



Scott A. Bauer
Department Leader
Regulatory Affairs
Palo Verde Nuclear
Generating Station

10 CFR 50.55a

Tel: 623/393-5978
Fax: 623/393-5442
e-mail: sbauer@apsc.com

Mail Station 7636
P.O. Box 52034
Phoenix, AZ 85072-2034

102-04963-SAB/TNW/RJR
July 8, 2003

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

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 3 Docket No. STN 50-530
Second 10-Year Interval – Tenth 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 the PVNGS Unit 3 Inservice Inspection Report for the tenth refueling outage, provided in enclosure 1. This is the first refueling for Interval 2, Period 2, which was conducted from March 29, 2003 through April 30, 2003.

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,

TNWG302... for
SA Bauer

SAB/TNW/RJR/kg

Enclosures

cc: Regional Administrator, NRC Region IV
J. N. Donohew
N. L. Salgado

(w/attachment)
(w/attachment)
(w/attachment)

A047

ENCLOSURE 1

SECOND 10-YEAR ISI INTERVAL

SUMMARY REPORT

TENTH REFUELING OUTAGE

PALO VERDE NUCLEAR GENERATING STATION

UNIT 3

PALO VERDE NUCLEAR GENERATING STATION

UNIT 3

INSERVICE INSPECTION REPORT

TENTH REFUELING OUTAGE

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

PREPARED BY: J.D. Bayless DATE: 5/1/03
REVIEWED BY: R.L. Brown R.L.B. DATE: 5-5-03
APPROVED BY: Michael A. Meekins DATE: 5-29-2003

COMMERCIAL SERVICE DATE: 01/08/88
REPORT DATE: 05/01/03

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UNIT 3 INSERVICE INSPECTION REPORT

1.0 Introduction

This report is a summary of the examinations performed during the tenth refueling outage at the Palo Verde Nuclear Generating Station (PVNGS) Unit 3. This report also includes all applicable examinations conducted since the last refueling outage. This was the first refueling for Interval 2, Period 2, which was conducted from March 29, 2003 through April 30, 2003. Palo Verde Unit 1 began commercial operation on January 8, 1988.

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

1. ASME Section XI, Class 1 and 2 pressure retaining components and their supports.
2. Augmented High Energy Piping systems in accordance with PVNGS UFSAR Section 6.6.8.

This report is a summary of the ISI examinations performed during the Second Interval. This report is a summary of the examinations performed through the tenth refueling outage. All of the examination report numbers for the second interval are listed in Appendix A. The reports for the tenth refueling and examinations performed since the last Summary Report are in bold type.

There were no ASME Section XI Subsection IWE or IWL scheduled examinations performed during this outage and no items of degradation were observed. There are no conditions that require reporting in accordance with 10CFR50.55a(b)(2)(viii) or 10CFR50.55a(b)(2)(ix).

2.0 Examination Summary

The evaluation of the results from the ISI examinations indicated the integrity of the systems have been maintained. There were no rejectable or abnormal indications found during this ISI inspection activity.

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

3.0 Examination Techniques

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

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

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

4.0 Accessibility

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

5.0 Personnel

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

6.0 Equipment and Materials

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

7.0 Repairs and Replacements

No repairs or replacements were performed as a result of ISI examinations during U3R10. 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.

Two leaks were identified during non-ISI walk downs, a small amount of boric acid residue was observed around an RTD instrument nozzle that penetrates the Loop 1 hot leg and around the sleeve for Pressurizer heater A01. The RTD nozzle was repaired under DMWO 2376926. The leaking Pressurizer heater sleeve was repaired using Mechanical Nozzle Seal Assemblies (MSNA) per DFWO 2594958. (CRDR's 2594999 AND 2595001)

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 Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
----------------------	---------------	-------------	------------	-------------	---------	-----	-----------------	--------	---------

ASME Class 2 Augmented High Energy Piping

AHE 5.51 & 5.52	47 MS SG1	One	13	13	47-1	00-3443	00-3388		
					47-2	00-3437	00-3388		
					47-4	00-3454	00-3389		
					47-8	00-3453	00-3389		
					47-12	00-3452	00-3389		
					47-16	00-3451	00-3389		
					47-20	00-3450	00-3389		
					47-24	00-3445	00-3388		
					47-25	00-3446	00-3388		
					47-28	00-3428	00-3387		
					47-29	00-3427	00-3387		
					47-30	00-3447	00-3388		
	51 Atmos Dump SG1	One	13	13	51-1	00-3425	00-3205		
					51-2	00-3433	00-3205		
					51-3	00-3432	00-3205		
					51-4	00-3435	00-3205		
					51-5	00-3431	00-3205		
					51-6	00-3430	00-3205		
					51-7	00-3429	00-3205		
					51-8A	00-3424	00-3386		
					51-8B	00-3403	00-3205		
					51-9	00-3404	00-3205		
					51-51	00-3405	00-3205		
					51-53	00-3426	00-3205		
					51-54	00-3434	00-3205		
	53 Steam to Aux FW	One	10	10	53-11	00-3134	00-3110		
					53-12	00-3138	00-3110		
					53-13	00-3137	00-3110		PSE
					53-14	00-3132	00-3110		
					53-15	00-3130	00-3110		
					53-21	00-3131	00-3110		
					53-22	00-3133	00-3110		
					53-23	00-3129	00-3110		
					53-24	00-3136	00-3110		PSE
					53-25	00-3135	00-3110		
	56 Feedwater SG 1	One	6	6	56-1	01-3411	01-3337		
					56-4	01-3412	01-3337		
					56-6	01-3413	01-3337		
					56-7	01-3414	01-3337		
					56-9	01-3415	01-3337		
					56-11	01-3416	01-3337		
	60 Downcomer SG1	One	9	9	60-7	00-3284	00-3267		
					60-8	00-3285	00-3266		
					60-9	00-3286	00-3268		
					60-11	00-3287	00-3267		
					60-12	00-3288	00-3267		
					60-14	00-3289	00-3267		
					60-15	00-3290	00-3267		
					60-16	00-3291	00-3267		
					60-17	00-3292	00-3267		
	66 Blowdown SG1	One	9	9	66-1	00-3146	00-3093		
					66-2	00-3145	00-3093		

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					66-3	00-3144	00-3093		
					66-5	00-3143	00-3093		
					66-6	00-3142	00-3093		
					66-7	00-3140	00-3093		
					66-8	00-3139	00-3093		
					66-9	00-3141	00-3093		
					66-25	00-3275	00-3206		
AHE 5.81 & 5.82	47 MS SG1	One	7	7	47-3	00-3442	00-3388		
					47-7	00-3441	00-3388		
					47-11	00-3440	00-3388		
					47-15	00-3439	00-3388		
					47-19	00-3436	00-3388		
					47-23	00-3444	00-3388		
					47-27	00-3438	00-3388		
ASME Class 1									
B-A									
B 1.22	02 Closure Head	One	33%	16%	2-4	00-3417	00-3082		Accessible Areas, RR#14
						00-3419			
						00-3421			
						00-3423			
B 1.30	01 Reactor Vessel	One	50%	50%	1-14	*			Examined 0-180
B 1.40	02 Closure Head	One	33%	33%	2-1	00-3416	00-3082		Examined 0-120
						00-3418			
						00-3420			
						00-3422			
B-B									
B 2.11	5 Pressurizer	One	66%	66%	5-2	00-3085			Examined 0-240
						00-3087			
						00-3089			
						00-3091			
&					5-3	00-3086			1' long seam for 5-2
						00-3088			
						00-3090			
						00-3092			
B2.12		Two	66%	66%	5-8	UT-03-003			Examined 0-240
						UT-03-006			
						UT-03-009			
					5-6	UT-03-007			1' of long seam
						UT-03-013			for 5-8
B2.31	3 Steam Generator 1	One	33%	33%	3-5	01-3078			Credited 0 - 120
&									
B2.32					3-3	01-3077			
					3-10	01-3081			
B2.40	3 Steam Generator 1		50%	50%	3-6	01-3079			Examined 0 -180
B-D									
B 3.90	1 Reactor Vessel	One	2	2	1-15	*			*Separate Report
					1-18	*			by Wesdyne. Exam

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 3.100	1 Reactor Vessel	One	2	2	1-15	*			Completed in 3R7
					1-18	*			
B 3.110	5 Pressurizer	One	2	2	5-9	01-3193			
					5-11	01-3273			
		Two	2	2	5-10	UT-03-008			
						UT-03-010			
					5-13	UT-03-004			
						UT-03-011			
						UT-03-012			
B 3.120	5 Pressurizer	One	2	2	5-9	01-3192			
					5-11	01-3274			
		Two	2	2	5-10	UT-03-005			
					5-13	UT-03-014			
B 3.130	3 Steam Generator 1	One	1	1	3-8	01-3080			
	4 Steam Generator 2	One	1	1	4-9	01-3394			
B 3.140	3 Steam Generator 1	One	1	1	3-8	01-3388			
	4 Steam Generator 2	One	1	1	4-9	01-3387			
B-E									
B 4.12	2 CEDM	One	8	8	CEDM			00-3543	
		Two	8	8	CEDM			VT-03-430	
B 4.13	1 RPV ICI	One	5	5	Instru			00-3543	
		Two	5	5	Instru			VT-03-428	
B 4.20	5 Pressurizer	One	12	12	Heaters			00-3543	
		Two	12	12	Heaters			VT-03-431	CEIB 89-06
B-F									
B 5.40	20 PZR Surge & 31 PZR Safety	One	2	2	5-34	01-3194	01-3083		
					5-29	01-3275	01-3272		
B-G-1									
B 6.10	2 Nuts	One	18	18	1 thru 18		00-3200	00-3207	
		Two	18	18	19 thru 36		MT-03-019	VT-03-224	
B 6.30	2 Studs	One	18	18	1 thru 18	01-3338	00-3200		
		Two	18	18	19 thru 36	UT-03-024	MT-03-018		
B 6.50	2 Washers	One	18	18	1 thru 18			00-3207	
		Two	18	18	19 thru 36			VT-03-223	
B 6.180	16 RCP 1A	One	5	5	1 thru 5	01-3453		00-3209	
		Two	5	5	6 thru 10	UT-03-035		VT-03-373	IEB 82-02, IEIN 80-27
	17 RCP 1B	One	5	5	1 thru 5	01-3006	01-3004	00-3210	
						01-3454		01-3003	
								01-3236	
		Two	5	5	6 thru 10	UT-03-036		VT-03-364	IEB 82-02, IEIN 80-27
	18 RCP 2A	One	5	5	1 thru 5	01-3455		00-3211	
		Two	5	5	6 thru 10	UT-03-037		VT-03-375	IEB 82-02, IEIN 80-27
	19 RCP 2B	One	5	5	1 thru 5	01-3456		00-3212	
		Two	5	5	6 thru 10	UT-03-038		VT-03-377	IEB 82-02, IEIN 80-27

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
B 6.190	17 RCP 1B	One	1	1	Flange			01-3003	
								01-3235	
B 6.200	16 RCP 1A	One	5	5	1 thru 5			00-3209	
		Two	5	5	6 thru 10			VT-03-316	
	17 RCP 1B	One	5	5	1 thru 5			00-3210	
								01-3003	
								01-3236	
		Two	5	5	6 thru 10			VT-03-326	
	18 RCP 2A	One	5	5	1 thru 5			00-3211	
		Two	5	5	6 thru 10			VT-03-328	
	19 RCP 2B	One	5	5	1 thru 5			00-3212	
		Two	5	5	6 thru 10			VT-03-354	
B-G-2									
B 7.20	05 Pressurizer	One	20	20	20 studs/nuts			00-3187	
								01-3314	
								01-3005	
		Two	20	20	20 studs/nuts		MT-03-017	VT-03-210	IEB 82-02
B 7.30	03 SG1	One	40	40	40 studs/nuts			00-3188	
								01-3315	
		Two	40	40	40 studs/nuts		MT-03-011	VT-03-208	IEB 82-02
	04 SG2	One	40	40	40 studs/nuts			00-3189	
								01-3316	
		Two	40	40	40 studs/nuts		MT-03-012	VT-03-209	IEB 82-02
B 7.50	31 PZR Safeties	One	1	1	PSV200			00-3186	
								01-3313	
					PSV201			00-3186	
								01-3313	
					PSV202			00-3186	
								01-3313	
					PSV203			00-3186	
								01-3313	
		Two	1	1	PSV200		MT-03-013	VT-03-422	IEB 82-02
					PSV201		MT-03-014	VT-03-423	IEB 82-02
					PSV202		MT-03-015	VT-03-424	IEB 82-02
					PSV203		MT-03-016	VT-03-425	IEB 82-02
	37 Charging	One	1	1	V435			00-3254	
B 7.60	16 RCP 1A	One	5	5	1 thru 5			00-3209	
								00-3113	
		Two	5	5	6 thru 10			VT-03-317	
	17 RCP 1B	One	5	5	1 thru 5			00-3210	
								00-3113	
								01-3002	PSE (16 studs)
								01-3007	
		Two	5	5	6 thru 10			VT-03-327	
	18 RCP 2A	One	5	5	1 thru 5			00-3211	
								00-3113	
		Two	5	5	6 thru 10			VT-03-345	
	19 RCP 2B	One	5	5	1 thru 5			00-3212	

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
								00-3113	
		Two	5	5	6 thru 10			VT-03-404	
B 7.70	21 SD Cooling	One	1	1	UV653			00-3006	
	22 SD Cooling	One	1	1	UV654			01-3457	
		Two	1	1	UV652			VT-03-127	
	23 SI 1A	One	1	1	V237			01-3017	
		Two	2	2	V235			VT-03-141	
					V634			VT-03-142	
	24 SI 1B	One	1	1	V543			00-3066	
		Two	2	2	V245			VT-03-164	
					V644			VT-03-165	
	25 SI 2A	One	1	1	V540			00-3080	
		Two	1	1	V217			VT-03-146	
	26 SI 2B	One	1	1	V225			00-3185	
		Two	2	2	V541			VT-03-181	
					UV624			VT-03-144	
	27 PZR Spray 1A	Two	1	1	PV100E			VT-03-054	
					V240			VT-03-222	
	28 PZR Spray	One	2	2	V241			00-3028	
					V242			00-3028	
		Two	1	1	V100F			VT-03-050	
	31 PZR Safeties	One	1	1	PSV200			00-3035	
		Two	1	1	PSV202			VT-03-188	
	32 Drain 1A	One	2	2	V234			00-3038	
					V334			00-3038	
								01-3512	
	33 Drain 1B	Two	2	2	V235			VT-03-117	
					V335			VT-03-119	
	34 Drain 2A	Two	2	2	V233			VT-03-227	
					V333			VT-03-228	
	37 Charging	One	1	1	PDV240			00-3208	
	38 Drain Line	One	1	1	V215			01-3048	
	39 HPSI	One	1	1	V-523			00-3259	
		Two	2	2	V522			VT-03-145	
					V957			VT-03-356	
	40 HPSI	Two	1	1	V532			VT-03-204	
B 7.80	2 Head	One	1	1	2-21			00-3270	CEDM 92
					2-21			00-3270	CEDM 96
B-H									
B 8.20	5 Pressurizer	One	67%	67%	5-1	00-3278	00-3069		Examined 0-240
						00-3279			Code Limited
						00-3280			Relief Required
						00-3281			
B 8.30	3 SG 1	One	33%	33%	3-1	01-3325	01-3317		Examined 0 -120
B-J									
B 9.11	6 RCS Piping	One	7	7	1-27	*	01-3506		*Separate report by
& 9.12					1-30	*	01-3506		Wesdyne. Exams
					6-7	*	01-3506		completed in U3R7
					7-7	*	01-3506		
					3-29	01-3409	01-3401		
					4-30	01-3410	01-3401		

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					17-2	01-3407	01-3345		
		Two	6	6	16-1	UT-03-023	MT-03-005		
					17-1	UT-03-016	MT-03-010		
					18-1	UT-03-018	MT-03-007		
					19-1	UT-03-021	MT-03-006		
					3-28	UT-03-019	MT-03-020		
					4-28	UT-03-017	MT-03-021		
	20 PZR Surge	One	1	1	20-1	01-3195	01-3083		
	21 SD Cooling	One	3	3	6-11	01-3076	01-3196		
						01-3075			
					21-18	01-3073	01-3196		
					21-20	01-3074	01-3196		
	22 SD Cooling	One	2	2	22-11	00-3148	00-3108		
					22-23	00-3149	00-3172		
	23 SI 1A	One	4	4	9-10	01-3049	01-3026		
						01-3050			
					23-1	01-3051	01-3026		
					23-2	01-3052	01-3026		
					23-4	01-3055	01-3026		
						01-3053			
					23-6	01-3056	01-3026		Augmented
						01-3054			
	25 SI 2A	One	2	2	25-26	00-3083	00-3033		
					25-29	00-3084	00-3081		
	26 SI 2B	One	2	2	26-9	00-3190	00-3176		
					26-11	00-3191	00-3175		
	29 PZR Spray	One	2	2	29-10	00-3051	00-3049		
					29-11	00-3052	00-3049		
					29-7	01-3405	01-3404		PSE
					29-9	01-3406	01-3404		PSE
	31 PZR Safety	One	1	1	31-1	01-3276	01-3272		
B 9.21 & 9.22	27 PZR Spray	One	4	4	9-11		01-3027		
					27-42		01-3027		
					27-43		01-3027		
					27-44		01-3027		
	28 PZR Spray 1A	One	4	4	28-31		00-3070		
					28-32		00-3070		
					28-39		00-3070		
					28-40		00-3070		
	30 Aux PZR Spray	One	2	2	30-1	00-3053			Augmented
					30-2	00-3053			Augmented
					30-4		00-3068		
					30-7		00-3068		
	32 Drain 1A	One	3	3	8-18		00-3034		
					32-1		00-3034		
					32-2		00-3034		
	36 Letdown	One	4	4	36-8		00-3201		
					36-9		00-3201		
					36-28		00-3255		
					36-35		00-3255		
	37 Charging	One	5	5	37-41		00-3202		
					37-42		00-3202		

