaul & testing of spare valve. Code part replacement from other spare valves or from approved purchased spare parts based upon inspection results.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No failure in the ASME Section III boundary. The spindle replacement is to correct normal wear, there was no structual failure.

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

Initial DMG Date 3-29-2005 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 3-29-2005 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 3-29-2005 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMG Date 3-29-2005 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.
Spindle	Apn# 45560003	6008552-1	N/A	MR# 653408

19. Planner [signature] 3-29-05 Printed Name: David Goodlet
Signature Date

20. ISI [signature] 3/31/05 Printed Name: R.P. INDAP Long Entry-RPT
Signature Date

21. ANII [signature] 4-2-05 Printed Name: R.G. HOUSTON
Signature Date

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID S/N: BS-08586 2. Code Class ASME Section III Class 2
3. Item Description: Main Steam Safety Valve; Dresser - 6" 3707RAX-RT-25 1315 psig
4. N-5 Data Package Number: n/a 5. W.O. Number: 2757217
6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Maintenance overhaul & testing of spare valve. Code part replacement from other spare valves or from approved purchased spare parts based upon inspection results.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No failure in the ASME Section III boundary. The disc will be replaced with preoxidized ASME SB637 OR ASTM B637 INCONEL X-750 material to enhance performance. The spindle replacement is to correct normal wear, there was no structual failure.

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

Initial DMG Date 3-29-2005 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 3-29-2005 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 3-29-2005 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMG Date 3-29-2005 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.
DISC	Apn# 00064290	ADG52	N/A	MR# 943938
Spindle	Apn# 45560003	6008552-2	N/A	MR# 653408

19. Planner [signature] 3-29-2005 Printed Name: David Goodlet
Signature Date

20. ISI [signature] 4-4-05 Printed Name: R.P. INDAP Log Entry-RE
Signature Date

21. ANII [signature] 4-5-05 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. Date: 3/29/2005

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2757217

3. Work Performed by: NWS Technologies Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG - Main Steam

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Disc	Dresser	ADG51	n/a	BS-08611	2005	Replacement	NO
Nozzle	Dresser	ABC41	n/a	BS-08611	2005	Replacement	NO
Disc	Dresser	ADG52	n/a	BS-08586	2005	Replacement	NO
Spindle	Dresser	6008552-2	n/a	BS-08586	2005	Replacement	NO
Spindle	Dresser	6008552-1	n/a	BS-08569	2005	Replacement	NO

7. Description of Work: Overhaul and testing of three 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 #2757217 for off-site disassembly, reconditioning and testing of spare Main Steam Safety valves, s/n BS-08611, BS-08586 & BS-08569.

Pre-Pressure Test W.O. 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 Pindar, Consulting Metallurgical Engineer Date: 4-4-2005
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 4-2-05 to 4-5-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R B Lytton
Inspectors Signature

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

Date: 4-5-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2JSIAUV0673
2. Item Description: A Train Suction Valve from Containment Recirc Sump
3. N-5 Data Package Number: 2SI01-7 4. W.O. Number: 2767634
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 gasket retainer bolts per EDC 2005-00031.
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:
   BOLTS FRACTURED DUE TO STRESS CORROSION CRACKING (SCC). JP 4-23-05
   The bolts are being replaced ~~as precautionary measure~~ with more SCC resistant material (410 Vs 17-4 PH)
   JP 4-23-05

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 3-24-05 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 3-24-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D. Date 3-24-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D Date 3-24-05 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.
Bonnet retainer bolts	APN 00090043	NJA	NJ1412	MR 959192

18. Planner [signature] 3-24-05 Printed Name: James I. Davis
    Signature Date

19. ISI [signature] 3/24/05 Printed Name: R.P. Indap Log Entry-RR
    Signature Date

20. ANII [signature] 3-24-05 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. Date: 4-23-05

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2767634

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)
Valve	Posi -Seal	143383A	N/A	2JSIAUV0673	1979	Repaired	YES
Gasket retainer bolts	N/A	HT# N1412	N/A	2JSIAUV0673	2005	Replacement	NO

7. Description of Work: Replace the gasket retainer bolting as required per EDC 2005-00031

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 2767634 replaced the original 410 Stainless steel gasket retainer bolts with more corrosion resistant SA564, Gr 630 bolts per EDC 2005-00031 and DMWO 2760330 .