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					37-43		00-3202		
					37-45		00-3202		
					37-47		00-3202		
	39 HPSI A	One	2	2	39-1		00-3204		
					39-5		00-3203		
	40 HPSI B	One	3	3	40-1		01-3346		
					40-2		01-3346		
					40-3		01-3346		
B 9.31	6 RCS Piping	One	1	1	9-8	01-3408	01-3345		
		Two	1	1	13-8	UT-03-020	MT-03-009		
B 9.32	6 RCS Piping	One	1	1	8-17		00-3030		
		Two	1	1	13-9		MT-03-008		
	22 SD Cooling	One	1	1	22-7A		00-3107		
B 9.40	32 Drain 1A	One	1	1	32-6		00-3109		
							01-3318		PSE
					32-8		01-3318		PSE
	38 Drain 1	One	1	1	38-5		01-3444		
B-K-1									
B 10.10	36 Letdown	One	1	1	RC91H5		00-3255		
					RC91H6		00-3255		
		Two	1	1	RC91H006		PT-03-004		
B-L-1									
B 12.20	17 RCP 1B	One	1	1	Pump			01-3001	Disassembled
B-N-1									
B 13.10	1 RPV	One	100%	100%	N/A			01-3397	Accessible areas
								01-3398	
B-O									
B 14.10	2 Head	One	4	4	2-9	00-3060	00-3199		CEDM # 84
						00-3061			
					2-9	00-3062	00-3199		CEDM # 88
						00-3063			
					2-10	00-3064	00-3199		CEDM # 84
					2-10	00-3065	00-3199		CEDM # 88
		Two	4	4	2-09	UT-03-026	PT-03-007		CEDM # 78
					2-09	UT-03-027	PT-03-008		CEDM # 89,
					2-10	UT-03-022	PT-03-005		CEDM # 78
					2-10	UT-03-025	PT-03-006		CEDM # 89
B-P									
B 15.10,	RCS Piping	One	ALL	ALL	Press Bound			00-3543	
20,30,40,								00-3112	Bolting RR 11&12
50,60,70								01-3058	
								01-3065	
								01-3396	
								01-3464	
								01-3467	
								01-3508	
								01-3509	
								01-3513	

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INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
								01-3514	
		Two	All	All	Press Bound			VT-03-429	RR 11 & 12
N/A BFLYWH	16 RCP 1A	One	1	1	Fly Wheel	01-3426			
	17 RCP 1B	One	1	1	Fly Wheel	01-3427			
	18 RCP 2A	One	1	1	Fly Wheel	01-3428			
	19 RCP 2B	One	1	1	Fly Wheel	01-3429			
F-A F 1.10	20 PZR Surge	One	2	2	RC28H1			00-3010	
					RC28H2			00-3011	
		Two	2	2	RC28H842			VT-03-342	
					RC28H844			VT-03-344	
	21 SD Cooling A	One	7	7	SI240H10			00-3007	
					SI240H11			00-3008	
					SI240H13			00-3009	
					RC51H1			01-3028	Support deleted
					RC51H2			01-3205	
					RC51H3			01-3206	
					RC51H821			01-3204	
		Two	7	7	RC51H004			VT-03-347	Snubber deleted
					RC51H005			VT-03-349	
					RC51H822			VT-03-357	RR 4
					SI240H002			VT-03-350	RR 4
					SI240H012			VT-03-352	RR 4, Snubber deleted
					SI240H823			VT-03-353	RR 4
					SI240H824			VT-03-355	RR 4
	22 SD Cooling B	One	4	4	RC68H5			00-3097	
					RC68H6			00-3197	
					SI193H17			00-3095	
					SI193H19			00-3096	
		Two	4	4	SI193H008			VT-03-121	
					SI193H009			VT-03-122	RR 4
					SI193H020			VT-03-125	
					SI193H025			VT-03-124	Snubber deleted
	23 SI 1A	One	1	1	SI207H5			01-3016	Support deleted
		Two	2	2	SI207H007			VT-03-140	
					SI207H011			VT-03-139	
	24 SI 1B	One	2	2	SI223H3			00-3067	
					SI223H4			00-3002	
		Two	2	2	SI223H001			VT-03-162	RR 4
					SI223H002			VT-03-163	Snubber deleted
	25 SI 2A	One	2	2	SI156H7			00-3076	
					SI156H9			00-3077	
		Two	1	1	SI160H001			VT-03-161	
	26 SI 2B	One	2	2	SI179H9			00-3001	
					SI179H11			00-3198	
		Two	3	3	SI175H021			VT-03-150	
					SI175H022			VT-03-153	Support deleted
					SI175H023			VT-03-155	
	27 PZR Spray 1A	One	9	9	RC62H26			00-3012	
					RC62H27			00-3013	
					RC62H28			00-3014	
					RC62H29			00-3015	

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INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					RC62H30			00-3016	
					RC62H31			00-3017	
					RC62H32			00-3018	
					RC62H33			00-3019	
					RC62H34			00-3020	
		Two	8	8	RC16H005			VT-03-049	RR 4
					RC16H006			VT-03-051	RR 4
					RC16H007			VT-03-052	RR 4
					RC16H015			VT-03-053	RR 4, Snubber Deleted
					RC62H035			VT-03-056	RR 4
					RC62H036			VT-03-057	RR 4, Spring can deleted
					RC62H037			VT-03-058	RR 4
					RC62H038			VT-03-059	RR 4
	28 PZR Spray 1B	One	9	9	RC17H24			00-3003	
					RC17H34			00-3021	
					RC17H35			01-3021	
					RC17H36			00-3022	
					RC17H38			00-3023	
					RC17H39			00-3024	
					RC17H40			00-3025	
					RC17H41			00-3026	
					RC17H42			00-3027	
		Two	8	8	RC17H043			VT-03-065	RR 4
					RC17H044			VT-03-064	RR 4, Spring deleted
					RC17H045			VT-03-062	RR 4
					RC17H046			VT-03-063	RR 4
					RC18H009			VT-03-061	RR 4
					RC18H010			VT-03-070	RR 4, Spring deleted
					RC18H011			VT-03-060	RR 4, Snubber deleted
					RC18H012			VT-03-055	RR 4
	29 PZR Spray	One	2	2	RC18H16			00-3037	
					RC18H18			00-3036	
		Two	1	1	RC18H017			VT-03-187	
	32 Drain 1A	One	2	2	RC60HA			00-3039	
					RC60HB			00-3040	
	33 Drain 1B	Two	2	2	RC58H00A			VT-03-114	
					RC58H00B			VT-03-116	Snubber deleted
	34 Drain 2A	Two	2	2	RC96H00A			VT-03-225	
					RC96H00B			VT-03-226	Snubber deleted
	36 Letdown	One	9	9	RC91H1			00-3256	
					RC91H5			00-3257	
					RC91H6			00-3258	
					RC91HB			00-3216	
					RC91HD			00-3213	
					RC91HE			00-3218	
					RC91HY			00-3214	
					RC91HZ			00-3215	
					RC91HAA			00-3219	
					RC91HAK			00-3217	
		Two	10	10	RC91H002			VT-03-211	RR 4
					RC91H006			VT-03-212	RR 4
					RC91H00P			VT-03-216	RR 4
					RC91H00Q			VT-03-217	RR 4
					RC91H00R			VT-03-218	RR 4
					RC91H00S			VT-03-219	RR 4

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INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					RC91H00T			VT-03-220	RR 4
					RC91H0AJ			VT-03-213	RR 4
					RC91H0AP			VT-03-214	RR 4
					RC91H0AQ			VT-03-215	RR 4
	37 Charging	One	14	14	CH5H2			00-3231	
					CH5H3			00-3232	
					CH5H20			01-3473	PSE
					CH5H25			00-3233	
					CH5H26			00-3225	
					CH5H27			00-3224	
					CH5H28			00-3222	
					CH5H30			00-3226	
					CH5H34			00-3220	
					CH5H35			00-3221	
					CH5H36			00-3223	
					CH5H42			00-3234	
					CH5H43			00-3486	
					CH5H44			00-3235	
					CH5HAA			00-3236	
		Two	9	9	CH05H013			VT-03-240	RR 4
					CH05H017			VT-03-243	RR 4
					CH05H018			VT-03-244	RR 4
					CH05H019			VT-03-247	RR 4
					CH05H020			VT-03-251	RR 4
					CH05H021			VT-03-242	RR 4
					CH05H022			VT-03-252	RR 4
					CH05H032			VT-03-253	RR 4
					CH05H037			VT-03-241	RR 4
	39 HPSI A	One	4	4	SI248H26			00-3228	
					SI248H27			00-3227	
					SI248H28			00-3229	
					SI248H30			00-3230	
		Two	5	5	SI248H017			VT-03-148	
					SI248H018			VT-03-154	Snubber deleted
					SI248H019			VT-03-162	
					SI248H020			VT-03-416	RR 4
					SI248H029			VT-03-149	
	40 HPSI B	One	3	3	SI199H13			01-3029	
					SI199H14			01-3030	
					SI199H21			01-3031	Support deleted
		Two	4	4	SI199H015			VT-03-200	RR 4
					SI199H016			VT-03-201	RR 4
					SI199H017			VT-03-202	RR 4
					SI199H018			VT-03-203	RR 4
F 1.40	3 SG 1	One	1	1	3-40			01-3319	
	16 RCP 1A	One	2	2	16-17			00-3489	
					16-18			00-3528	
		Two	4	4	16-12			VT-03-318	
					16-13			VT-03-319	
					16-14			VT-03-320	
					16-15			VT-03-321	
	17 RCP 1B	One	2	2	17-17			00-3527	
					17-18			00-3527	

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INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
		Two	4	4	17-12			VT-03-322	
					17-13			VT-03-323	
					17-14			VT-03-324	
					17-15			VT-03-325	
	18 RCP 2A	One	4	4	18-12			00-3004	
					18-13			00-3004	
					18-14			00-3004	
					18-15			00-3004	
		Two	2	2	18-17			VT-03-330	
					18-18			VT-03-346	
	19 RCP 2B	One	4	4	19-12			00-3005	
					19-13			00-3005	
					19-14			00-3005	
					19-15			00-3005	
		Two	2	2	19-17			VT-03-348	
					19-18			VT-03-351	

ASME Class 2

C-A									
C 1.10	41 SG 1	One	1	1	41-3	01-3403			Examined 0 -180
					41-4	01-3402			Examined 0 -180
	68 Regen HTEXCH	One	3	3	68-3	01-3328			
					68-5	01-3330			
					68-7	01-3332			
	69 Letdown HTEXCH	One	50%	50%	69-1	00-3276			Examined 0 -180
C 1.20	41 SG 1	One	1	1	41-5	01-3395			Examined 0 -180
	68 Regen HTEXCH	One	2	2	68-4	01-3329			
					68-6	01-3331			
C 1.30	41 SG 1	One	1	1	41-1	01-3082			Examined 0 -180
	42 SG 2	Two	1	1	42-1	UT-03-002			Examined 0 -180
						UT-03-030			
	68 Regen HTEXCH	One	4	4	68-1	01-3326			
					68-2	01-3327			
					68-8	01-3333			
					68-9	01-3334			
	69 Letdown HTEXCH	One	50%	50%	69-2	00-3277			Examined 0 -180
C-B									
C 2.21	41 Blowdown	One	1	1	41-62	01-3342	01-3324		
	42 Blowdown	One	1	1	42-63	01-3341	01-3323		
C-C									
C 3.10	41 SG 1	One	1	1	41-36		01-3400		
	68 Regen HTEXCH	One	2	2	68-10		01-3311		
					68-11		01-3311		
C 3.20	44 MS SG1	Two	1	1	SG33H016		MT-03-027		
	45 MS SG2	One	1	1	SG42H14		00-3072		
		Two	2	2	SG42H015		MT-03-025		
					SG42H016		MT-03-026		
	55 Feedwater	n/a	1	1	SG5H6		00-3282		First Interval RR 14
		One	1	1	SG5H9		01-3320		
	64 Blowdown	One	2	2	SG39H15		01-3343		

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INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SG39H17		01-3071		
							01-3343		
		Two	2	2	SG39H001		MT-03-002		
					SG53H005		MT-03-001		PT of inaccessible
							PT-03-001		MT areas
	65 Blowdown	n/a	1	1	SG48H23		00-3283		First Interval RR 14
		One	2	2	SG48H20		01-3344		
					SG-52H1		01-3022		
		Two	3	3	SG48H014		MT-03-028		
					SG48H016		MT-03-004		
					SG48H026		MT-03-003		
	71 LPSI Discharge	One	1	1	SI87H11		00-3392		
	76 CS Suction	One	1	1	SI9H4		00-3393		
	88 East Wrap	One	1	1	SI72H13		00-3055		
	89 East Wrap	One	1	1	SI194H14		00-3054		
	91 West Wrap	One	4	4	SI70H9		00-3265		
					SI70H11		00-3485		
					SI70H12		00-3261		
					SI70H16		00-3485		
	92 West Wrap	One	1	1	SI241H21		00-3488		
	99 LPSI B	Two	1	1	SI174H013		PT-03-009		
	100 LPSI Suction	One	1	1	SI369H1		00-3151		
		Two	1	1	84-5		PT-03-012		
	102 SI	One	3	3	SI307H2		01-3242		
					SI307H3		01-3240		
					SI307H15		01-3242		
	103 Refueling Suction A	Two	2	2	CH142H020		PT-03-011		
					CH424H006		PT-03-002		
	104 SI Suction B	Two	1	1	SI308H003		PT-03-003		
	113 HPSI	One	1	1	SI107H22		01-3244		
C 3.30	72 LPSI	One	3	3	72-3A		01-3213		
					72-3B		01-3213		
					72-3C		01-3213		
	116 HPSI	One	4	4	116-1A		01-3233		
					116-1B		01-3233		
					116-1C		01-3233		
					116-1D		01-3233		
C-D									
C 4.40	56 FW SG1	Two	40	40	V132	UT-03-028			
					V174	UT-03-029			
	47 MS SG 1	One	20	20	V170	01-3469			
	48 MS SG 1	One	20	20	V180	01-3469			
C-F-1									
C 5.11	58 Aux Feedwater	One	0	4	58-1	00-3524	00-3273		PSE
& 5.12					58-2	00-3521	00-3273		PSE
					58-3	00-3522	00-3272		PSE
					58-4	00-3523	00-3273		PSE
	59 Aux Feedwater	One	0	3	59-6	01-3460	01-3447		PSE
						01-3463			PSE
					59-37	01-3461	01-3447		PSE

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ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
						01-3462			PSE
		Two	2	0	59-1	RT-03-001	PT-03-010		PSE
	63 Aux FW	One	1	1	63-4	01-3446	01-3392		
	70 & 73LPSI Suction A & B	One	1	1	70-58	00-3455	00-3448		
	82 & 85 SD Cooling A & B	One	2	2	72-50	00-3479	00-3390		
					73-49	01-3347	01-3245		
	83 & 86 SD Cooling A & B	One	4	4	74-19	00-3480	00-3391		
					74-21	00-3482	00-3391		
					74-22	00-3481	00-3391		
					74-105	00-3483	00-3391		
	88 & 91 East & West Wrap	One	6	6	78-16	00-3195	00-3147		
					74-44	00-3484	00-3264		
					76-2	00-3487	00-3263		
					76-21	01-3278	01-3217		
					77-7	01-3246	01-3217		
					77-14	01-3279	01-3217		
	94 SI	One	1	1	74-40	01-3216	01-3215		
	96,97,98,99 LPSI Loop	One	3	3	78-45	00-3194	00-3173		
	1A,1B, 2A, 2B				78-47	00-3193	00-3174		
					79-23	01-3335	01-3389		
	102 SI	One	1	1	84-12	01-3277	01-3240		
	103 SI	One	1	1	86-57	01-3252	01-3239		
	104 SI	One	1	1	85-46	01-3468	01-3391		
							01-3458		PSE
	105 SI	One	1	1	87-23	01-3253	01-3241		
C 5.21	106 & 107 HPSI	One	4	4	106-1	01-3199	01-3197		
					106-21	01-3219	01-3218		
					107-11	01-3248	01-3237		
					107-42	01-3247	01-3237		
	108 & 109 HPSI	One	2	2	109-4	01-3202	01-3072		
					109-21	01-3200	01-3072		
	110 & 111 HPSI	One	2	2	110-6	01-3203	01-3071		
					110-39	01-3198	01-3071		
	112 & 113 HPSI	One	3	3	112-1	01-3251	01-3238		
					112-33	01-3250	01-3238		
					112-45	01-3249	01-3238		
	114 & 115 HPSI	One	1	1	115-13	01-3336	01-3393		
C 5.30	106 & 107 HPSI	One	1	1	107-53		01-3237		
C 5.41 & 5.42	82 & 85 SD Cooling A & B	One	1	1	72-49B		00-3390		
	88 & 91 East & West Wrap	One	1	1	74-102		00-3262		
C-F-2									
C 5.51	43 MS SG1 90	One	1	1	43-2	00-3111	00-3071		
& 5.52	44 MS SG1 270	One	1	1	44-1	00-3150	00-3073		
	46 MS SG2 90	One	1	1	46-25	00-3192	00-3094		
	54 FW SG 1	One	1	1	54-41	01-3212	01-3201		
		Two	2	1	54-1	UT-03-031	MT-03-022		PSE
	55 FW SG 2	One	2	2	55-1	01-3024	01-3023		
					55-15	01-3025	01-3023		
		Two	1	0	55-1	UT-03-033	MT-03-023		PSE
					55-15	UT-03-032	MT-03-024		PSE

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INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
	58 Aux Feedwater SG1	One	1(5)	1(5)	41-33	00-3526	00-3272		
					(58-1)	00-3524	00-3273		
					(58-12)	00-3048	00-3031		() signifies
					(58-13)	00-3047	00-3031		augmented
					(58-16)	00-3046	00-3031		examinations
					(58-16A)	00-3045	00-3031		
	59 Aux Feedwater SG2	One	0(5)	0(5)	(59-1)	00-3269	00-3260		
					(59-12)	00-3044	00-3032		
					(59-13)	00-3041	00-3032		
					(59-16)	00-3042	00-3032		
					(59-16A)	00-3043	00-3032		
					59-38	01-3459	01-3447		PSE
	64 Blowdown	One	1	1	64-1	01-3339	01-3322		
	65 Blowdown	One	1	1	65-28	01-3340	01-3321		
C-G C 6.10	116 HPSI	One	1	1	116-2		01-3243		
C-H C 7.10, 30 50, & 70	Periodic Pressure Test	One	N/A	N/A	Pressure Boundary			01-3057	
								01-3061	
								01-3062	
								01-3065	
								01-3066	
								01-3067	
								01-3069	
								01-3070	
								01-3220	
								thru	
								01-3232	
								01-3355	
								01-3360	
								01-3361	
								01-3365	
								thru	
								01-3381	
								01-3390	
								01-3396	
								01-3464	
								thru	
								01-3467	
								01-3504	
								01-3505	
								01-3508	
								thru	
								01-3511	
								01-3514	
								01-3515	
								01-3516	
								01-3518	
								01-3519	
								01-3520	
								01-3522	
								01-3523	
								01-3525	

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
		Two	N/A	N/A	Pressure Boundary			VT-03-432	Accessible portions in containment
F-A									
F 1.20	41 SG 1	One	2	2	41-36			01-3443	
&					41-37			01-3445	
F 1.40	43 MS SG 1 90	One	2	2	SG36H17			00-3075	
					SG36H884			00-3410	
					SG36H885			00-3411	
		Two	1	1	SG36H011			VT-03-359	
	44 MS SG1 270	One	2	2	SG33H17			00-3078	
					SG33H18			00-3079	
		Two	3	3	SG33H016			VT-03-393	
					SG33H881			VT-03-255	RR 4
					SG33H882			VT-03-256	RR 4
	45 MS SG 2 270	One	1	1	SG42H14			00-3074	
		Two	3	3	SG42H011			VT-03-257	RR 4
					SG42H015			VT-03-258	Snubber deleted
					SG42H016			VT-03-394	
	46 MS SG 2 90	One	2	2	SG45H17			00-3098	
					SG45H18			00-3099	
		Two	3	3	SG45H011			VT-03-362	
					SG45H887			VT-03-365	
					SG45H888			VT-03-367	
	47 MS SG1 270	One	1	1	SG206H1			00-3529	
	51 Atm. Dump SG1	One	1	1	SG59H6			00-3449	
	53 Steam to Aux FW	One	4	4	SG81H1			00-3106	
					SG81H2			00-3105	
					SG83H1			00-3104	
					SG83H2			00-3103	
		Two	2	2	SG81H004			VT-03-261	Snubber Deleted
					SG83H004			VT-03-262	Snubber Deleted
	54 FW SG 1	One	7	7	SG2H4			01-3208	
					SG2H5			01-3209	
					SG2H12			01-3018	
					SG2H13			01-3214	
					SG2H14			01-3210	
					SG2H15			01-3211	
					SG2H803			01-3019	
		Two	6	6	SG13H001			VT-03-395	RR 4
					SG13H802			VT-03-412	RR 4
					SG2H009			VT-03-396	RR 4
					SG2H010			VT-03-397	RR 4
					SG2H011			VT-03-402	RR 4
					SG2H806			VT-03-415	Support deleted
	55 FW SG 2	One	8	8	SG5H9			01-3350	
					SG5H10			01-3348	
					SG5H11			01-3349	
					SG5H12			01-3011	
					SG5H805			01-3012	
					SG5H809			01-3014	Support deleted
					SG14H1			01-3013	
					SG14H804			01-3015	
		Two	7	7	SG5H004			VT-03-133	RR 4
					SG5H005			VT-03-134	RR 4

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INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
								VT-03-385	RR 4, Re-exam
					SG5H006			VT-03-259	RR 4
					SG5H007			VT-03-130	RR 4
					SG5H008			VT-03-132	RR 4
					SG5H013			VT-03-131	RR 4
					SG5H014			VT-03-260	RR 4
58 Aux FW		One	7	7	SG8H2			01-3436	
					SG8H3			01-3435	
					SG8H4			01-3434	
					SG8H5			01-3433	
					SG8H20			01-3432	
					SG8H901			01-3431	
					SG8H903			01-3430	
		Two	7	7	SG8H006			VT-03-147	RR #4
					SG8H007			VT-03-160	RR 4
					SG8H008			VT-03-151	
					SG8H009			VT-03-158	RR 4
					SG8H010			VT-03-137	RR 4
					SG8H011			VT-03-138	RR 4
					SG8H017			VT-03-143	RR 4
59 Aux FW		One	6	6	AF6H1			00-3238	
					SG11H8			00-3240	
					SG11H9			00-3239	
					SG11H10			00-3241	
					SG11H11			00-3242	
					SG11H12			00-3237	
		Two	6	6	SG11H013			VT-03-358	RR 4
					SG11H014			VT-03-360	RR 4
					SG11H015			VT-03-361	RR 4
					SG11H016			VT-03-363	RR 4
					SG11H018			VT-03-368	RR 4
					SG11H019			VT-03-370	RR 4
60 FW SG1		One	1	1	SG200H9			00-3530	
					SG200H13			00-3534	PSE
					SG200H14			00-3533	PSE
61 FW SG 2		One	0	0	SG203H13			00-3531	PSE
					SG203H14			00-3532	PSE
62 Aux FW SG1		One	1	1	AF4H3			00-3102	
63 Aux FW SG2		One	2	2	AF6H2			00-3100	
					AF16H1			00-3101	
64 Blowdown		One	10	10	SG39H10			01-3032	
					SG39H11			01-3033	Support deleted
					SG39H12			01-3034	
					SG39H13			01-3035	Support deleted
					SG39H14			01-3036	Support deleted
					SG39H15			01-3037	
					SG39H16			01-3038	
					SG39H17			01-3039	Support deleted
					SG39H26			01-3040	
					SG53H2			01-3020	Support deleted
		Two	12	12	SG39H001			VT-03-386	Snubber deleted
					SG39H002			VT-03-069	Support deleted
					SG39H003			VT-03-104	Snubber deleted
					SG39H004			VT-03-105	RR 4
					SG39H005			VT-03-106	RR 4

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INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SG39H006			VT-03-107	Snubber deleted
					SG39H027			VT-03-108	Snubber deleted
					SG53H003			VT-03-066	Support deleted
					SG53H004			VT-03-109	RR 4
					SG53H005			VT-03-111	
					SG53H006			VT-03-067	Support deleted
					SG53H007			VT-03-068	Snubber deleted
	65 Blowdown	One	10	10	SG48H2			01-3010	Support deleted
					SG48H3			01-3043	Support deleted
					SG48H4			01-3044	
					SG48H19			01-3045	Support deleted
					SG48H20			01-3046	Support deleted
					SG48H21			01-3047	
					SG52H1			01-3008	Support deleted
					SG52H2			01-3009	Support deleted
					SG52H3			01-3041	Support deleted
					SG52H4			01-3042	
		Two	11	11	SG48H013			VT-03-110	Snubber deleted
					SG48H014			VT-03-389	
					SG48H015			VT-03-113	Snubber deleted
					SG48H016			VT-03-115	
					SG48H017			VT-03-426	RR 4, Snubber deleted
					SG48H018			VT-03-118	
					SG48H022			VT-03-120	Snubber deleted
					SG48H023			VT-03-123	RR 4
					SG48H024			VT-03-126	RR 4
					SG48H025			VT-03-128	Snubber deleted
					SG48H026			VT-03-129	Snubber deleted
	68 Regen HTEXCH	One	2	2	68-10			01-3312	
					68-11			01-3312	
	70 LPSI Suction A	One	1	1	SI67H4			00-3249	
	71 LPSI Discharge A	One	1	1	SI87H11			00-3394	
		Two	5	5	SI78H001			VT-03-335	RR 4
					SI78H002			VT-03-334	RR 4
					SI87H001			VT-03-331	RR 4
					SI87H002			VT-03-332	RR 4
					SI87H003			VT-03-333	RR 4
	72 LPSI	One	3	3	72-3A			01-3207	
					72-3B			01-3207	
					72-3C			01-3207	
	73 LPSI Suction B	One	0	0	SI308H12			00-3120	PSE
		Two	1	1	SI308H014			VT-03-112	RR 4
	76 CS Suction A	One	1	1	SI9H4			00-3395	
					SI67H1			01-3256	PSE
					SI67H3			01-3257	PSE
	77 CS Discharge A	One	4	4	SI79H1			00-3243	
					SI79H2			00-3244	
					SI79H3			00-3246	
					SI79H4			00-3245	
	79 CS Suction B	One	3	3	SI34H1			00-3169	
					SI34H2			00-3168	
					SI34H3			00-3167	
					SI34H1			00-3128	PSE
					SI34H3			00-3122	PSE
					SI33H4			00-3117	PSE

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ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SI34H6			00-3196	PSE
	80 CS Discharge B	One	3	3	SI119H7			00-3166	
					SI119H8			00-3165	
					SI119H9			00-3164	
	82 SD Cooling A	One	2	2	SI78H5			00-3248	
					SI79H10			00-3247	
	83 SD Cooling A	One	4	4	SI87H9			00-3250	
					SI89H1			00-3253	
					SI89H2			00-3251	
					SI89H3			00-3252	
	85 SD Cooling B	One	3	3	SI119H10			00-3158	
					SI123H6			00-3160	
					SI123H7			00-3159	
	86 SD Cooling B	One	3	3	SI129H10			00-3157	
					SI129H11			00-3156	
					SI129H12			00-3155	
	88 East Wrap	One	8	8	SI72H11			00-3056	
					SI72H13			00-3058	
					SI72H14			00-3057	
					SI72H21			01-3451	
					SI72H22			01-3452	
					SI73H1			01-3448	
					SI73H2			01-3449	
					SI73H3			01-3450	
	89 East Wrap	One	4	4	SI194H12			00-3154	
					SI194H13			00-3153	
					SI194H14			00-3059	
					SI194H23			00-3152	
					SI38H1			00-3183	PSE
					SI194H13			00-3177	PSE
	91 West Wrap	One	7	7	SI70H9			00-3398	
					SI70H10			00-3397	
					SI70H11			00-3413	
					SI70H12			00-3399	
					SI70H13			00-3414	
					SI70H14			00-3415	
					SI70H15			00-3396	
					SI70H16			00-3412	
	92 West Wrap	One	5	5	SI239H3			00-3402	
					SI241H9			01-3260	PSE
					SI241H11			01-3261	PSE
					SI241H12			00-3274	
								01-3262	PSE
					SI241H14			00-3400	
								01-3263	PSE
					SI241H15			00-3401	
					SI241H21			00-3490	
	94 LPSI A	One	3	3	SI89H7			00-3467	
					SI89H8			00-3466	
					SI89H9			00-3465	
					SI241H5			01-3258	PSE
					SI241H7			01-3259	PSE
					SI241H8			01-3271	PSE
		Two	4	4	SI241H006			VT-03-189	RR 4
					SI241H007			VT-03-190	RR 4

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INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SI241H008			VT-03-191	RR 4
					SI241H017			VT-03-192	
	95 LPSI B	One	6	6	SI72H8			00-3464	
					SI72H10			00-3459	
					SI134H11			00-3458	
					SI134H12			00-3542	
					SI194H3			00-3506	
					SI194H5			00-3511	
					SI194H5			00-3126	PSE
					SI194H7			00-3125	PSE
					SI194H15			00-3124	PSE
					SI194H21			00-3119	PSE
		Two	10	2	SI72H007			VT-03-135	
					SI72H009			VT-03-136	
	96 LPSI to Loop 1A	One	3	3	SI202H7			00-3496	
					SI202H8			00-3495	
					SI202H9			00-3494	
		Two	8	8	SI202H002			VT-03-232	RR 4
					SI202H003			VT-03-233	RR 4
					SI202H004			VT-03-234	RR 4
					SI202H005			VT-03-235	RR 4, Snubber deleted
					SI202H006			VT-03-236	RR 4
					SI202H010			VT-03-237	RR 4, Snubber deleted
					SI202H011			VT-03-238	RR 4, Snubber deleted
					SI202H015			VT-03-239	RR 4
	97 LPSI to Loop 1B	One	10	10	SI220H9			00-3505	
					SI220H10			00-3504	
					SI220H11			00-3503	
					SI220H12			00-3502	
					SI220H13			00-3501	
					SI220H14			00-3500	
					SI220H15			00-3499	
					SI220H19			00-3498	
					SI220H22			00-3497	
					SI220H8			01-3472	
		Two	7	7	SI220H001			VT-03-193	RR 4
					SI220H016			VT-03-195	RR 4
					SI220H017			VT-03-196	RR 4
					SI220H018			VT-03-197	RR 4
					SI220H020			VT-03-198	RR 4
					SI220H021			VT-03-194	RR 4, Snubber deleted
					SI220H028			VT-03-199	RR 4, Snubber deleted
	98 LPSI to Loop 2A	One	2	2	SI155H5			00-3163	
					SI155H6			00-3162	
		Two	4	4	SI155H002			VT-03-156	
					SI155H003			VT-03-157	Support deleted
					SI155H004			VT-03-159	Support deleted
					SI155H007			VT-03-166	RR 4
	99 LPSI to Loop 2B	Two	5	5	SI174H007			VT-03-245	RR 4, Snubber deleted
					SI174H008			VT-03-246	RR 4
					SI174H009			VT-03-248	RR 4, Snubber deleted
					SI174H010			VT-03-249	RR 4
					SI174H013			VT-03-250	RR 4, Snubber deleted
	100 LPSI A Suction	One	2	2	SI241H19			00-3029	
					SI369H1			00-3161	

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INSERVICE INSPECTION SUMMARY REPORT

ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
		Two	1	1	84-5			VT-03-399	
	102 SI	One	6	6	SI8H4			01-3254	PSE
					SI9H1			01-3255	PSE
					SI307H2			01-3264	PSE
								01-3281	
					SI307H3			01-3282	
					SI307H4			01-3470	Support deleted
					SI307H5			01-3265	PSE
								01-3283	
					SI307H6			01-3266	PSE
					SI307H7			01-3267	PSE
					SI307H8			01-3471	
					SI307H15			01-3284	
		Two	7	7	SI008H001			VT-03-336	RR 4
					SI008H002			VT-03-337	RR 4, Strut deleted
					SI008H003			VT-03-338	RR 4
					SI008H004			VT-03-339	RR 4
					SI307H006			VT-03-341	RR 4
					SI307H007			VT-03-343	RR 4
					SI307H014			VT-03-340	RR 4, Snubber deleted
	103 Refuel Suction A	One	6	6	CH142H13			00-3519	
					CH142H14			00-3518	
					CH142H15			00-3517	
					CH142H19			00-3516	
					CH142H22			00-3515	
					CH424H1			00-3520	
					CH424H2			01-3269	PSE
					CH424H3			01-3270	PSE
					SI142H3			01-3268	PSE
		Two	6	6	CH142H008			VT-03-175	
					CH142H020			VT-03-176	
					CH142H021			VT-03-177	
					CH424H002			VT-03-178	
					CH424H003			VT-03-179	RR 4
					CH424H006			VT-03-180	
	104 SI Suction B	One	7	7	SI33H1			00-3512	
					SI33H2			00-3513	
					SI33H3			00-3514	
					SI308H5			00-3507	
					SI308H8			00-3508	
					SI308H10			00-3509	
					SI308H11			00-3510	
					SI031H1			00-3127	PSE
					SI308H2			00-3180	PSE
					SI308H4			00-3181	PSE
					SI308H5			00-3182	PSE
					SI308H9			00-3115	PSE
		Two	7	7	SI308H001			VT-03-167	RR 4
					SI308H002			VT-03-168	RR 4
					SI308H003			VT-03-170	RR 4
					SI308H004			VT-03-171	RR 4
					SI308H006			VT-03-172	RR 4, Snubber deleted
					SI308H007			VT-03-173	RR 4, Snubber deleted
					SI308H015			VT-03-174	RR 4
	105 Refueling Water	One	7	7	CH149H3			00-3116	PSE

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ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					CH149H5			00-3123	PSE
					CH149H7			00-3121	PSE
					CH149H8			00-3184	PSE
					CH149H12			00-3179	PSE
					CH149H14			00-3178	PSE
					CH149H21			00-3118	PSE
					CH149H9			01-3285	
					CH149H10			01-3286	
					CH149H12			01-3287	
					CH149H13			01-3288	
					CH149H14			01-3289	
					CH149H21			01-3280	
					CH149H28			01-3290	
		Two	7	7	CH149H004			VT-03-182	
					CH149H005			VT-03-183	
					CH149H006			VT-03-184	
					CH149H007			VT-03-185	
					CH149H025			VT-03-186	RR 4
					CH149H026			VT-03-391	
					CH149H027			VT-03-392	
106 HPSI		One	8	8	SI99H1			01-3422	
					SI99H2			01-3423	
					SI100H1			01-3417	
					SI100H2			01-3418	
					SI100H3			01-3419	
					SI100H5			01-3420	
					SI100H34			01-3421	
					SI106H1			01-3424	
107 HPSI		One	6	6	SI107H3			01-3352	
					SI107H11			01-3293	
					SI107H12			01-3292	
					SI112HC			01-3353	
					SI112HG			01-3351	
					SI112HH			01-3291	
108 HPSI Discharge		One	11	11	SI100H22			00-3468	
					SI100H23			00-3469	
					SI100H24			00-3470	
					SI100H25			00-3471	
					SI100H26			00-3472	
					SI100H27			00-3473	
					SI100H28			00-3474	
					SI100H29			00-3475	
					SI100H31			00-3476	
					SI100H32			00-3478	
					SI100H35			00-3477	
109 HPSI		One	7	7	SI107H13			01-3437	
					SI107H14			01-3438	
					SI107H15			01-3439	
					SI107H16			01-3440	
					SI107H21			01-3441	
					SI107H47			01-3442	
					SI107H50			01-3425	Support deleted
110 HPSI		One	7	7	SI103HB			01-3298	
					SI103HD			01-3299	
					SI103HE			01-3300	

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ASME Cat / Item #	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SI218H1			01-3294	
					SI218H2			01-3295	
					SI218H3			01-3296	
					SI218H4			01-3297	
	111 HPSI	One	3	3	SI100H37			01-3302	
					SI100HA			01-3354	
					SI100HB			01-3301	
	112 HPSI	One	3	3	SI176H1			01-3303	
					SI176H2			01-3304	
					SI176H3			01-3305	
	113 HPSI	One	5	5	SI107H22			01-3309	
					SI107H24			01-3310	
					SI157H2			01-3306	
					SI157H3			01-3307	
					SI157H4			01-3308	
	115 HPSI	Two	3	3	SI157H010			VT-03-229	Snubber deleted
					SI157H011			VT-03-230	RR 4
					SI176H004			VT-03-231	RR 4
	116 HPSI	One	4	4	116-1A			01-3234	
					116-1B			01-3234	
					116-1C			01-3234	
					116-1D			01-3234	

APPENDIX B

CODE LIMITATIONS

REFUELING OUTAGE NUMBER TEN

CODE LIMITATIONS

None – All examinations were performed to obtain 100% coverage or conformed to the criteria in ASME Code Case N-460 to take full credit for the examinations.

APPENDIX C

FORM NIS-1

APS

NIS-1 FORM

OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

1. OWNER - *ARIZONA PUBLIC SERVICE COMPANY, et al*
ADDRESS - *P.O. BOX 52034, PHOENIX, ARIZONA 85072*
2. PLANT - *PALO VERDE NUCLEAR GENERATING STATION*
ADDRESS - *5801 SOUTH WINTERSBURG ROAD; TONOPAH, ARIZONA 85354-7529*
3. UNIT NUMBER - 3
4. OWNERS' CERTIFICATE OF AUTHORIZATION - *NONE*
5. COMMERCIAL SERVICE DATE - January 8, 1988
6. COMPONENTS INSPECTED:

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

This report is a summary of the second interval second period examinations performed to date for Unit 3. 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 3-29-2003 TO 4-30-2003
8. INSPECTION INTERVAL FROM 1-11-1998 TO 1-10-2008
9. ABSTRACT OF EXAMINATIONS. INCLUDE A LIST OF EXAMINATIONS AND A STATEMENT CONCERNING STATUS OF WORK REQUIRED FOR CURRENT INTERVAL.

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

10. ABSTRACT OF CONDITIONS NOTED

The evaluation of the results from the ISI examinations indicated the integrity of the systems have been maintained. There were no rejectable indications found during this ISI inspection activity.

11. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN

There were no rejectable indications found during this ISI inspection activity.

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 5/29/2003 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 11-6-01 TO 4-30-03, AND STATE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE OWNER HAS PERFORMED EXAMINATIONS AND TAKEN CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT IN ACCORDANCE WITH THE REQUIREMENTS OF THE ASME CODE, SECTION XI. BY SIGNING THIS CERTIFICATE NEITHER THE INSPECTOR NOR HIS EMPLOYER MAKES ANY WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE EXAMINATIONS AND CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT. FURTHERMORE, NEITHER THE INSPECTOR NOR HIS EMPLOYER SHALL BE LIABLE IN ANY MANNER FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE OR A LOSS OF ANY KIND ARISING FROM OR CONNECTED WITH THIS INSPECTION.