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: [signature] SR. ISI ENGINEER Date: 4/23/05

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 3-24-05 to 4-23-05, 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" "T" AZ264

National Board, State, Province, and Endorsements

Date: 4-23-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2JSIBUV0615
2. Item Description: B Train Suction Valve from Containment Recirc Sump
3. N-5 Data Package Number: 2SI01-7 4. W.O. Number: 2767648
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 gasket retainer bolts per EDC 2005-00031.
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 bolts are being replaced as precautionary measure with more SCC resistant material (410 Vs 17-4 PH)

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.P. Date 3-24-05 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 3-24-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 3-24-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D Date 3-24-05 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.
Bonnet retainer bolts	APN 00090043	N/A	N1412	MR 959197

18. Planner [signature] 3-24-05 Printed Name: James I. Davis
    Signature Date
19. ISI [signature] 3-24-05 Printed Name: R. P. INDAP Log Entry-RB
    Signature Date
20. ANII [signature] 3-24-05 Printed Name: R.G. HOGSTRON
    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: 4-29-05

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2767648

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)
Valve	Posi -Seal	143383B	N/A	2JSIBUV0675	1979	Repaired	YES
Gasket retainer bolts	N/A	HT# N1412	N/A	2JSIBUV0675	2005	Replacement	NO

7. Description of Work: Replace the gasket retainer bolting as required per EDC 2005-00034

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 2767648 replaced the original 410 Stainless steel gasket retainer bolts with more corrosion resistant SA564, Gr 630 bolts per EDC 2005-00034 and DMWO 2760330 .

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: Alan Morrow Sr ISI Engineer Date: 4-29-05

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 3-24-05 to 4-29-05, 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 Hylton

Inspectors Signature

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

National Board, State, Province, and Endorsements

Date: 4-29-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page ____ of ____

1. Component ID 2JSIAUV0637
2. Item Description: HPSI HEADER A TO RC LOOP 1A VALVE
3. N-5 Data Package Number: 2S109-2 4. W.O. Number: 2770722
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 SEATING AREA TO ELIMINATE LEAK THROUGH
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:
~~N/A~~ Work is to fix seat leakage. No failure in the ASME pressure boundary RPI 4/11/05

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 4/7/05 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 4/7/05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial GEO Date 4/7/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial GEO Date 4/7/05 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.

18. Planner G Osmundson 4/7/05 Printed Name: G. OSMUNDSON
Signature Date

19. ISI RP Indap 4/11/05 Printed Name: R.P. INDAP Log Entry RPI
Signature Date

20. ANII RG Hogstrom 4-11-05 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. Date: 05/13/05

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2770722

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: SP

5. (a) Applicable Construction Code 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)
HPSI Globe Valve	Borg Warner	51731	N/A	2JSIAUV0637	1979	Repaired	Yes

7. Description of Work: Seat repair and Body to Bonnet 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.
WO 2770722: Lapped valve seat and disc,ressembled valve and reinstalled bonnet seal weld.

Pre-Pressure Test W.O. 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 Findlay, Consulting Metallurgical Engineer Date: 5/13/05
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~~ VIRGINIA and employed by ~~HSB CT~~ UHSB 5-13-05 of **Hartford, Connecticut**, have inspected the components described in this Owner's report during the period of 4-11-05 to 5-13-05, 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.