INSPECTOR RA System COMMISSIONS NS 9685 "AWIC" Az 264
NAT'L BOARD, STATE, PROVINCE

DATE 5-30-03

APPENDIX D

FORMS NIS-2

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 3MRCEP01A 2. Code Class ASME Section III Class 1
 3. Item Description Reactor Coolant Pump
 4. N-5 Package Number 3RC02-6 5. W.O. Number 2368965
 6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition
 7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda
 8. Work Description Mechanical Seal Replacement as a part of normal maintenance.

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

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

11. Repair/Replacement Work Organization APS
 12. Replacement Item Construction or reconciled Code/Edition ASME Section III, Class 1, 1974 Ed
 13. Repair/Replacement Activity Construction Code/Edition ASME Section III, Class 1, 1974 Ed, Winter 1975 Add.
 14. ASME Section XI Code/Edition 1992 Edition, 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
BV 03/12/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
BV 03/12/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
BV 03/12/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
BV 03/12/03 18. Include a step in the W.O. to record below all applicable numbers for repaired or
Initial Date replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
3rd Stage Seal Retainer	1663509	Q95-1876 SN9		N/A

19. Planner Barbara Vidal 3/12/03 Print Name Barbara Vidal
Signature Date
 20. ISI Engineer R.P. Lindahl 3/18/03 Print Name R.P. LINDAHL
Signature Date
 21. ANII Robert Hogstrom 3-20-03 Print 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 03/12/03
Name

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

Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station

Unit 3

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

2368965
Work Order Number

3. Work Performed by Arizona Public Service
Name

Type Code Symbol Stamp None

Authorization No. N/A

5801 S Wintersburg Rd Tonopah, AZ 85354
Address

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
3rd Stage Retainer	Sulzer	<u>Q45-1876</u> <u>SN 9</u>	N/A	3MRCEP01A		Replacement	Yes

7. Description of Work Replacement of 3rd stage seal retainer on RCP 1A

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

Other ☐

Pressure psi

Test Temp. °F

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

FORM NIS-2 (Back)

9. Remarks WO# 2368965 to replace mechanical seals in RCP 3MRCEP01A as part of normal maintenance.

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. repair or replacement

Type Code Symbol Stamp N/A

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

Signed FRED POTTER JR. SR. ISI ENGINEER Date 4/28/03
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 3-20-03 to 4-28-03, 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.

28 [Signature]
Inspector's Signature

Commissions NS 9685 "ASIC" Az 264
National Board, State, Province, and Endorsements

Date 4-28-03

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 3MRCEP01C 2. Code Class ASME Section III Class 1
 3. Item Description Reactor Coolant Pump
 4. N-5 Package Number 3RC02-6 5. W.O. Number 2373807
 6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition
 7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda
 8. Work Description Mechanical Seal Replacement as a part of normal maintenance.

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

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

11. Repair/Replacement Work Organization APS
 12. Replacement Item Construction or reconciled Code/Edition ASME Section III, Class 1, 1974 Ed
 13. Repair/Replacement Activity Construction Code/Edition ASME Section III, Class 1, 1974 Ed, Winter 1975 Add.
 14. ASME Section XI Code/Edition 1992 Edition, 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
BV 09/27/02 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
BV 09/27/02 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
BV 09/27/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
BV 09/27/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or
Initial Date replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
3rd Stage Seal Retainer	1663509	Q95-196A SN#7		N/A

19. Planner Barbara Vidal 11/12/02 Print Name Barbara Vidal
Signature Date
 20. ISI Engineer Alan Morrow 11/13/02 Print Name Alan Morrow
Signature Date
 21. ANII Robert G. Hogstrom 11-13-02 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 08/06/02
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address
2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2373807
Address Work Order Number
3. Work Performed by Arizona Public Service Type Code Symbol Stamp None
Name
5801 S Wintersburg Rd Tonopah, AZ 85354 Authorization No. N/A
Address Expiration Date N/A
4. Identification of System RC, ASME Section III Class 1
5. (a) Applicable Construction Code Section III Class 1 19 74 Edition, W'75 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
3rd Stage Retainer	Sulzer	Q45-106927	N/A	3MRCEP01C	1985	Replacement	Yes

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

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-1 ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

9. Remarks WO#2373807 to replace mechanical seals in RCP 3MRCEP01C as part of normal maintenance.

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. repair or replacement

Type Code Symbol Stamp N/A

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

Signed FRED POTEET SR. ISI ENGINEER Date 4/28/03
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 11-13-02 to 4-28-03, 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.

Rick L. Hyatt Commissions JB 9685 "ANIC" Az 264
Inspector's Signature National Board, State, Province, and Endorsements

Date 4-28-03

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 3JSGAHV0179
2. Code Class ASME Section III Class 2
3. Item Description: 12" CCI Atmospheric Dump Valve
4. N-5 Data Package Number: 3SG02-2
5. W.O. Number: 2422467
6. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Disassemble and rework valve to correct internal seat leakage. Replace damaged bonnet studs & nuts.
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:
acting SERVICE RPR 4/25/03
No failure of ASME III pressure boundary. Bonnet studs & nuts were damaged during valve disassembly.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter 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 4-14-2003 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 4-14-2003 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Dmg Date 4-14-2003 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Dmg Date 4-14-2003 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet Studs	APN 43161046	n/a	67255HC#F2B	MR 00739190
Bonnet Nuts	APN 43122024	n/a	W5U	MR 00739190

19. Planner David M. Goodlet 4/14/03 Printed Name: David Goodlet
Signature Date

20. ISI Alan Morrow 4/14/03 Printed Name: Alan Morrow
Signature Date

21. ANII R.G. Houston 4-14-03 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 04/14/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address

2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2422467
Address Work Order Number

3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None
Name
5801 S. Wintersburg Rd., Tonopah, AZ 85354-7529 Authorization No. N/A
Address Expiration Date N/A

4. Identification of System SG:Main Steam

5. (a) Applicable Construction Code ASME III Class 2 19 74 Edition, W '75 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Bonnet Studs	N/A	N/A	N/A	3JSGAHV179	2003	Replacement	No
Bonnet Nuts	N/A	N/A	N/A	3JSGAHV179	2003	Replacement	No

7. Description of Work Rework valve to correct seat leakage, studs & nuts damaged during work.

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

Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

9. Remarks: WO# 2422467 for valve 3JSGAHV0179 was disassembled and reworked to correct internal seat leakage. Four (4) bonnet studs and eight (8) bonnet nuts were damaged during disassembly and will be replaced.

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. Indap, Consulting Metallurgical Engineer Date: 4/25/03
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 4-14-03 to 4-25-03, 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. P. Indap

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264

National Board, State, Province, and Endorsements

Date: 4-25-03

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 3JCHNPSV0345 2. Code Class ASME SECTION III CLASS 2
3. Item Description SAFETY RELIEF VALVE
4. N-5 Package Number 3CH13-1 5. W.O. Number 2435047
6. Original Construction Code Edition 1974 EDITION, SUMMER 1976 ADDENDA
7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA
8. Work Description REPLACEMENT OF THE PSV NOZZLE AND DISC INSERT WITH NEW DUE TO "STICKING" CONDITION DURING TESTING.

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

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

Existing nozzle appeared to be galling during assembly and therefore being replaced with a new one. No structural failure.
RPI 5/16/02
10-25-01

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition SEC. III CL.2/1974 EDITION, SUMMER 1976 ADD.
13. Repair/Replacement Activity Construction Code/Edition SECT III CL.2/1974 EDITION, WINTER 1975 ADD.
14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☒ NO

JLB 10/25/01 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

RPI 5/16/02

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

JLB 10/25/01 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date

- JLB 10/25/01 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date

- JLB 10/25/01 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.
Initial Date

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
NOZZLE	92031-40-0014	Crosby EQ# 15568	N/A	MR# 589016
DISC INSERT	N/A	N92032-13-0007	N/A	MR# 589016
SPINDLE ASSY.	K76710	K76710-33-0004	N/A	MR# 589016
SPRING	N/A	NX 3228-1013	N/A	MR# 590418
WASHERS	N/A	N92034-41-28529	N/A	"

19. Planner James G. Boulanger 10/25/01 Print Name JAMES G. BOULANGER
Signature Date

20. ISI Engineer RPI 10/25/01 Print Name RAMAKANT INDAP
Signature Date

21. ANII Robert Hogstrom 10/25/01 Print 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 05/09/02
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address
2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2435047
Address Work Order Number
3. Work Performed by APS Maintenance Type Code Symbol Stamp None
Name
Authorization No. N/A
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A
Address
4. Identification of System CH: Chemical & Volume Control System
5. (a) Applicable Construction Code ASME III Class 2 19 74 Edition, S '76 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)
Spindle	Crosby	K76710-33-004	N/A	3JCHPSV345	2002	Replacement	No
Spring	Crosby	NX3228-0013	N/A	3JCHPSV345	2002	Replacement	No
Washer	Crosby	N92034-41-028	N/A	3JCHPSV345	2002	Replacement	No
Washer	Crosby	N92034-41-029	N/A	3JCHPSV345	2002	Replacement	No
Disc	Crosby	N92032-33-007	N/A	3JCHPSV345	2002	Replacement	No
Nozzle	Crosby	R34E-26-27	N/A	3JCHPSV345	2002	Replacement	No

7. Description of Work Rework spare safety valve to correct seat leakage.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

9. Remarks WO# 2435047 on spare valve for 3JCHNPSV0345 location was reworked to correct seat leakage condition. S/N : N61180-00-0006

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. repair or replacement

Type Code Symbol Stamp N/A

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

Signed [Signature] Consulting Metallurgical Engineer Date 6/26/2002
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-28-01 to 3-9-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspector's Signature

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

Date 3-9-02

Page _____ of _____

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: 09/15/2002

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2437662

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 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)
Disc	Flow Serve	ARZ-15	n/a	3PSGEV026	2003	Replacement	NO

7. Description of Work: Rework valve to correct problem of valve not opening fully.

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# 2437662 for the replacement of valve disc on valve 3PSGEV026 to correct problem of valve not opening fully.

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: 4/4/03
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 6-7-02 to 4-4-03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

B. S. [Signature]

Inspectors Signature

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

Date: 4-4-03

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 3MEWBE01 2. Code Class ASME Section III Class 3
3. Item Description ESSENTIAL COOLING WATER HEAT EXCHANGER "B"
4. N-5 Package Number 32EW02-2 5. W.O. Number 2453612
6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda.
7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda.
8. Work Description WELD BUILD-UP MATERIAL REPAIR OF DEFECTS IDENTIFIED IN THE TUBE (Spray Pond) SIDE OF THE HEAT EXCHANGER.
9. ☐ ISI Flaw NDE Method of Flaw Detection _____
Report Number _____
10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
WELD REPAIR REQUIRED AFTER INSPECTION OF THE METAL SURFACES PRIOR TO PERIODIC COATING, THERE WAS NO FAILURE OF THE CODE PRESSURE BOUNDARY.
11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition Sec. III Cl.3/'74 Edition '75 Winter Addenda
13. Repair/Replacement Activity Construction Code/Edition Sec. III Cl.3/'74 Edition '75 Winter Addenda
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
KVS 4/4/2003 If required, include a step in the W.O. to perform Preservice Inspection.
Initial N/A Date

16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
KVS 4/4/2003 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial KVS 4/4/2003 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial KVS 4/4/2003 18. Include a step in the W.O. to record below all applicable numbers for repaired or
Initial KVS 4/4/2003 replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
3MEWBE01	N/A	N/A	N/A	N/A

19. Planner Karl V. Savage 04/04/03 Print Name KARL V. SAVAGE
Signature Date
20. ISI Engineer Wiley Ahlstrom 4-4-03 Print Name WILEY AHLSTROM
Signature Date
21. ANII Robert G. Hogstrom 4-5-03 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 4-4-03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address

2. Plant Palo Verde Nuclear Generating Station Unit X3
Name 4/9/2003
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2453612
Address Work Order Number

3. Work Performed by Arizona Public Service Company Type Code Symbol Stamp None
Name
5801 S. Wintersburg Rd., Tonopah Arizona, 85354-7529 Authorization No. N/A
Address Expiration Date N/A

4. Identification of System EW, ASME Section III, Class 3

5. (a) Applicable Construction Code Section III, Class 3 19 74 Edition, W/75 Addenda, Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
<u>3/B EW Ht. Exch.</u> <small>WS 4/4/03</small>	<u>Struther Wells Corp.</u>	<u>17606329152</u>	<u>14611</u>	<u>3MEWBE01</u>	<u>'80</u>	<u>Repaired</u>	<u>Yes</u>

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

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-1 ☒
 Other ☐ Pressure psi Test Temp. °F

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

FORM NIS-2 (Back)

9. Remarks Pressure Test per N-416-1, Performed Weld Repair/Build-up of Eroded areas designated by Engineering in the Tube (Spray Pond) Side of the Heat Exchanger.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp _____

Certificate of Authorization No. _____

Expiration Date _____

Signed _____

ISI Engineer

Date 4-9-03

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 4-5-03 to 4-10-03, 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.

Bo L. Lytton
Inspector's Signature

Commissions

NB 9685 "N" "I" AZ264

National Board, State, Province, and Endorsements

Date 4-10-03

1. Component ID 3PRCEL032 2. Code Class ASME Section III Class 1
 3. Item Description: Reactor Coolant System Hot Leg #1 line 3PRCEL032, Spool S001.
 4. N-5 Data Package Number: 3RC01-4 & 3RC01-18A 5. W.O. Number: 2455749
 6. Original Construction Code Edition: ASME Section III Class 1, 1974 w/ Summer 1974
 7. Original Installation Code Edition: ASME Section III Class 1, 1974 w/Winter 1975
 8. Work Description: Replace existing Inconel 600 thermowells with Inconel 690 thermowells. The modification includes RTDs 3JRCCTW0112HC, 3JRCATW0112HA, 3JRCETW0111X, 3JRCBTW0112HB and 3JRCDTW0112HD. This work order applies to RCS Hot Leg #1. Ref. DMWO 2376926 and N001-0607-00397 and 00398.

9. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

Existing inconel 600 nozzles are susceptible for PW SCC. As a preventive measure, being replaced by inconel 690 material. The nozzles for RTDs 3JRCBTW0112HB & 0112HD have been found leaking in 3R10 & 3R9 respectively and based on previous investigation considered to have axial cracks in the 600 nozzles and are being replaced with 690 material along with the other nozzles.

*RPZ nozzles 2/4/03
RPZ nozzles 4/25/03*

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

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

Initial N/A Date _____ If required, include a step in the W.O. for ISI & ANII Inspection.Initial HL Date 10/7/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.Initial HL Date 10/7/02 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.
3JRCETW0111X, Nozzle	APN 00067199	7	N/A	741264-2
3JRCETW0111X, Thermowell	APN 00067116	7	N/A	741264-1
3JRCATW0112HA, Nozzle	APN 00067199	9	N/A	741263-1
3JRCATW0112HA, Thermowell	APN 00067116	9	N/A	741263-2
3JRCCTW0112HC, Nozzle	APN 00067199	24	N/A	686735-2
1JRCCTW0112HC, Thermowell	APN 00067116	24	N/A	686735-1

19. Planner Herbert L. Green 10/7/02 Printed Name: Herbert L. Green
Signature Date20. ISI Alan Morrow 1-28-03 Printed Name: Alan Morrow
Signature Date21. ANII Robert G. Hogstrom 2-4-03 Printed Name: Robert G. Hogstrom
Signature Date

1. Component ID 3PRCEL032 2. Code Class ASME Section III Class 1
 3. Item Description: Reactor Coolant System Hot Leg #1 line 3PRCEL032, Spool S001.
 4. N-5 Data Package Number: 3RC01-4 & 3RC01-18A 5. W.O. Number: 2455749
 6. Original Construction Code Edition: ASME Section III Class 1, 1974 w/ Summer 1974
 7. Original Installation Code Edition: ASME Section III Class 1, 1974 w/Winter 1975
 8. Work Description: Replace existing Inconel 600 thermowells with Inconel 690 thermowells. The modification includes RTDs 3JRCCTW0112HC, 3JRCATW0112HA, 3JRCETW0111X, 3JRCBTW0112HB and 3JRCDTW0112HD. This work order applies to RCS Hot Leg #1. Ref. DMWO 2376926 and N001-0607-00397 and 00398.
 9. ☐ ISI Flaw NDE Method of Flaw Detection:
 Report Number:
 10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

see Page 1

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

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

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

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

Initial HL Date 1/28/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial HL Date 1/28/03 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.
3JRCBTW0112HB, Nozzle	APN 00067199	36	N/A	686733-2
3JRCBTW0112HB, Thermowell	APN 00067116	36	N/A	686733-1
3JRCDTW0112HD, Nozzle	APN 00067199	21	N/A	686734-2
3JRCDTW0112HD, Thermowell	APN 00067116	21	N/A	686734-1

19. Planner Herbert L. Green 1/28/03 Printed Name: Herbert L. Green
 Signature Date

20. ISI Alan Morrow 1-28-03 Printed Name: Alan Morrow
 Signature Date

21. ANII Robert G. Hogstrom 2-4-03 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: 10/07/2002

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2455749

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 3PRCEL032, Spool S001

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
RCS Hot Leg #1	Combustion Engineering	771-301	N/A	3PRCEL032	1982	Repaired	YES

7. Description of Work: Replace a section of existing Inconel 600 RTD nozzles with a new design Inconel 690 RTD nozzles, and replace existing Inconel 600 thermowells with Inconel 690 thermowells. The modification includes RTDs 3JRCCTW0112HC, 3JRCATW0112HA, 3JRCETW0111X, 3JRCBTW0112HB and 3JRCDTW0112HD. This work order applies to RCS Hot Leg #1. Ref. DMWO 2376926 and N001-0607-00397 and 00398.

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

Other ☐

Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

9. Remarks: _____

W.O. 2455749

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: JP Bridge, Consulting Metallurgical Engineer Date: 4/25/03
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 2-4-03 to 4-26-03, 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.

JP Bridge
Inspectors Signature

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

Date: 4-26-03

PAGE 1 OF 2

- ## 9. ☐ ISI Flaw

Report Number:

- Evaluation of the suitability of this work as per the requirements of IWA - 4150:
 Existing Inconel 600 nozzles are susceptible for PWSCC -
 As a preventive measure, being replaced by Inconel 690 material
 RPR 2/4/03

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

Initial HL Date 10/7/02

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

Initial HL Date 10/7/02

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.
3JRCETW0121X, Nozzle	APN 00067199	31	N/A	689398-2
3JRCETW0121X, Thermowell	APN 00067116	31	N/A	689398-1
3JRCATW0122HA, Nozzle	APN 00067199	33	N/A	689397-2
3JRCATW0122HA, Thermowell	APN 00067116	33	N/A	689397-1
3JRCCTW0122HC, Nozzle	APN 00067199	2	N/A	689401-2
3JRCCTW0122HC, Thermowell	APN 00067116	2	N/A	689401-1

- | | | | |
|-------------|---------------------------------|------------------------|---------------------------------------|
| 19. Planner | <u>[Signature]</u>
Signature | <u>10/1/02</u>
Date | Printed Name: <u>Herbert L. Green</u> |
| 20. ISI | <u>[Signature]</u>
Signature | <u>2/4/03</u>
Date | Printed Name: <u>R. P. JINDAP</u> |
| 21. ANII | <u>[Signature]</u>
Signature | <u>2-4-03</u>
Date | Printed Name: <u>R. G. HOGSTROM</u> |

1. Component ID 3PRCEL063 2. Code Class ASME Section III Class 1
3. Item Description: Reactor Coolant System Hot Leg #2 line 3PRCEL063, Spool S001.
4. N-5 Data Package Number: 3RC01-4 & 3RC01-18A 5. W.O. Number: 2455750
6. Original Construction Code Edition: ASME Section III Class 1, 1974 w/ Summer 1974
7. Original Installation Code Edition: ASME Section III Class 1, 1974 w/Winter 1975
8. Work Description: Replace existing Inconel 600 thermowells with Inconel 690 thermowells. The modification includes RTDs 3JRCCTW0122HC, 3JRCATW0122HA, 3JRCETW0121X, 3JRCBTW0122HB and 3JRCDTW0122HD. This work order applies to RCS Hot Leg #2. Ref. DMWO 2376926 and N001-0607-00397 and 00398.

9. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

*Existing inconel 600 nozzles are susceptible for PWSCC. As a preventive measure, being replaced by Inconel 690 material
RPZ 2/4/03*

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

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

Initial N/A Date _____ If required, include a step in the W.O. for ISI & ANII Inspection.Initial [Signature] Date 10/2/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.Initial [Signature] Date 10/2/02 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.
3JRCBTW0122HB, Nozzle	APN 00067199	38	N/A	689399-2
3JRCBTW0122HB, Thermowell	APN 00067116	38	N/A	689399-1
3JRCDTW0122HD, Nozzle	APN 00067199	25	N/A	689400-2
3JRCDTW0122HD, Thermowell	APN 00067116	25	N/A	689400-1

19. Planner [Signature] 10/2/02
Signature DatePrinted Name: Herbert L. Green20. ISI [Signature] 2/4/03
Signature DatePrinted Name: R. P. INDAP21. ANII [Signature] 2-4-03
Signature DatePrinted 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: 10/07/2002
P. O. Box 53999, Phoenix Arizona 85072-2034 Sheet: 1 of 2
2. Plant: Palo Verde Nuclear Generating Station Unit: 3
5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2455750
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 3PRCEL063, Spool S001
5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1974 Addenda, _____ Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
RCS Hot Leg #2	Combustion Engineering	771-501	N/A	3PRCEL063	1982	Repaired	YES

7. Description of Work: Replace a section of existing Inconel 600 RTD nozzles with a new design Inconel 690 RTD nozzles, and replace existing Inconel 600 thermowells with Inconel 690 thermowells. The modification includes RTDs 3JRCCTW0122HC, 3JRCATW0122HA, 3JRCETW0121X, 3JRCBTW0122HB and 3JRCDTW0122HD. This work order applies to RCS Hot Leg #2. Ref. DMWO 2376926 and N001-0607-00397 and 00398.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐
Other ☐ Pressure _____ psi Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 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. 2455750

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 Indeg, Consulting Metallurgical Engineer Date: 4/25/03
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 2-4-03 to 4-26-03, 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.

RP Indeg

Inspector's Signature

Commissions: NB 9685 "N" "I" AZ264

National Board, State, Province, and Endorsements

Date: 4-26-03

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 3PCHNV816
2. Code Class ASME Section III Class 2
3. Item Description: 1-1/2" Borg Warner "Y" type manual globe valve
4. N-5 Data Package Number: 3CH14-3
5. W.O. Number: 2459150
6. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Disassemble valve, inspect for cause of seat leakage and rework as necessary. Remove and replace bonnet seal weld for access to valve internals.

9. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

No failure in the ASME Sec. III boundary. The existing code replacement of the bonnet seal weld is for access to valve internals for inspection.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter 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 4-4-03

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 4-4-03

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

Initial Dmg Date 4-4-03

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

Initial Dmg Date 4-4-03

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

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet Seal Weld	n/a	n/a	n/a	n/a

19. Planner

Signature

Date

Printed Name: David Goodlet

20. ISI

Signature

Date

Printed Name: Alan Morrow

21. ANII

Signature

Date

Printed Name: ROBERT G. HOGSTON

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: 04/04/2003

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2459150

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 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)
Bonnet Seal Weld	n/a	n/a	n/a	3PCHNV816	n/a	Replacement	NO

7. Description of Work: Remove bonnet seal weld to allow for inspection and rework of valve internals.

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

Other ☐ Pressure _____ psi

Test 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# 2459150, for valve 3PCHNV816, will remove and replace the bonnet seal weld to allow access to the 1-1/2" globe valve internals for inspection and rework to correct seat leakage.

Certificate of Compliance

We certify that the statements made in the report are correct and this replacement 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: 4/21/03
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 4-4-03 to 4-24-03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Alan Monow

Inspectors Signature

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

Date: 4-24-03

ASME SECTION XI - REPAIR / REPLACEMENT

1. Component ID 3PDGBL015 2. Code Class ASME Section III Class 3
 3. Item Description: DG JACKET WATER MAKE-UP
 4. N-5 Data Package Number: 3DW03-1 5. W.O. Number: 2467922
 6. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
 7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
 8. Work Description: Modify line 3PDGBL015 and replace valve 3JDGBUV002 with a manual operated globe valve 3PDGBV064 per DMWO 220055. Ref. EDC 2002-00102.

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:

Valve replacement for better operability. No failure in the ASME boundary. RREdap 1/15/03

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

Initial [Signature] Date 9/26/02 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [Signature] Date 9/26/02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [Signature] Date 9/26/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial [Signature] Date 9/26/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
FLANGE	APN 43580509	N/A	30479 43520509-41303	00686502-0002
PIPE	APN 43510409	N/A	453904 435904-41303	00686502-0004
VALVE	APN 45000258	AS62-32	N/A	00686502-0001

19. Planner [Signature] 9/26/02
Signature Date

Printed Name: HERBERT L. GREEN

20. ISI [Signature] 1/28/03
Signature Date

Printed Name: FRED POTEET

21. ANII [Signature] 1-28-03
Signature Date

Printed Name: ROBERT G. HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 09/26/2002

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2467922

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System:

5. (a) Applicable Construction Code ASME Section III ND Class 3 1974 Edition, Winter 1975 Addenda, _____ Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Jacket Water Make-up Valve	Target Rock	2SMH-S3	N/A	3JDGBUV002	1978	Replacement	YES
Jacket Water Make-up line	N/A	N/A	N/A	3PDGBL015	2002	Replacement	No

7. Description of Work: Modify line 3PDGBL015 and replace valve 3JDGBUV002 with a manual operated globe valve 3PDGBV064 per DMWO 220055.

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: Modify line 3PDGBL015 and replace valve 3JDGBUV002 with a manual operated globe valve 3PDGBV064 per DMWO 220055. Ref. EDC 2002-00102.

W.O. 2467922

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 IST Engineer Date: 4/8/03
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 1-28-03 to 4-8-03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. A. Lytton Commissions: NB 9685 "N" "I" AZ264
Inspectors Signature National Board, State, Province, and Endorsements
Date: 4-8-03

ASME SECTION XI - REPAIR / REPLACEMENT

Page of

1. Component ID 3PCHNV494
2. Code Class ASME Section III Class 2
3. Item Description: Check Valve
4. N-5 Data Package Number: 3CH07-4
5. W.O. Number: 2469167
6. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Seal weld body/bonnet joint after disassembly for inspection.
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:
Modification of the valve did not occur per this work order.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter 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 Dus Date 10/13/02 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Dus Date 10/13/02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Dus Date 10/13/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Dus Date 10/13/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

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

19. Planner David Shaffer 10/13/02 Printed Name: David Shaffer
Signature Date

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

21. ANII Robert Hogstrom 10-14-02 Printed Name: Robert Hogstrom
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date:

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2469167

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 NC, Class 2 1974 Edition, Winter 1975 Addenda, _____ Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Check Valve	Borg Warner	79776	N/A	3PCHNV494	1983	Replacement	YES

7. Description of Work: Seal weld body/bonnet joint after disassembly for 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)

Remarks:

N.O. 2469167

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: 4/16/03
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-14-02 to 4-16-03, 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. H. [Signature]
Inspectors Signature

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

Date: 4-16-03

ASME SECTION XI - REPAIR/REPLACEMENT

Page ____ of ____

1. Component ID 3PSIEV133 2. Code Class 2
3. Item Description HPSI CONTAINMENT PENETRATION CHECK VALVE
4. N-5 Package Number 3RC01-9 5. W.O. Number 2469169
6. Original Construction Code Edition ASME SECT. III, CL 2, 1974 EDITION, W75 ADD.
7. Original Installation Code Edition ASME SECT. III, CL 2, 1974 EDITION, W75 ADD.
8. Work Description REPLACE DISC AND STUD ASSEMBLY TO CORRECT SEAT LEAKAGE.

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

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
NO PRESSURE BOUNDARY FAILURE


11. Repair/Replacement Work Organization ARIZONA PUBLIC SERVICE
12. Replacement Item Construction or reconciled Code/Edition ASME SECT. III, CL 2, 1974 EDITION, W75 ADD.
13. Repair/Replacement Activity Construction Code/Edition ASME SECT. III, CL 2, 1974 EDITION, W75 ADD.
14. ASME Section XI Code/Edition ASME SECT. III, 1992 EDITION, 92 ADD.


15. Preservice Inspection Required. ☐ YES ☒ NO
JD 04/12/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

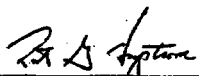
16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
JD 04/12/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date

- JD 04/12/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
- JD 04/12/03 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
DISC/STUD ASSY.	76347A	35	N/A	MR 739676

19. Planner  4-12-03 Print Name JAMES I. DAVIS
Signature Date

20. ISI Engineer  4-12-03 Print Name R.L. BROWNING
Signature Date

21. ANII  4-12-03 Print 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 4-24-03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address

2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2469169
Address Work Order Number

3. Work Performed by Arizona Public Service Type Code Symbol Stamp None
Name
Authorization No. N/A
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A
Address

4. Identification of System Safety Injection

5. (a) Applicable Construction Code ASME Sec III, CI 2 19 74 Edition, W75 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)
Valve	Borg - Warner	74380	N/A	3PSIEV133	1981	Repaired	Yes
Disc/stud assembly	Borg - Warner	35	N/A	3PSIEV133	2003	Replacement	No

7. Description of Work Replace the valve disc and stud assembly to correct seat leakage.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

9. Remarks Work Order 2469169 replaced the valve disc/stud assembly in 3PSIEV133 to correct seat leakage.

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed RP [Signature], Consulting Metallurgical Engineer Date 4/24/03
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 4-12-03 to 4-24-03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date 4-24-03

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 3PSGEL011 2. Code Class ASME Section III Class 2
 3. Item Description Pipe Spool
 4. N-5 Package Number 3SG02-2 5. W.O. Number 2486603
 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 2486601 EDC# 2002-00185.

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

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
Replacement of Eroded piping with Stainless Steel as Described in DIDM 2417232, EDC# 2001-00562. There was no failure of the Code Pressure Boundry.

11. Repair/Replacement Work Organization APS
 12. Replacement Item Construction or reconciled Code/Edition Sec.III C12/'74 Edition '75 Summer Addenda
 13. Repair/Replacement Activity Construction Code/Edition Sec.III C1.2/'74 Edition '75 Winter Addenda
 14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☒ YES ☐ NO
KVS 8/2/2002 If required, include a step in the W.O. to perform Preservice Inspection.
 Initial Date

16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
KVS 8/2/2002 If required, include a step in the W.O. for ISI & ANII Inspection.
 Initial Date
KVS 8/2/2002 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
 Initial Date
KVS 8/2/2002 18. Include a step in the W.O. to record below all applicable numbers for repaired or
 Initial Date replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
8" Pipe	APN 00061187		385840	MR# 646606
8" Elbow	APN 00067691		LYGR-1	MR# 646606
8" X 6" Reducer	APN 00061185		LXLX-1	MR# 646606
6" Pipe	APN 00061183		C7958	MR# 646606
6" Elbow	APN 00061184		LXCM-1	* MR# 646606 -
				* MR# 646704

19. Planner Karl V. Savage 8/2/2002 Print Name Karl V. Savage
 Signature Date
 20. ISI Engineer Ramakant P. Indap 8/16/02 Print Name Ramakant P. Indap
 Signature Date
 21. ANII Robert G. Hogstrom 8-16-02 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: 07/05/2002

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2486603

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

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

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

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

Other ☐ Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

9. Remarks: Pressure Test per Code Case N-416-1, Work Order 2486603, Replaced 6" Spool S-001 and 8" Spool S-009 of Line 1PSGEL011 with Stainless Steel.

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A _____

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

Signed: R. L. Brown RLB ISI ENL Date: 4-28-03
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 8-16-02 to 4-28-03, 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. L. Brown
Inspector's Signature

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

Date: 4-28-03

ASME SECTION XI - REPAIR/REPLACEMENT

Page 1 of 1

1. Component ID 3MRCEE01A 2. Code Class ASME SECTION III, CLASS1
 3. Item Description STEAM GENERATOR #1 COLD LEG
 4. N-5 Package Number 3RC01-2 5. W.O. Number 2486853
 6. Original Construction Code Edition 1971 EDITION & 1973 WINTER ADDENDA
 7. Original Installation Code Edition 1974 EDITION & 1975 WINTER ADDENDA
 8. Work Description Perform Steam Generator SG31 COLD LEG plugging and repair IAW "DFWO" 2486845
 9. ☒ ISI Flaw NDE Method of Flaw Detection Eddy Current Exam
 Report Number 3R10 Eddy Current Exam Report
 10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
EVALUATION PER ENG-DFWO 2486845

11. Repair/Replacement Work Organization WESTINGHOUSE
 12. Replacement Item Construction or reconciled Code/Edition 1971 EDITION & 1973 WINTER ADDENDA
 13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION & 1975 WINTER ADDENDA
 14. ASME Section XI Code/Edition 1992 EDITION & 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☒ NO
B.V. 02/12/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date
 16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
B.V. 02/12/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
B.V. 02/12/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
B.V. 02/12/03 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

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 2/12/03 Print Name Barbara Vidal
Signature Date
 20. ISI Engineer R. P. Indap 2/14/03 Print Name R. P. INDAP
Signature Date
 21. ANII R. G. Hogstrom 2-14-03 Print 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 02/11/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address
2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#2486853
Address Work Order Number
3. Work Performed by WESTINGHOUSE Type Code Symbol Stamp None
Name
911 W. MAIN ST. CHATTANOOGA TN. 37402 Authorization No. N/A
Address Expiration Date N/A
4. Identification of System REACTOR COOLANT
5. (a) Applicable Construction Code ASME SEC III CL.1 19 71 Edition, W;73 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
S/G	CE	65273-1	22860	3MRCEE01A	1981	Repaired	Yes
Tube Plugs	Westinghouse	*	N/A	*		Replacement	No

7. Description of Work SG31 Hold Leg plugging and repair per ENG-DFWO 2486845. *See attached list.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

9. Remarks See DFWO #2486845 for tubes plugged. (Plugging list attached)

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. repair or replacement

Type Code Symbol Stamp N/A

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

Signed *[Signature]* SR CONSULTING ENGR Date 4-23-03
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 2-14-03 to 4-24-03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date 4-24-03

STEAM GENERATOR 3MRCEE01A "COLD LEG"

3 of 4

DIWO 2486853

DFWO 2486845

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI							
1. Owner: American Public Service Company, et al. P.O. Box 51779, Phoenix, Arizona 85077-2794	Date: 02/1/82						
2. Plant: Palo Verde Nuclear Generating Station 2601 S. Wendenburg Rd., Phoenix, Arizona 85124-7272	ASME Code Section: XI Subsection: A						
3. Work Performed by: WESTINGHOUSE	Type Code Symbol Entry: None						
411 W. MAIN ST., CHATTANOOGA TN 37602	Authorization No.: N/A Expiration Date: N/A						
4. Identification of System: REACTOR COOLANT							
5. ASME Applicable Construction Code: ASME SEC. I, CL. 1, 1971 Edition, 10-72, Atlanta, GA							
6. Applicable Edition of Section XI Utilized for Repairs or Replacements: XI, 1972 Edition, 1972, Atlanta							
7. Identification of Components Requiring Repair and Replacement Components							
Item No.	Item Name	Manufacturer's Model No.	Material Spec. No.	Other Identifications	Year Built	Required or Replacement	ASME Code Section (7.1 or 7.2)
001	CR	0000-1	0000	REACTOR COOLANT	1971	Replacement	7.1
7.1a	7.1a	7.1a	7.1a	7.1a	7.1a	7.1a	7.1a

ASME SECTION XI-REPAIR/REPLACEMENT						
COMP. ID	ROW	COLUMN	PART NO.	SERIAL NO.	HEAT NO.	MR NO.
3MRCEE01A	2	27	0307-1601	40013385-77	NX3171HK	733382
3MRCEE01A	29	18	0307-1601	40013374-174	NX3171HK	733382
3MRCEE01A	29	112	0307-1601	40013374-167	NX3171HK	733382
3MRCEE01A	36	113	0307-1601	40013374-154	NX3171HK	733382
3MRCEE01A	42	87	0307-1601	40013374-173	NX3171HK	733382
3MRCEE01A	43	120	0307-1601	40013374-144	NX3171HK	733382
3MRCEE01A	44	101	0307-1601	40013374-159	NX3171HK	733382
3MRCEE01A	44	109	0307-1601	40013374-172	NX3171HK	733382
3MRCEE01A	45	98	0307-1601	40013374-160	NX3171HK	733382
3MRCEE01A	45	104	0307-1601	40013374-166	NX3171HK	733382
3MRCEE01A	46	91	0307-1601	40013374-163	NX3171HK	733382
3MRCEE01A	46	93	0307-1601	40013374-169	NX3171HK	733382
3MRCEE01A	46	95	0307-1601	40013374-168	NX3171HK	733382
3MRCEE01A	46	113	0307-1601	40013374-161	NX3171HK	733382
3MRCEE01A	48	145	0307-1601	40013374-150	NX3171HK	733382
3MRCEE01A	49	94	0307-1601	40013374-170	NX3171HK	733382
3MRCEE01A	50	83	0307-1601	40013374-164	NX3171HK	733382
3MRCEE01A	51	72	0307-1601	40013374-153	NX3171HK	733382
3MRCEE01A	61	146	0307-1601	40013374-135	NX3171HK	733382
3MRCEE01A	65	114	0307-1601	40013374-171	NX3171HK	733382
3MRCEE01A	73	30	0307-1601	40013374-151	NX3171HK	733382
3MRCEE01A	78	43	0307-1601	40013374-155	NX3171HK	733382
3MRCEE01A	82	153	0307-1601	40013374-148	NX3171HK	733382
3MRCEE01A	86	161	0307-1601	40013374-149	NX3171HK	733382
3MRCEE01A	86	165	0307-1601	40013374-138	NX3171HK	733382
3MRCEE01A	88	153	0307-1601	40013374-131	NX3171HK	733382
3MRCEE01A	88	165	0307-1601	40013374-139	NX3171HK	733382
3MRCEE01A	102	137	0307-1601	40013374-146	NX3171HK	733382
3MRCEE01A	104	137	0307-1601	40013374-140	NX3171HK	733382
3MRCEE01A	107	150	0307-1601	40013374-136	NX3171HK	733382
3MRCEE01A	110	143	0307-1601	40013374-145	NX3171HK	733382
3MRCEE01A	113	42	0307-1601	40013374-152	NX3171HK	733382
3MRCEE01A	117	146	0307-1601	40013374-133	NX3171HK	733382
3MRCEE01A	117	148	0307-1601	40013374-141	NX3171HK	733382
3MRCEE01A	118	111	0307-1601	40013374-130	NX3171HK	733382
3MRCEE01A	118	133	0307-1601	40013374-137	NX3171HK	733382
3MRCEE01A	135	128	0307-1601	40013374-128	NX3171HK	733382
3MRCEE01A	136	99	0307-1601	40013374-143	NX3171HK	733382
3MRCEE01A	136	103	0307-1601	40013385-78	NX3171HK	733382