William E Huber
Inspectors Signature

Commissions: NB8058 ANI
National Board, State, Province, and Endorsements

Date: 5-13-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2PSIEV133
2. Item Description: HPSI Injection Header Containment Penetration Check Valve
3. N-5 Data Package Number: 2RC01-3B 4. W.O. Number: 2786797
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 to correct leakage past the seat
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 of the ASME pressure boundary. Routine maintenance 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 N/A Date _____ If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 4-22-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D Date 4-22-05 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.
Disc and stud assembly	APN 45020876	7	N/A	MR 914209

18. Planner [signature] 4-22-05 Printed Name: James I. Davis
    Signature Date

19. ISI Alan Morrow 4/22/05 Printed Name: Alan Morrow Log Entry am
    Signature Date

20. ANII [signature] 4-22-05 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. Date: _____

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2786797

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)
Valve	Borg -Warner	51291	N/A	2PSIEV133	1979	Repaired	YES
Disc/stud Assembly	Borg -Warner	7	N/A	2PSIEV133	2005	Replacement	NO

7. Description of Work: Replace the valve disc 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: Work Order 2786797 replaced the valve disc and stud assembly to correct leakage past the seat.

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 Lindop, Consulting Metallurgical Engineer Date: 5/4/05
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 4-22-05 to 5-5-05, 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 Hyton
Inspectors Signature

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

Date: 5-5-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2MRCEX02
2. Item Description: Reactor Coolant System Pressurizer
3. N-5 Data Package Number: 2RC01-1A 4. W.O. Number: 2787285
5. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove failed presurizer heaters 2MRCEA10, 2MRCEB10 and 2MRCEB11. Install Pressurizer sleeve plugs into the Pressurizer sleeves IAW DFWO 2785731
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 heaters have failed. No failure of the code boundry.

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: ☒ YES ☐ NO

Initial [signature] Date 4/12/05 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 complete NIS-2 Form prior to releasing the component.

Initial N/A Date _____ 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 Plug - Heater sleeve RCEA10	APN 00076370	N/A	9R0094-LAD	MR 00964548
Shop fabricated Plug - Heater sleeve RCEB10	APN 00076370	N/A	9R0094-LAD	MR 00964548
Shop fabricated Plug - Heater sleeve RCEB10 11	APN 00076370	N/A	9R0094-LAD	MR00964548

18. Planner [signature] 4/12/05 Printed Name: Herbert Green
    Signature Date
19. ISI [signature] 4/12/05 Printed Name: Ramakant Indap Log Entry RPI
    Signature Date
20. ANII [signature] 4-12-05 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. Date: 04/09/2005

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2787285

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

   Authorization No. N/A

   Expiration Date N/A

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

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1971 Edition, Winter 1973 Addenda, _____ Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Pressurizer	Combustion Engineering	79373	N/A	2MRCEX02	1979	Repaired	YES

7. Description of Work: Remove failed presurizer heaters 2MRCEA10, 2MRCEB10 and 2MRCEB11. Install Pressurizer sleeve plugs into the Pressurizer sleeves IAW DFWO 2785731

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 2787285. Plug failed Pressurizer Heater Sleeves with shop fabricated plugs per DFWO 2785731 disposition. Heaters 2MRCEA10, 2MRCEB10, & 2MRCEB11.

Pre-Pressured Test WO Review – ISI RPhilap 5/14/05

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: Alan Morrow ISI Engineer Date: 5/16/05

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~~ Virginia and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, 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 8098 AVI with NB 9685 "N" "I" AZ264

National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2SG033H017 & 2SG036H011
2. Item Description: PIPE HANGERS
3. N-5 Data Package Number: 2SG01-1A 4. W.O. Number: 2789760
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Repair Failed/Damaged Pipe Hangers per DFWO 2788864 Disposition
8. ☒ ISI Flaw NDE Method of Flaw Detection: VT-3
   Report Number: VT-05-521 VT-05-530
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
   The Failed pipe supports are being replaced with a better design as per DFWO 2788864.