STEAM GENERATOR 3MRCEE01A "COLD LEG"

4 of 4

DIWO 2486853

DFWO 2486845

FORM 885-3 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner: Atomic Power Service Company, Inc. Date: 8/11/81
P.O. Box 5000, Phoenix, Arizona 85072-5001 Street: 1 of 2

2. Plant: John W. Harkins Operating Station Unit: 2
3801 S. Wendenburg Rd., Phoenix, Arizona 85034-7001 WPPS: WPPS450013

3. Work Performed by: WESTINGHOUSE Type Code Special Repair: None
Authorization No.: N/A
311 W. MAIN ST. CRATTANWOODA TN. 37403 Expiration Date: N/A

4. Identification of System: REACTOR COOLANT

5. (a) Applicable Generation Code: ASME SECTION I (b) Edition: 1975 (c) Addenda: N/A (d) Code Case
(e) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1975 (f) Edition: 1977 (g) Addenda

6. Identification of Components Repaired or Replaced and Replacement Groupings

Name of Item	Name of Manufacturer	Manufacturer's Serial No.	National Serial No.	Other Identification	Year Built	Material or Substitution	ASME Code Section XI or Sub
3MR	GE	88573-1	88573	88573 (LA)	1974	Repaired	Yes
Tube Plug	Chromalox	*	204	*		Replacement	No

3MRCEE01A	138	99	0307-1601	40013374-132	NX3171HK	733382
3MRCEE01A	144	89	0307-1601	40013374-162	NX3171HK	733382
3MRCEE01A	146	75	0307-1601	40013374-165	NX3171HK	733382
3MRCEE01A	146	93	0307-1601	40013374-156	NX3171HK	733382
3MRCEE01A	146	95	0307-1601	40013374-157	NX3171HK	733382
3MRCEE01A	146	107	0307-1601	40013374-142	NX3171HK	733382
3MRCEE01A	146	117	0307-1601	40013374-147	NX3171HK	733382
3MRCEE01A	148	85	0307-1601	40013374-158	NX3171HK	733382
3MRCEE01A	149	106	0307-1601	40013385-76	NX3171HK	733382
3MRCEE01A	151	112	0307-1601	40013374-134	NX3171HK	733382
3MRCEE01A	153	118	0307-1601	40013374-127	NX3171HK	733382
3MRCEE01A	154	101	0307-1601	40013374-129	NX3171HK	733382

ASME SECTION XI - REPAIR/REPLACEMENT

Page 1 of 1

1. Component ID 3MRCEE01A 2. Code Class ASME SECTION III, CLASS1
3. Item Description STEAM GENERATOR #1 HOT LEG
4. N-5 Package Number 3RC01-2 5. W.O. Number 2486860
6. Original Construction Code Edition 1971 EDITION & 1973 WINTER ADDENDA
7. Original Installation Code Edition 1974 EDITION & 1975 WINTER ADDENDA
8. Work Description Perform Steam Generator SG31 HOT LEG plugging and repair IAW "DFWO" 2486859
9. ☒ ISI Flaw NDE Method of Flaw Detection EDDY CURRENT EXAM
Report Number 3R10 Eddy Current Exam Report
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
EVALUATION PER ENG-DFWO 2486859

11. Repair/Replacement Work Organization WESTINGHOUSE
12. Replacement Item Construction or reconciled Code/Edition 1971 EDITION & 1973 WINTER ADDENDA
13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION & 1975 WINTER ADDENDA
14. ASME Section XI Code/Edition 1992 EDITION & 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☒ NO
B.V. 02/12/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
B.V. 02/12/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
- B.V. 02/12/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
- B.V. 02/12/03 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/NO NO.
TUBE PLUGS	See attached list.	See attached list.	See attached list.	See attached list.

19. Planner Barbara Vidal 2/12/03 Print Name Barbara Vidal
Signature Date
20. ISI Engineer R.P. Indap 2/14/03 Print Name R.P. INDAP
Signature Date
21. ANII R.L. Hogstrom 2-14-03 Print Name R.L. 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 02/11/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address

2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#2486860
Address Work Order Number

3. Work Performed by WESTINGHOUSE Type Code Symbol Stamp None
Name
911 W. MAIN ST. CHATTANOOGA TN. 37402 Authorization No. N/A
Address Expiration Date N/A

4. Identification of System REACTOR COOLANT

5. (a) Applicable Construction Code ASME SEC III CL.1 19 71 Edition, W;73 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Steam Generator	CE	65273-1	22860	3MRCEE01A	1981	Repaired	Yes
Tube Plugs	Westinghouse	*	N/A	*		Replacement	No

7. Description of Work SG31 Hot Leg plugging and repair per ENG-DFWO 2486859. *See attached list.

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

Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

9. Remarks See DFWO #2486859 for tubes plugged. (Plugging list attached)

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. repair or replacement

Type Code Symbol Stamp N/A

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

Signed DAH - SK CONSULTING ENGR Date 4-23-03
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 2-14-03 to 4-24-03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

DAH
 Inspector's Signature

Commissions NB 9685 "ASIC" Az 264
National Board, State, Province, and Endorsements

Date 4-24-03

STEAM GENERATOR 3MRCEE01A

3 of 4

"HOT LEG"

DIWO 2486860

DFWO 2486859

ASME SECTION XI-REPAIR/REPLACEMENT

COMP. ID	ROW	COLUMN	PART NO.	SERIAL NO.	HEAT NO.	MR NO.
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FORM NS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner: Alabama Public Service Company, Inc. Date: 02/1/80
210 S.W. 22nd Street, Panama City, FL 32401

2. Plant: John F. Kennedy Generating Station Date: 2
2011 S. W. 22nd Street, Panama City, FL 32401

3. Work Performed by: WESTERN POWER Date: 02/01/80
211 W. MAIN ST. CHATTAHOOCHEE, FL 32402

4. Identification of System: REACTOR COOLANT

5. ASME Section XI Code: ASME SEC. XI, 1979 Edition, Part II, Subsection N, 1979 Edition, 1979

6. Identification of Components Repaired or Replaced and Replacement Components

Repair of	Name of Manufacturer	Manufacturer's Serial No.	ASME Section XI Code	Year of Manufacture	Quantity of Components	ASME Code
Steam Generator	GE	40075-1	ASME SEC. XI, 1979 Edition, Part II, Subsection N, 1979 Edition, 1979	1979	1	Replaced
Tube Plug	Westinghouse	1	ASME SEC. XI, 1979 Edition, Part II, Subsection N, 1979 Edition, 1979	1979	1	Replaced

3MRCEE01A	2	27	0307-1601	40013385-73	NX3171HK	733382
3MRCEE01A	29	18	0307-1601	40013374-106	NX3171HK	733382
3MRCEE01A	29	112	0307-1601	40013374-107	NX3171HK	733382
3MRCEE01A	36	113	0307-1601	40013374-103	NX3171HK	733382
3MRCEE01A	42	87	0307-1601	40013374-175	NX3171HK	733382
3MRCEE01A	43	120	0307-1601	40013374-116	NX3171HK	733382
3MRCEE01A	44	101	0307-1601	40013374-112	NX3171HK	733382
3MRCEE01A	44	109	0307-1601	40013374-120	NX3171HK	733382
3MRCEE01A	45	98	0307-1601	40013374-108	NX3171HK	733382
3MRCEE01A	45	104	0307-1601	40013374-105	NX3171HK	733382
3MRCEE01A	46	91	0307-1601	40013374-102	NX3171HK	733382
3MRCEE01A	46	93	0307-1601	40013374-114	NX3171HK	733382
3MRCEE01A	46	95	0307-1601	40013374-117	NX3171HK	733382
3MRCEE01A	46	113	0307-1601	40013374-101	NX3171HK	733382
3MRCEE01A	48	145	0307-1601	40013374-122	NX3171HK	733382
3MRCEE01A	49	94	0307-1601	40013374-176	NX3171HK	733382
3MRCEE01A	50	83	0307-1601	40013374-88	NX3171HK	733382
3MRCEE01A	51	72	0307-1601	40013374-92	NX3171HK	733382
3MRCEE01A	61	146	0307-1601	40013374-113	NX3171HK	733382
3MRCEE01A	65	114	0307-1601	40013374-100	NX3171HK	733382
3MRCEE01A	73	30	0307-1601	40013374-94	NX3171HK	733382
3MRCEE01A	78	43	0307-1601	40013374-75	NX3171HK	733382
3MRCEE01A	82	153	0307-1601	40013374-115	NX3171HK	733382
3MRCEE01A	86	161	0307-1601	40013374-121	NX3171HK	733382
3MRCEE01A	86	165	0307-1601	40013374-118	NX3171HK	733382
3MRCEE01A	88	153	0307-1601	40013374-119	NX3171HK	733382
3MRCEE01A	88	165	0307-1601	40013374-99	NX3171HK	733382
3MRCEE01A	102	137	0307-1601	40013374-110	NX3171HK	733382
3MRCEE01A	104	137	0307-1601	40013374-104	NX3171HK	733382
3MRCEE01A	107	150	0307-1601	40013374-82	NX3171HK	733382
3MRCEE01A	110	143	0307-1601	40013374-98	NX3171HK	733382
3MRCEE01A	113	42	0307-1601	40013374-84	NX3171HK	733382
3MRCEE01A	117	146	0307-1601	40013374-77	NX3171HK	733382
3MRCEE01A	117	148	0307-1601	40013374-97	NX3171HK	733382
3MRCEE01A	118	111	0307-1601	40013374-86	NX3171HK	733382
3MRCEE01A	118	133	0307-1601	40013374-91	NX3171HK	733382
3MRCEE01A	135	128	0307-1601	40013374-87	NX3171HK	733382
3MRCEE01A	136	99	0307-1601	40013374-93	NX3171HK	733382
3MRCEE01A	136	103	0307-1601	40013385-74	NX3171HK	733382

STEAM GENERATOR 3MRCEE01A "HOT LEG"

4 of 4

DIWO 2486860

DFWO 2486859

FORM 888-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section II

1. Owner Address: Public Service Company, N. A. Date: 03/1/81
211 W. Main St., Chattanooga, TN 37402 Street: 1 of 2

2. Plant: Public Service Company, N. A. Date: 3
211 W. Main St., Chattanooga, TN 37402 Telephone: 423/2486860

3. Unit: WATERWALL Type: Steam-Generator Name: None
 Address: None Address: None
211 W. Main St., Chattanooga, TN 37402 Address: None

4. Identification of System: STEAM GENERATOR

5. (a) Applicable Code Section: ASME SEC II, Div. 1, Subsec. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 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, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100 Code Class: None
 (b) Applicable Edition of Section II: 1992 Edition: 1992 Address: None

6. Identification of Components Replaced or Repaired and Replacement Components

Item No.	Name of Manufacturer	Identification Number	Material Specification	Other Identification	Year Built	Replaced or Repaired	ASME Code Section II, Div. 1, Subsec. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 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, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
1	CH	0001	SA-263	3MRCEE01A	1971	Replaced	Yes
2	Welding	-	WPS	-	-	Replacement	No

3MRCEE01A	138	99	0307-1601	40013374-76	NX3171HK	733382
3MRCEE01A	144	89	0307-1601	40013374-85	NX3171HK	733382
3MRCEE01A	146	75	0307-1601	40013374-83	NX3171HK	733382
3MRCEE01A	146	93	0307-1601	40013374-79	NX3171HK	733382
3MRCEE01A	146	95	0307-1601	40013374-78	NX3171HK	733382
3MRCEE01A	146	107	0307-1601	40013374-96	NX3171HK	733382
3MRCEE01A	146	117	0307-1601	40013374-81	NX3171HK	733382
3MRCEE01A	148	85	0307-1601	40013374-89	NX3171HK	733382
3MRCEE01A	149	106	0307-1601	40013385-75	NX3171HK	733382
3MRCEE01A	151	112	0307-1601	40013374-80	NX3171HK	733382
3MRCEE01A	153	118	0307-1601	40013374-95	NX3171HK	733382
3MRCEE01A	154	101	0307-1601	40013374-90	NX3171HK	733382

ASME SECTION XI - REPAIR/REPLACEMENT

Page 1 of 1

1. Component ID 3MRCEE01B 2. Code Class ASME SECTION III, CLASS1
3. Item Description STEAM GENERATOR #2 COLD LEG
4. N-5 Package Number 3RC01-2 5. W.O. Number 2486862
6. Original Construction Code Edition 1971 EDITION & 1973 WINTER ADDENDA
7. Original Installation Code Edition 1974 EDITION & 1975 WINTER ADDENDA
8. Work Description Perform Steam Generator SG32 COLD LEG plugging and repair IAW "DFWO" 2486861
9. ☒ ISI Flaw NDE Method of Flaw Detection Eddy Current Exam
Report Number 3R10 Eddy Current Exam Report
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
EVALUATION PER ENG-DFWO 2486861

11. Repair/Replacement Work Organization WESTINGHOUSE
12. Replacement Item Construction or reconciled Code/Edition 1971 EDITION & 1973 WINTER ADDENDA
13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION & 1975 WINTER ADDENDA
14. ASME Section XI Code/Edition 1992 EDITION & 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☒ NO
B.V. 02/13/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
B.V. 02/13/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
- B.V. 02/13/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
- B.V. 02/13/03 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

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 2/13/03 Print Name Barbara Vidal
Signature Date

20. ISI Engineer R. P. Indap 2/14/03 Print Name R. P. INDAP
Signature Date

21. ANII R.G. Hogstrom 2-14-03 Print 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 02/13/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address
2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#2486862
Address Work Order Number
3. Work Performed by WESTINGHOUSE Type Code Symbol Stamp None
Name
911 W. MAIN ST. CHATTANOOGA TN. 37402 Authorization No. N/A
Address Expiration Date N/A
4. Identification of System REACTOR COOLANT
5. (a) Applicable Construction Code ASME SEC III CL.1 19 71 Edition, W;73 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
S/G	CE	65273-2	22861	3MRCEE01B	1981	Repaired	Yes
Tube Plugs	Westinghouse	*	N/A	*		Replacement	No

7. Description of Work SG32 Cold Leg plugging and repair per ENG-DFWO 2486861. *See attached list.

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

Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

9. Remarks See DFWO #2486861 for tubes plugged. (Plugging list attached)

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. repair or replacement

Type Code Symbol Stamp N/A

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

Signed *[Signature]* *SR Consulting Engr* Date *4-23-03*
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 2-14-03 to 4-24-03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date 4-24-03

STEAM GENERATOR 3MRCEE01B

"COLD LEG"

DIWO 2486862

DFWO 2486861

ASME SECTION XI-REPAIR/REPLACEMENT

COMP. ID	ROW	COLUMN	PART NO.	SERIAL NO.	HEAT NO.	MR NO.
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FORM 886-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner: Arkansas Public Service Company, Inc. Date: 05/13/01
2. ASME Reg. No. 8867, District Arkansas, Section 1, Subsection 1
3. Unit: Boiler No. 1001, Steam Generator Date: 5
Boiler No. 1001, Steam Generator Date: 5
4. Work Performed by: WESTAR/BOONE Type/Grade Special Study: None
Bill W. Marnett, Chattanooga TN 37403 Authorization No.: 201
Signature: Bill W. Marnett
5. Identification of System: STEAM GENERATOR
6. ASME Section XI Code: ASME SECTION XI, Part I, Subpart 1, Division 1 Date: 5/13/01
7. ASME Section XI Code: ASME SECTION XI, Part I, Subpart 1, Division 1 Date: 5/13/01
8. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer's Serial No.	Material	Heat No.	Other Identification	Year Fabricated	Repaired or Replaced	Repair Code (See 8.1.1)
Boiler	CS	00712	SA-516	0307-1601	40013374-193	1963	Repaired	20
Boiler	CS	00712	SA-516	0307-1601	40013374-200	1963	Replaced	20