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 4/27/05 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 4/15/05 If required, include a step in the W.O. for ISI & ANII Inspection.
    Initial KVS Date 4/15/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
    Initial KVS Date 4/15/05 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.
2 BEAM ATTATCHMENT	00090383	2005-18 2005-19		968953
2" ROD	00090366	HCD	HT# 240151	965681
1.25 BEAM ATTATCHMENT	00090384			968958

18. Planner Karl V. Savage 4/15/05 Printed Name: Karl V. Savage
    Signature Date
19. ISI Alan Morrow 4/27/05 Printed Name: ~~Ramakant Indap~~ Alan Morrow on 4/27/05 Log Entry on
    Signature Date
20. ANII RG Hogstrom 4-27-05 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: 04/15/2005

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2789760

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: SG

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)
Pipe Support	Pullman Power	2SG033H017	N/A	2SG033H017	1979	Repaired	Yes
Pipe Support	Pullman Power	2SG036H011	N/A	2SG036H011	1979	Repaired	Yes
Welded Beam Attachment	Anvil	2005-18	N/A	2SG036H011	2005	Replacement	Yes
Welded Beam Attachment	Anvil	2005-19	N/A	2SG036H011	2005	Replacement	Yes
Welded Beam Attachment	Anvil	N/A	N/A	2SG033H017	2005	Replacement	No

7. Description of Work: Rework Pipe Support 2-SG-033-H017 and 2-SG-036-H011 per DFWO 2788864

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

FORM NIS-2 (Back)

9. Remarks: Work Order 2789760 - Repaired Failed/Damaged Pipe Supports 2-SG-033-H-017 & 2-SG-036-H-011 per EDC# 2005-00277 - DFWO 2788864 Disposition.

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: Alan Morrow ISI Engineer Date: 5/10/05
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 4-27-05 to 5-10-05, 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: 5-10-05

2" BEAM ATTACHMENTS

FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of 2

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 66 REV.9 (Design Report or Load Capacity Data Sheet) 2005 (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)	2005- 18	SA36	N/A	066-10025/F 3/20/00	N/A
(2)	2005- 19	SA36	N/A	066-10025/F 3/20/00	N/A
(3)	2005- 20	SA36	N/A	066-10025/F 3/20/00	N/A
(4)	2005- 21	SA36	N/A	066-10025/F 3/20/00	N/A
(5)					
(6)					
(7)					
(8)					
(9)					
(10)					

7. Remarks:

: * Corrected Document

* Note: We further certify that the material "SA36" meets the requirements of ASME II 1992 Edition with the 1993 Addenda
The material "SA36" does not meet ASME III 1974 Edition, Winter 1975 Addenda, required bend tests not performed.

PO#: 500285454
SO#: 41-69414

*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. 2005-18 through 2005-21

CERTIFICATE OF DESIGN

Design Specification certified by H. R. Sonderegger P.E. State R.I. Reg. no 3537
Design Report certified by Frank J. Birch P.E. State R.I. Reg. no 4149

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-2902 Expires 9/29/2007

Date 4-26-05 Name Anvil International, Inc. (NPT Certificate Holder) Signed

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 4/20/05, 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 4/26/05 Signed (Authorized Inspection) Commissions RI 862 ANI (Natl. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2SG045H017 & 2SG042H011
2. Item Description: PIPE HANGERS
3. N-5 Data Package Number: 2SG02-1A
4. W.O. Number: 2790467
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: ~~Repair Failed/Damaged~~ Rework Pipe Hangers per DFWO 2788864 Disposition
8. ~~☒~~ ISI Flaw RLB 4/27/05 NDE Method of Flaw Detection: ~~VT-3~~ RLB 4/27/05
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   The ~~failed~~ pipe supports are being replaced with a better design as per DFWO 2788864.

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 ~~DHH~~ Date ~~4/15/05~~ 4/27/05 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 4/15/05 If required, include a step in the W.O. for ISI & ANII Inspection.

    Initial KVS Date 4/15/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

    Initial KVS Date 4/15/05 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.
2" THREADED ROD	00090366		240151	966340
2" WELDED BEAM ATTATCHMENT	00090383	2005-20 2005-21		968956

18. Planner Karl V. Savage 4/15/05
    Signature Date Printed Name: Karl V. Savage
19. ISI Alan Morrow 4/27/05 Printed Name: ~~Ramakant Indap~~ Alan Morrow am 4/27/05 Log Entry am
    Signature Date
20. ANII RG Hogstrom 4-27-05 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: 04/15/2005

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2790467

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: SG

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)
Pipe Support	Pullman Power	2SG045H017	N/A	2SG045H017	1979	Repaired	Yes
Pipe Support	Pullman Power	2SG042H011	N/A	2SG042H011	1979	Repaired	Yes
Welded Beam Attachment	Anvil	2005-20	N/A	2SG042H011	2005	Replacement	Yes
Welded Beam Attachment	Anvil	2005-21	N/A	2SG042H011	2005	Replacement	Yes

7. Description of Work: Rework Pipe Support 2-SG-045-H017 and 2-SG-042-H011 per DFWO 2788864

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

FORM NIS-2 (Back)

9. W.O. 2790467 – Reworked pipe supports 2-SG-042-H011 and 2-SG-045-H017 per EDC# 2005-00280 – DFWO 2788864 disposition.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Morrow ISI Engineer Date: 5/10/05
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 4-27-05 to 5-11-05, 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 Hylton
Inspectors Signature

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

Date: 5-11-05

FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of 2

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 66 REV.9 (Design Report or Load Capacity Data Sheet) 2005 (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)	2005- 18	SA36	N/A	066-10025/F 3/20/00	N/A
(2)	2005- 18	SA36	N/A	066-10025/F 3/20/00	N/A
(3)	2005- 20	SA36	N/A	066-10025/F 3/20/00	N/A
(4)	2005- 21	SA36	N/A	066-10025/F 3/20/00	N/A
(5)					
(6)					
(7)					
(8)					
(9)					
(10)					

7. Remarks:

: * Corrected Document

* Note: We further certify that the material "SA36" meets the requirements of ASME II 1992 Edition with the 1993 Addenda

The material "SA36" does not meet ASME III 1974 Edition, Winter 1975 Addenda, required bend tests not performed.

PO#: 500285454

SO#: 41-69414

*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 (E00076) 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. 2005-18 through 2005-21

CERTIFICATE OF DESIGN

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

Design Report certified by Frank J. Birch P.E. State R.I. Reg. no 4149

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 4-26-05 Name Anvil International, Inc. (NPT Certificate Holder) Signed

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 4/20/05, 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 4/26/05 Signed (Authorized Inspector) Commissions RI 862 AIN (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2CH147H009
2. Item Description: Pipe support, 1/4 kip snubber
3. N-5 Data Package Number: 2PC01-1
4. W.O. Number: 2790927
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 snubber for precautionary measures.
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 of an ASME Pressure retaining boundry.

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

Initial ___DWS___ Date ___04/18/05__ If required, include a step in the W.O. to perform Preservice Inspection

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

Initial ___DWS___ Date ___04/18/05__ If required, include a step in the W.O. for ISI & ANII Inspection.

Initial ___DWS___ Date ___04/18/05__ 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial ___DWS___ Date ___04/18/05__ 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.
2CH147H009	APN 45350024	17973	N/A	MR 967163

18. Planner D W Shaffer (Signature) 4/18/05 (Date) Printed Name: David Shaffer
19. ISI Alan Morrow (Signature) 4/18/05 (Date) Printed Name: Alan Morrow Log Entry am
20. ANII RG Hogstrom (Signature) 4-19-05 (Date) Printed Name: R.G. Hogstrom

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. Date: 04/18/2005

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2790927

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 NF, Class 3 1974 Edition, Winter 1975 Addenda, _____ Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
1/4 Kip Snubber	PSA	17973	n/a	2CH147H009	1981	Replacement	YES

7. Description of Work: Replace snubber for precautionary reasons.

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 #2790927, Replace the snubber for precautionary reasons.