3MRCEE01B	2	63	0307-1601	40013374-193	NX3171HK	733382
3MRCEE01B	4	13	0307-1601	40013374-200	NX3171HK	733382
3MRCEE01B	14	27	0307-1601	40013374-187	NX3171HK	733382
3MRCEE01B	21	116	0307-1601	40013385-71	NX3171HK	733382
3MRCEE01B	23	122	0307-1601	40013385-69	NX3171HK	733382
3MRCEE01B	24	121	0307-1601	40013385-65	NX3171HK	733382
3MRCEE01B	25	56	0307-1601	40013374-186	NX3171HK	733382
3MRCEE01B	26	117	0307-1601	40013385-68	NX3171HK	733382
3MRCEE01B	29	134	0307-1601	40013385-56	NX3171HK	733382
3MRCEE01B	30	45	0307-1601	40013374-190	NX3171HK	733382
3MRCEE01B	35	78	0307-1601	40013385-49	NX3171HK	733382
3MRCEE01B	35	114	0307-1601	40013385-70	NX3171HK	733382
3MRCEE01B	41	104	0307-1601	40013385-12	NX3171HK	733382
3MRCEE01B	41	116	0307-1601	40013385-57	NX3171HK	733382
3MRCEE01B	43	90	0307-1601	40013385-58	NX3171HK	733382
3MRCEE01B	44	87	0307-1601	40013385-8	NX3171HK	733382
3MRCEE01B	44	105	0307-1601	40013385-3	NX3171HK	733382
3MRCEE01B	45	92	0307-1601	40013385-10	NX3171HK	733382
3MRCEE01B	46	101	0307-1601	40013385-7	NX3171HK	733382
3MRCEE01B	49	74	0307-1601	40013385-33	NX3171HK	733382
3MRCEE01B	55	108	0307-1601	40013385-9	NX3171HK	733382
3MRCEE01B	58	37	0307-1601	40013374-181	NX3171HK	733382
3MRCEE01B	58	71	0307-1601	40013385-43	NX3171HK	733382
3MRCEE01B	58	79	0307-1601	40013385-15	NX3171HK	733382
3MRCEE01B	60	75	0307-1601	40013385-41	NX3171HK	733382
3MRCEE01B	61	78	0307-1601	40013385-16	NX3171HK	733382
3MRCEE01B	62	79	0307-1601	40013385-19	NX3171HK	733382
3MRCEE01B	63	86	0307-1601	40013385-11	NX3171HK	733382
3MRCEE01B	65	84	0307-1601	40013385-4	NX3171HK	733382
3MRCEE01B	65	104	0307-1601	40013385-13	NX3171HK	733382
3MRCEE01B	65	128	0307-1601	40013385-66	NX3171HK	733382
3MRCEE01B	67	40	0307-1601	40013374-196	NX3171HK	733382
3MRCEE01B	68	15	0307-1601	40013374-188	NX3171HK	733382
3MRCEE01B	68	19	0307-1601	40013374-177	NX3171HK	733382
3MRCEE01B	68	81	0307-1601	40013385-23	NX3171HK	733382
3MRCEE01B	68	83	0307-1601	40013385-22	NX3171HK	733382
3MRCEE01B	69	22	0307-1601	40013374-183	NX3171HK	733382
3MRCEE01B	70	111	0307-1601	40013385-18	NX3171HK	733382
3MRCEE01B	71	26	0307-1601	40013374-179	NX3171HK	733382

STEAM GENERATOR 3MRCEE01B

"COLD LEG"

DIWO 2486862

DFWO 2486861

FORM 88-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section II

1. Owner: Arizona Public Service Company, et al. Date: 03/01/01
P.O. Box 10000, Phoenix, Arizona 85066-0000

2. Plant: San Yusef Nuclear Generating Station Unit: 1
3801 E. Washington St., Tempe, Arizona 85284-7302 W0746862

3. Work Performed by: WESTINGHOUSE Type Code Applied: None
311 W. Main St., Chattanooga, TN 37402 Authorization No.: N/A
 Signature Date: N/A

4. Identification of System: REACTOR COOLANT

5. (a) ASME Code Section: ASME SEC. II, CL. 1, Div. 1, Subdiv. 1, Part 1, Article 320
 (b) Applicable Edition of Section II: ASME SEC. II, Div. 1, Subdiv. 1, Part 1, Article 320

6. Identification of Component: Reactor Coolant System

Name of Item	Name of Manufacturer	Manufacturer's Serial No.	Material	Other	Part No.	Quantity	ASME Code Section II, Div. 1, Subdiv. 1, Part 1, Article 320
CR	CR	CR	CR	CR	CR	CR	CR
CR	CR	CR	CR	CR	CR	CR	CR

3MRCEE01B	71	74	0307-1601	40013385-44	NX3171HK	733382
3MRCEE01B	71	102	0307-1601	40013385-14	NX3171HK	733382
3MRCEE01B	71	104	0307-1601	40013385-2	NX3171HK	733382
3MRCEE01B	75	30	0307-1601	40013374-194	NX3171HK	733382
3MRCEE01B	75	36	0307-1601	40013374-195	NX3171HK	733382
3MRCEE01B	76	21	0307-1601	40013374-182	NX3171HK	733382
3MRCEE01B	76	103	0307-1601	40013385-5	NX3171HK	733382
3MRCEE01B	77	136	0307-1601	40013385-52	NX3171HK	733382
3MRCEE01B	77	150	0307-1601	40013385-63	NX3171HK	733382
3MRCEE01B	78	75	0307-1601	40013385-30	NX3171HK	733382
3MRCEE01B	78	87	0307-1601	40013385-1	NX3171HK	733382
3MRCEE01B	80	143	0307-1601	40013385-51	NX3171HK	733382
3MRCEE01B	81	22	0307-1601	40013374-180	NX3171HK	733382
3MRCEE01B	81	68	0307-1601	40013385-32	NX3171HK	733382
3MRCEE01B	83	26	0307-1601	40013374-178	NX3171HK	733382
3MRCEE01B	83	30	0307-1601	40013374-189	NX3171HK	733382
3MRCEE01B	83	90	0307-1601	40013385-37	NX3171HK	733382
3MRCEE01B	83	96	0307-1601	40013385-34	NX3171HK	733382
3MRCEE01B	85	154	0307-1601	40013385-80	NX3171HK	733382
3MRCEE01B	89	58	0307-1601	40013374-192	NX3171HK	733382
3MRCEE01B	92	33	0307-1601	40013374-185	NX3171HK	733382
3MRCEE01B	92	111	0307-1601	40013385-6	NX3171HK	733382
3MRCEE01B	92	151	0307-1601	40013385-50	NX3171HK	733382
3MRCEE01B	93	46	0307-1601	40013374-198	NX3171HK	733382
3MRCEE01B	95	82	0307-1601	40013385-45	NX3171HK	733382
3MRCEE01B	95	94	0307-1601	40013385-26	NX3171HK	733382
3MRCEE01B	95	96	0307-1601	40013385-20	NX3171HK	733382
3MRCEE01B	96	137	0307-1601	40013385-61	NX3171HK	733382
3MRCEE01B	99	98	0307-1601	40013385-17	NX3171HK	733382
3MRCEE01B	100	31	0307-1601	40013374-184	NX3171HK	733382
3MRCEE01B	100	87	0307-1601	40013385-36	NX3171HK	733382
3MRCEE01B	100	115	0307-1601	40013385-53	NX3171HK	733382
3MRCEE01B	100	117	0307-1601	40013385-60	NX3171HK	733382
3MRCEE01B	102	65	0307-1601	40013385-40	NX3171HK	733382
3MRCEE01B	102	73	0307-1601	40013385-27	NX3171HK	733382
3MRCEE01B	102	83	0307-1601	40013385-47	NX3171HK	733382
3MRCEE01B	102	143	0307-1601	40013385-62	NX3171HK	733382
3MRCEE01B	103	98	0307-1601	40013385-24	NX3171HK	733382
3MRCEE01B	103	124	0307-1601	40013385-59	NX3171HK	733382
3MRCEE01B	104	33	0307-1601	40013374-199	NX3171HK	733382
3MRCEE01B	104	87	0307-1601	40013385-48	NX3171HK	733382

STEAM GENERATOR 3MRCEE01B

"COLD LEG"

DIWO 2486862

DFWO 2486861

3MRCEE01B	106	79	0307-1601	40013385-42	NX3171HK	733382
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FORM 88-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section II

1. Owner Address: Public Service Company, 61.4 City: STAMFORD
2. O. Box: 2292 State: CT Zip: 06707-2292

3. Plant: John Birch Nuclear Generating Station Unit: 1
201 A. Westchester St., Westport, Conn. 06781-0002

4. Work Performed by: WOLFEKIND Type Code: Repair Date: 8/82
241 W. Main St., Cheshire, CT 06115 Authorization No.: 75A
Signature: SEA

5. Identification of System: BRACON COOLANT

6. (a) Applicable ASME Code: ASME SEC. II, CL. I, WT, Subsec. MC-21 Addenda: 20A Date Issued: 1977
(b) Applicable Edition of Section II Used for Repair or Replacement: 1977 Addenda: 20A

7. Identification of Components Repaired or Replaced and Replacement Components

Repair of Item	Name of Manufacturer	Identification Number	Material	Other Information	Part of Equipment	Repaired or Replaced	Part of Equipment (Type and Size)
20	CS	0073-1	SS304	Self-priming	Yes	Repaired	Yes
20a	Wolfekind	-	SS304	-	Yes	Replacement	Yes

3MRCEE01B	108	63	0307-1601	40013385-29	NX3171HK	733382
3MRCEE01B	108	91	0307-1601	40013385-31	NX3171HK	733382
3MRCEE01B	108	123	0307-1601	40013385-54	NX3171HK	733382
3MRCEE01B	109	38	0307-1601	40013374-191	NX3171HK	733382
3MRCEE01B	109	80	0307-1601	40013385-35	NX3171HK	733382
3MRCEE01B	109	122	0307-1601	40013385-55	NX3171HK	733382
3MRCEE01B	109	124	0307-1601	40013385-72	NX3171HK	733382
3MRCEE01B	111	154	0307-1601	40013385-79	NX3171HK	733382
3MRCEE01B	113	120	0307-1601	40013385-67	NX3171HK	733382
3MRCEE01B	114	67	0307-1601	40013385-38	NX3171HK	733382
3MRCEE01B	117	130	0307-1601	40013385-64	NX3171HK	733382
3MRCEE01B	120	59	0307-1601	40013374-197	NX3171HK	733382
3MRCEE01B	120	89	0307-1601	40013385-46	NX3171HK	733382
3MRCEE01B	121	86	0307-1601	40013385-28	NX3171HK	733382
3MRCEE01B	130	101	0307-1601	40013385-25	NX3171HK	733382
3MRCEE01B	150	63	0307-1601	40013385-39	NX3171HK	733382
3MRCEE01B	151	88	0307-1601	40013385-21	NX3171HK	733382

ASME SECTION XI - REPAIR/REPLACEMENT

Page 1 of 1

1. Component ID 3MRCEE01B 2. Code Class ASME SECTION III, CLASS1
3. Item Description STEAM GENERATOR #2 HOT LEG
4. N-5 Package Number 3RC01-2 5. W.O. Number 2486868
6. Original Construction Code Edition 1971 EDITION & 1973 WINTER ADDENDA
7. Original Installation Code Edition 1974 EDITION & 1975 WINTER ADDENDA
8. Work Description Perform Steam Generator SG32 HOT LEG plugging and repair IAW "DFWO" 2486865
9. ☒ ISI Flaw NDE Method of Flaw Detection Eddy Current Exam Report
Report Number 3R10 Eddy Current Exam Report
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
EVALUATION PER ENG-DFWO 2486865

11. Repair/Replacement Work Organization WESTINGHOUSE
12. Replacement Item Construction or reconciled Code/Edition 1971 EDITION & 1973 WINTER ADDENDA
13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION & 1975 WINTER ADDENDA
14. ASME Section XI Code/Edition 1992 EDITION & 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☒ NO
B.V. 02/13/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date
16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
B.V. 02/13/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
- B.V. 02/13/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
- B.V. 02/13/03 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

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 2/13/03 Print Name Barbara Vidal
Signature Date
20. ISI Engineer R. P. Indap 2/14/03 Print Name R. P. INDAP
Signature Date
21. ANII R. G. Holstrom 2-14-03 Print 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 02/13/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address
2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#2486868
Address Work Order Number
3. Work Performed by WESTINGHOUSE Type Code Symbol Stamp None
Name
911 W. MAIN ST. CHATTANOOGA TN. 37402 Authorization No. N/A
Address Expiration Date N/A
4. Identification of System REACTOR COOLANT
5. (a) Applicable Construction Code ASME SEC III CL.1 19 71 Edition, W;73 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
S/G	CE	65273-2	22861	3MRCEE01B	1981	Repaired	Yes
Tube Plugs	Westinghouse	*	N/A	*		Replacement	No

7. Description of Work SG32 Hot Leg tube plugging and repair per ENG-DFWO 2486865. *See attached lis

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

9. Remarks See DFWO #2486865 for tubes plugged. (Plugging list attached)

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. repair or replacement

Type Code Symbol Stamp N/A

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

Signed [Signature] Sr CONSULTING ENGR Date 4-23-03
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 2-14-03 to 4-24-03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date 4-24-03

3 of 5

DFWO 2486865

ASME SECTION XI-REPAIR/REPLACEMENT						
COMP. ID	ROW	COLUMN	PART NO.	SERIAL NO.	HEAT NO.	MR NO.

FORM 902-3 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Prescribed by the Foundation of the ASAC Code System 3

1. Owner Armenia Public Service Company, et al. Date 02/23/01
P.O. Box 2997, Shreveport, LA 71272-2974 Unit 1 of 2

2. Place Unit 199, Marsh Road, Chesapeake, Md 20781 Street 1
2011 S. Washington Blvd., Chesapeake, America 21554-7322 City/State/Zip Chesapeake, Md 20781

3. Work performed by WAGNET COOPER Type: Other Special Service None
As Directed by MASTEN, JOHN Agency/Station Name SEA
Supervisor Date SEA

4. Identification of System IRAWCON COOLANT

5. 60 Applicable Classification Code ABCHBCHCLL 61 Title WPA Address SEA City/State

6. 62 Applicable Section of Manual for Repairs or Replacement 30 63 Address SEA

7. 64 Identification of Equipment for Repairs or Replacement IR Address SEA

Brand of Equipment	Brand of Manufacturer	Manufacturer's Model No.	Rated Power (kW)	Q/PS	Year Made	Repaired or Replaced	ASAC Code
SEA	SEA	SEB0-4	2500	1000	1998	Replaced	Yes
Type Pump	Waterpump		SEA			Replaced	Yes

3MRCEE01B	2	63	0307-1601	40013374-11	NX3171HK	733382
3MRCEE01B	4	13	0307-1601	40011047-124	NX2227HK	691280
3MRCEE01B	14	27	0307-1601	40013374-73	NX3171HK	733382
3MRCEE01B	21	116	0307-1601	40013374-70	NX3171HK	733382
3MRCEE01B	23	122	0307-1601	40013374-49	NX3171HK	733382
3MRCEE01B	24	121	0307-1601	40013374-52	NX3171HK	733382
3MRCEE01B	25	56	0307-1601	40013374-14	NX3171HK	733382
3MRCEE01B	26	117	0307-1601	40013374-56	NX3171HK	733382
3MRCEE01B	29	134	0307-1601	40013374-67	NX3171HK	733382
3MRCEE01B	30	45	0307-1601	40013374-17	NX3171HK	733382
3MRCEE01B	35	78	0307-1601	40013374-53	NX3171HK	733382
3MRCEE01B	35	114	0307-1601	40013374-43	NX3171HK	733382
3MRCEE01B	41	104	0307-1601	40013374-39	NX3171HK	733382
3MRCEE01B	41	116	0307-1601	40013374-69	NX3171HK	733382
3MRCEE01B	43	90	0307-1601	40013374-74	NX3171HK	733382
3MRCEE01B	44	87	0307-1601	40013374-32	NX3171HK	733382
3MRCEE01B	44	105	0307-1601	40013374-40	NX3171HK	733382
3MRCEE01B	45	92	0307-1601	40013374-30	NX3171HK	733382
3MRCEE01B	46	101	0307-1601	40013374-46	NX3171HK	733382
3MRCEE01B	49	74	0307-1601	40013374-22	NX3171HK	733382
3MRCEE01B	55	108	0307-1601	40013374-126	NX3171HK	733382
3MRCEE01B	58	37	0307-1601	40013374-10	NX3171HK	733382
3MRCEE01B	58	71	0307-1601	40011047-165	NX2227HK	691280
3MRCEE01B	58	79	0307-1601	40013374-23	NX3171HK	733382
3MRCEE01B	60	75	0307-1601	40013374-16	NX3171HK	733382
3MRCEE01B	61	78	0307-1601	40011047-192	NX2227HK	691280
3MRCEE01B	62	79	0307-1601	40011047-190	NX2227HK	691280
3MRCEE01B	63	86	0307-1601	40013374-31	NX3171HK	733382
3MRCEE01B	65	84	0307-1601	40011047-191	NX2227HK	691280
3MRCEE01B	65	104	0307-1601	40013374-48	NX3171HK	733382
3MRCEE01B	65	128	0307-1601	40013374-62	NX3171HK	733382
3MRCEE01B	67	40	0307-1601	40013374-12	NX3171HK	733382
3MRCEE01B	68	15	0307-1601	40011047-166	NX2227HK	691280
3MRCEE01B	68	19	0307-1601	40011047-146	NX2227HK	691280
3MRCEE01B	68	81	0307-1601	40011047-156	NX2227HK	691280
3MRCEE01B	68	83	0307-1601	40011047-152	NX2227HK	691280
3MRCEE01B	69	22	0307-1601	40011047-168	NX2227HK	691280
3MRCEE01B	70	111	0307-1601	40013374-34	NX3171HK	733382
3MRCEE01B	71	26	0307-1601	40011047-193	NX2227HK	691280

STEAM GENERATOR 3MRCEE01B

"HOT LEG"

4 of 5

DIWO 2486868

DFWO 2486865

FORM MS-8 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required by the Provisions of the ASME Code Section XI

1. Owner: American Electric Power Co., Inc. Date: 05/13/01
214 New York, Chicago, Illinois 60601-1000

2. Site: Erie York Nuclear Generating Station
2001 S. Washington St., York, Pennsylvania 17403-7201

3. Work Performed by: WESTINGHOUSE Type: Safety Related Work: ☒ Other: ☐
Activity No.: 001
Signature Date: 05/13/01

4. Description of Work: REACTOR COOLANT

5. (a) Applicable Code Section: ASME SEC. I, DIV. 1, SUBC. 3, PART 1, ARTICLE 3000, DATE 1980
(b) Applicable Edition of Section XI: 1980 Edition, 1980, Article 3000

6. Identification of Components Replaced or Repaired and Replacement Temperature

Item No.	Item Description	Replacement Material No.	Replacement Date	Replacement Temperature
001	001	0000-0	0000	0000
002	002	0000-0	0000	0000