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: Alan Morrow ISI Engineer Date: 4/22/05

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 4-19-05 to 4-22-05, 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: 4-22-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2PRCEL028/2JRCEFO0724
2. Item Description: Pressurizer Surge Line Sample Flow Limiting Orifice
3. N-5 Data Package Number: 2RC01-2 4. W.O. Number: 2792023
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1977 Edition, Winter 1977 Addenda RPI 5/4/05
7. Work Description: Perform 2 X 1 Build-up of existing Fillet Welds.
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 Code Boundry WELD SIZE BEING CHANGED TO PREVENT ANY FAILURE DUE TO VIBRATION. REF: EDC # 2005-00223 JP 4/26/05

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 4/25/05 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 4/25/05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [illegible] Date 4/25/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial N/A Date 4/25/05 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.

18. Planner [signature] 4/26/05 Printed Name: Karl V. Savage
    Signature Date
19. ISI [signature] 4-26-05 Printed Name: WILEY AHLSTROM Log Entry
    Signature Date
20. ANII [signature] 4-26-05 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. Date: 04/25/2005

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

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

   5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2792023

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: 2RC01-2

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)
Pressurizer Surge Line	Pullman Power Products	2RC028S004	N/A	2JRCEFO0724	1979	Repaired	Yes

7. Description of Work: Performed 2 x 1 build –up of existing fillet welds on Pressurizer Surge sample line.

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 2792023, Performed 2X1 Build-up of Existing fillet welds on Pressurizer Surge Sample line Flow Limiting Orifice to minimize potential vibration induced failure.

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: RP Pardap, Consulting Metallergical Engineer Date: 5/4/2005
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 4-26-05 to 5-6-05, 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: 5-6-05

ASME SECTION XI – REPAIR / REPLACEMENT

1. Component ID 2MRCEX01
2. Item Description: RX Head vent line
3. N-5 Data Package Number: 2RC01-1A 4. W.O. Number: 2793841
5. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1971 Edition, Winter 1973 Addenda
7. Work Description: Remove axial indications utilizing a flapper wheel or other suitable method per the disposition of ENG-DF02 #2793837.
8. ☒ ~~ISI Flaw~~ ISI Flaw – No RPI 5/12/05 NDE Method of Flaw Detection: ~~ET~~ RPI 5/12/05
   Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

   Blending and/or removal of axial indications to meet code exceptance criteria.

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, IWA-2220, IWA-4422.1 of 1998 Edition RPI 5/11/05
14. Preservice Inspection Required: ☐ YES ☒ NO, Per Alan Morrow

Initial ___DWS___ Date __04/24/05___ If required, include a step in the W.O. to perform Preservice Inspection

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

Initial ___DWS___ Date __04/24/05__ If required, include a step in the W.O. for ISI & ANII Inspection.

Initial ___DWS___ Date __04/24/05___ 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial ___DWS___ Date __04/24/05___ 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.
2MRCEX01	Head Vent line	79173	N/A	WO 2793841

18. Planner D W Shaffer (Signature) 4/24/05 (Date) Printed Name: David Shaffer

19. ISI Alan Morrow (Signature) 4/24/05 (Date) Printed Name: Alan Morrow Log Entry an

20. ANII per Telecon with Robert Hogstrom (Signature) 4/24/05 (Date) Printed Name: Robert Hogstrom

Alan Morrow 09:34

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: 02/24/2005

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

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

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2793841

3. Work Performed by: Westinghouse Electric Company Type of Code Stamp None

20 International Drive Authorization No. N/A

Windsor, Connecticut, 06095 Expiration Date N/A

4. Identification of System: RC – Reactor Coolant

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)
Reactor Vessel Head Vent	Combustion Engineering	N/A	N/A	2MRCEX01	1979	Repaired	Yes

7. Description of Work: Repair axial indications on the inside of the Rx Head Vent line per DFWO 2793837 disposition.

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. 2793841. Repair per DFWO 2793837 by reaming and flapper wheel, approximate depth of repair 36 MILS. Nominal wall thickness prior to reaming and flapping 0.154". Minimum wall remaining following reaming and flapping 0.118". NDE/ET per ASME Section XI 1998 no Addenda, used with NRC approval letter dated 5-9-05.

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: RFindap, Consulting Metallurgical Engineer Date: 5-12-2005
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 4-29-05 to 5-12-05, 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 Hyatt
Inspectors Signature

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

Date: 5-12-05