Date Page: 05/13/01 Page 1 of 1

3MRCEE01B	71	74	0307-1601	40013374-15	NX3171HK	733382
3MRCEE01B	71	102	0307-1601	40013374-45	NX3171HK	733382
3MRCEE01B	71	104	0307-1601	40013374-44	NX3171HK	733382
3MRCEE01B	75	30	0307-1601	40013374-123	NX3171HK	733382
3MRCEE01B	75	36	0307-1601	40013374-2	NX3171HK	733382
3MRCEE01B	76	21	0307-1601	40011047-148	NX2227HK	691280
3MRCEE01B	76	103	0307-1601	40011047-151	NX2227HK	691280
3MRCEE01B	77	136	0307-1601	40013374-64	NX3171HK	733382
3MRCEE01B	77	150	0307-1601	40013374-71	NX3171HK	733382
3MRCEE01B	78	75	0307-1601	40013374-19	NX3171HK	733382
3MRCEE01B	78	87	0307-1601	40013374-37	NX3171HK	733382
3MRCEE01B	80	143	0307-1601	40013374-72	NX3171HK	733382
3MRCEE01B	81	22	0307-1601	40011047-155	NX2227HK	691280
3MRCEE01B	81	68	0307-1601	40013374-9	NX3171HK	733382
3MRCEE01B	83	26	0307-1601	40011047-194	NX2227HK	691280
3MRCEE01B	83	30	0307-1601	40011047-189	NX2227HK	691280
3MRCEE01B	83	90	0307-1601	40013374-25	NX3171HK	733382
3MRCEE01B	83	96	0307-1601	40013374-35	NX3171HK	733382
3MRCEE01B	85	154	0307-1601	40013374-58	NX3171HK	733382
3MRCEE01B	89	58	0307-1601	40013374-6	NX3171HK	733382
3MRCEE01B	92	33	0307-1601	40013374-4	NX3171HK	733382
3MRCEE01B	92	111	0307-1601	40011047-149	NX2227HK	691280
3MRCEE01B	92	151	0307-1601	40013374-50	NX3171HK	733382
3MRCEE01B	93	46	0307-1601	40013374-7	NX3171HK	733382
3MRCEE01B	95	82	0307-1601	40013374-42	NX3171HK	733382
3MRCEE01B	95	94	0307-1601	40013374-27	NX3171HK	733382
3MRCEE01B	95	96	0307-1601	40013374-47	NX3171HK	733382
3MRCEE01B	96	137	0307-1601	40013374-66	NX3171HK	733382
3MRCEE01B	99	98	0307-1601	40013374-33	NX3171HK	733382
3MRCEE01B	100	31	0307-1601	40013374-1	NX3171HK	733382
3MRCEE01B	100	87	0307-1601	40013374-29	NX3171HK	733382
3MRCEE01B	100	115	0307-1601	40013374-51	NX3171HK	733382
3MRCEE01B	100	117	0307-1601	40013374-59	NX3171HK	733382
3MRCEE01B	102	65	0307-1601	40013374-20	NX3171HK	733382
3MRCEE01B	102	73	0307-1601	40013374-18	NX3171HK	733382
3MRCEE01B	102	83	0307-1601	40011047-154	NX2227HK	691280
3MRCEE01B	102	143	0307-1601	40013374-65	NX3171HK	733382
3MRCEE01B	103	98	0307-1601	40013374-38	NX3171HK	733382
3MRCEE01B	103	124	0307-1601	40013374-60	NX3171HK	733382
3MRCEE01B	104	33	0307-1601	40013374-5	NX3171HK	733382
3MRCEE01B	104	87	0307-1601	40011047-153	NX2227HK	691280

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DFWO 2486865

3MRCEE01B	106	79	0307-1601	40013374-24	NX3171HK	733382
3MRCEE01B	108	63	0307-1601	40013374-8	NX3171HK	733382
3MRCEE01B	108	91	0307-1601	40011047-169	NX2227HK	691280
3MRCEE01B	108	123	0307-1601	40013374-63	NX3171HK	733382
3MRCEE01B	109	38	0307-1601	40013374-3	NX3171HK	733382
3MRCEE01B	109	80	0307-1601	40011047-167	NX2227HK	691280
3MRCEE01B	109	122	0307-1601	40013374-57	NX3171HK	733382
3MRCEE01B	109	124	0307-1601	40013374-55	NX3171HK	733382
3MRCEE01B	111	154	0307-1601	40013374-68	NX3171HK	733382
3MRCEE01B	113	120	0307-1601	40013374-61	NX3171HK	733382
3MRCEE01B	114	67	0307-1601	40013374-21	NX3171HK	733382
3MRCEE01B	117	130	0307-1601	40013374-54	NX3171HK	733382
3MRCEE01B	120	59	0307-1601	40013374-13	NX3171HK	733382
3MRCEE01B	120	89	0307-1601	40013374-36	NX3171HK	733382
3MRCEE01B	121	86	0307-1601	40013374-26	NX3171HK	733382
3MRCEE01B	130	101	0307-1601	40013374-41	NX3171HK	733382
3MRCEE01B	150	63	0307-1601	40013374-125	NX3171HK	733382
3MRCEE01B	151	88	0307-1601	40013374-28	NX3171HK	733382

ASME SECTION XI - REPAIR / REPLACEMENT

Page of

1. Component ID 3MDGAE05 2. Code Class ASME Section III Class 3
3. Item Description: Diesel Jacket Water Cooler
4. N-5 Data Package Number: 3DG01-11 5. W.O. Number: 2511167
6. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Weld repair of corroded areas on the Jacket Water Cooler return cover inside at the Monel to Carbon Steel interface.

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 the corroded areas between the Monel and Carbon Steel interface to original condition. Condition caused by Holiday in coatings, repair areas to be coated with Belzona material which has proven to protect the surfaces of the coolers.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 3, 1974 Edition 1976 Summer Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 3, 1974 Edition 1975 Winter Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda *1992/03 4-11-03*
15. Preservice Inspection Required: ☐ YES ☒ NO

Initial ME Date 04/14/2003

If required, include a step in the W.O. to perform Preservice Inspection

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

Initial ME Date 04/14/2003

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

Initial ME Date 04/14/2003

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

Initial ME Date 04/14/2003

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.
Jacket Water Heat Exchanger	4-500-19-515-001	0H0601		

19. Planner Glenn E Moore 04/14/2003 Printed Name: Glenn E Moore
Signature Date

20. ISI Fred Poteet 04/14/2003 Printed Name: FRED POTEET
Signature Date

21. ANII R.G. Hogstrom 04/14/2003 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: 04/14/20031

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2511167

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Diesel Generator "A"

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Jacket Water Heat Exchanger	American Standard	0H0601	35334	3MDGAE05	1980	Repaired	YES

7. Description of Work: Weld repair Jacket Water Cooler Monel to Carbon interface weld

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 1/2 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 eroded area between Monel and Carbon Steel interface area on the Diesel Generator "A" Jacket Water Cooler Channel Cover

W.O. 2511167

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: 4/19/03
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 4-14-03 to 4-19-03, 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: 4-19-03

ASME SECTION XI - REPAIR/REPLACEMENT

Page ____ of ____

1. Component ID 3MDGBE05 2. Code Class ASME SECTION III, CLASS 3
3. Item Description DIESEL JACKET WATER COOLER
4. N-5 Package Number 3DG02-10 5. W.O. Number 2511168
6. Original Construction Code Edition ASME SECTION III, CLASS 3, 1974, SUMMER 1976 ADD.
7. Original Installation Code Edition ASME III, CLASS 3, 1974 WINTER, 1975 ADD
8. Work Description Weld build up of corroded areas on the Jacket Water cooler return cover and the Baffle-plate on the inlet/outlet end. ^{4/4/03} Per Telecom w/ ALAN MORROW

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 build up required due to exceeding minimum wall thickness of cover due to corrosion caused by holiday in coatings, repair areas to be coated with Belzona which has been proven to protect the surfaces of the coolers.

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition 1974 EDITION, SUMMER 1976 ADDENDA
13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION WINTER 1975 ADDENDA
14. ASME Section XI Code/Edition 1992 EDITION, 1992 ADDENDA

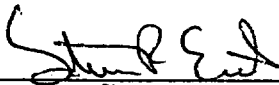
15. Preservice Inspection Required. ☐ YES ☒ NO
S.E. 04/03/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

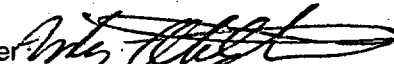
16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
S.E. 04/03/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date

- S.E. 04/03/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date

- S.E. 04/03/03 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
Heat Exchanger	4-500-19-515-001	0H0602		

19. Planner  4-4-03 Print Name Steven Eich
Signature Date

20. ISI Engineer  4-4-03 Print Name WILEY AHLSTROM
Signature Date

21. ANII ^{Per Telecom with 4-4-03} ROBERT HOGSTROM 4-4-03 Print 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 04/03/03
Name

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

2. Plant Palo Verde Nuclear Generating Station Unit 3
Name

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2511168
Address Work Order Number

3. Work Performed by APS Type Code Symbol Stamp None
Name

Authorization No. N/A

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

4. Identification of System DG

5. (a) Applicable Construction Code ASME Sect. 3, CL 3 19 74 Edition, S'76 Addenda, N-242 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)
Heat Exchanger	American Standard	0H0602	35335	3MDGNE05	1980	Repaired	Yes

7. Description of Work Weld repair of jacket water cooler channel cover.

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 Rework of eroded areas of DG "B" Jacket water cooler Channel Cover and BAFFLE PLATE
12th
4/8/03

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp _____ N/A

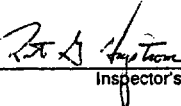
Certificate of Authorization No. _____ N/A Expiration Date _____ N/A

Signed Alan Monow ISI Engineer Date 4/9/03
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 4-4-03 to 4-9-03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

 Commissions NB 9685 "AWK" AZ 264
Inspector's Signature National Board, State, Province, and Endorsements

Date 4-9-03

Page of

Initial AD Date 4/22/03 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

[illegible]

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: 04/12/2003

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2511172

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 3MDGAE04

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
DG "A" lube oil cooler	American Standard	5-046-19-108-003	35423	3MDGAE04	1980	Repaired	YES

7. Description of Work:

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

Other ☐ Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

9. Remarks: WELD REPAIR OF BASE METAL W.O. # 2511172

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 PSI Engineer Date: 4/19/03
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 4-12-03 to 4-19-03, 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.

Alan Monow

Inspector's Signature

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

Date: 4-19-03

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3MDGBE04 2. Code Class ASME Section III Class 3
3. Item Description: DG LUBE OIL COOLER
4. N-5 Data Package Number: 3DG02-10 5. W.O. Number: 2511173
6. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
7. Original Installation Code Edition: 1974 Edition, Summer 1976 Addenda
WINTER 1975
8. Work Description: WELD BUILD UP OF CORRODED AREAS
ENT 4/4/03
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:
RETURN BASE MATERIAL TO ORIGINAL CONFIGURATION.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 3, 1974 Edition 1976 Summer Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III-NE Cl 3, 1974 Edition Winter 1975 Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
19963

15. Preservice Inspection Required: ☐ YES ☒ NO

Initial MSH Date 4/4/03 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MSH Date 4/4/03 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MSH Date 4/4/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial MSH Date 4/4/03 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.
CHANNEL ASSEMBLY	4-321-19-815-008	N/A	N/A	N/A

19. Planner Glenn Moore 4/4/03 Printed Name: Glenn Moore
Signature Date
20. ISI Alan Morrow 4/4/03 Printed Name: Alan Morrow
Signature Date
21. ANII Robert G. Lastron 4-4-03 Printed Name: ROBERT G. LASTRON
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: 04/04/03

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2511173

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Diesel Generator (DG)

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

4/9/03 to 4-4-03
(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)
Reversing spool lube oil cooler	American Standard	9-02216-02-6	35424	3MDGBE04	1980	Repaired	YES

7. Description of Work: Weld build up of corroded areas

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 1/2 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 number 2511173

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: 4/9/03
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 4-4-03 to 4-9-03, 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. S. Foster

Inspectors Signature

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

Date: 4-9-03

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 3JSGEPSV0578
2. Code Class ASME Section III Class 2
3. Item Description: Main Steam Safety Valve; Dresser 3707RA-RT25; 1290 psig
4. N-5 Data Package Number: 3SG01-2
5. W.O. Number: 2511189
6. Original Construction Code Edition: ASME III Class 2, 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: ASME III Class 2, 1974 Edition, Winter 1975 Addenda
8. Work Description: Replacement of main steam safety valve, with reconditioned and tested spare, per Engineering direction following on-line pressure testing.

9. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

Not failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon pressure testing.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME III Cl 2, 1974 Edition 1975 Summer Addenda
13. Repair/Replacement Activity Construction Code/Edition: ASME 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 Perly Date 3-3-03

If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required:

☒ YES

☐ NO

Initial Perly Date 3-3-03

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

Initial Perly Date 3-3-03

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

Initial Perly Date 3-3-03

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.
3JSGEPSV0578	Apn# 45003639	BS08600	N/A	MR# 00736415

19. Planner David Goodlet 3-3-03
Signature Date

Printed Name: David Goodlet

20. ISI Alan Morrow 4/3/03
Signature Date

Printed Name: Alan Morrow

21. ANII R.G. Hogstrom 4-4-03
Signature Date

Printed Name: R.G. Hogstrom

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 3JSGEPSV0577
2. Code Class ASME Section III Class 2
3. Item Description: Main Steam Safety Valve; Dresser 3707RA-RT25; 1315 psig
4. N-5 Data Package Number: 3SG01-2
5. W.O. Number: 2511189
6. Original Construction Code Edition: ASME III Class 2, 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: ASME III Class 2, 1974 Edition, Winter 1975 Addenda
8. Work Description: Replacement of main steam safety valve, with reconditioned and tested spare, per Engineering direction following on-line pressure testing.

9. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

Not failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon pressure testing.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME III CI 2, 1974 Edition 1975 Summer Addenda
13. Repair/Replacement Activity Construction Code/Edition: ASME Sec. III CI 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 3-3-03

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 3-3-03

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

Initial DMG Date 3-3-03

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

Initial DMG Date 3-3-03

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.
3JSGEPSV0577	Apn# 45003638	BS08606	N/A	MR# 00736407

19. Planner David Goodlet 3-3-03
Signature Date

Printed Name: David Goodlet

20. ISI Alan Morrow 4/13/03
Signature Date

Printed Name: Alan Morrow

21. ANII R.G. Hogstrom 4-4-03
Signature Date

Printed Name: R.G. Hogstrom

Page of

- ## 9. ☐ ISI Flaw

Report Number:

- Not failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon pressure testing.

- 15. Preservice Inspection Required:**

☐ YES☒ NO

Initial DWG Date 3-3-03

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 3-3-03

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

Initial PMG Date 3-3-03

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

Initial Peyh Date 3-3-03

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

19. Planner Robert J. Smith 3-3-03
Signature Date

Printed Name: David Goodlet

20. ISI Alan Monow 4/3/03
Signature Date

Printed Name: Alan Morrow

21. ANII AK Hyton 4-4-03
Signature Date

Printed Name: R. G. HOGSTROM

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 3JSGEPSV0694
2. Code Class ASME Section III Class 2
3. Item Description: Main Steam Safety Valve; Dresser 3707RA-RT25; 1315 psig
4. N-5 Data Package Number: 3SG02-2
5. W.O. Number: 2511189
6. Original Construction Code Edition: ASME III Class 2, 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: ASME III Class 2, 1974 Edition, Winter 1975 Addenda
8. Work Description: Replacement of main steam safety valve, with reconditioned and tested spare, per Engineering direction following on-line pressure testing.

9. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number: _____

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

Not failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon pressure testing.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME III CI 2, 1974 Edition 1975 Summer Addenda
13. Repair/Replacement Activity Construction Code/Edition: ASME Sec. III CI 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 3-3-03

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 3-3-03

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

Initial Dmg Date 3-3-03

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

Initial Dmg Date 3-3-03

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.
3JSGEPSV0694	Apn# 45003638	BS08585	N/A	MR# 00736409

19. Planner David Goodlet 3-3-03
Signature Date

Printed Name: David Goodlet

20. ISI Alan Morrow 4/3/03
Signature Date

Printed Name: Alan Morrow

21. ANII R.G. Hogstrom 4-4-03
Signature Date

Printed Name: R.G. Hogstrom

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 03/03/2003

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2511189

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 System

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Safety Valve	Dresser	BS08585	n/a	3JSGEPSV694	1978	Replacement	YES
Safety Valve	Dresser	BT01667	n/a	3JSGEPSV559	1979	Replacement	YES
Safety Valve	Dresser	BS08606	n/a	3JSGEPSV577	1980	Replacement	YES
Safety Valve	Dresser	BS08600	n/a	3JSGEPSV578	1980	Replacement	YES

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

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

Other ☐

Pressure _____ psi

Test 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# 2511189 for the replacement of main steam safety valves 3JSGEPSV0694, 559, 577 and 578. These four valves were selected by maintenance engineering following on-line set pressure testing.

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A

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

Signed: FRED POTEET JR SR. ISI ENGINEER Date: 4/28/03
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 4-4-03 to 4-28-03, 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: 4-28-03

ASME SECTION XI - REPAIR/REPLACEMENT

Page ____ of ____

1. Component ID 3JRCEPSV0200
2. Code Class ASME Section III Class 1
3. Item Description Pressurizer Safety Relief Valve
4. N-5 Package Number 3RC03-3
5. W.O. Number 2511513
6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda
8. Work Description Replace the Pressurizer safety valve with a reconditioned spare.
9. ☐ ISI Flaw NDE Method of Flaw Detection _____
Report Number _____
10. Evaluation of the suitability of this work as per the requirements of 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.
11. Repair/Replacement Work Organization Arizona Public Service
12. Replacement Item Construction or reconciled Code/Edition ASME III, Class 1, 1974 Edition, S 1975 Addenda
13. Repair/Replacement Activity Construction Code/Edition ASME III, Class 1, 1974 Edition, W 1975 Addenda
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
 BV 09/16/02 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
 BV 09/16/02 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date

BV 09/16/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date

BV 09/16/02 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MB/PO/WO NO.
3JRCEPSV0200	N/A	BS-08590	N/A	739351

19. Planner Barbara Vidal 9/16/02 Print Name Barbara Vidal
Signature Date

20. ISI Engineer Alan Morrow 9/26/02 Print Name Alan Morrow
Signature Date

21. ANII Robert Hogstrom 02-02 Print 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 09/16/02
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address

2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2511513
Address Work Order Number

3. Work Performed by Arizona Public Service Type Code Symbol Stamp None
Name
Authorization No. N/A
5801 S. Wintersburg Rd Tonopah AZ 85354 Expiration Date N/A
Address

4. Identification of System RC - Reactor Coolant System

5. (a) Applicable Construction Code ASME Sec III Class 1 19 74 Edition, '75 S Addenda, 1711 Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
PSV	Dresser	BS-08590	N/A	3JRCEPSV200	1979	Replacement	Yes

7. Description of Work _____

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

Other ☐ Pressure 2460 psi Test Temp. 653 °F
9/26/02 9/26/02
7 10-2-02

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

FORM NIS-2 (Back)

9. Remarks WO # 2511513, PSV being replaced as part of routine maintenance. (SN BS-08590)

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. repair or replacement

Type Code Symbol Stamp N/A

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

Signed R-L Brown RLB 151 ENG Date 4-28-03
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 10-2-02 to 4-28-03, 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-L Brown Commissions NS 9685 "ANIC" Az 264
Inspector's Signature National Board, State, Province, and Endorsements

Date 4-28-03

ASME SECTION XI - REPAIR/REPLACEMENT

Page ____ of ____

1. Component ID 3JRCEPSV0201 2. Code Class ASME Section III, Class 1
 3. Item Description Pressurizer Safety Relief Valve
 4. N-5 Package Number 3RC03-3 5. W.O. Number 2511514
 6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition, Summer 1975 Addenda
 7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda
 8. Work Description Replace the Pressurizer safety valve with a reconditioned spare.

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

10. Evaluation of the suitability of this work as per the requirements of 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.

11. Repair/Replacement Work Organization Arizona Public Service
 12. Replacement Item Construction or reconciled Code/Edition ASME III, Class 1, 1974 Edition, S 1975 Addenda
 13. Repair/Replacement Activity Construction Code/Edition ASME III, Class 1, 1974 Edition, W 1975 Addenda
 14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
BV 09/16/02 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
BV 09/16/02 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date

- BV 09/16/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date

- BV 09/16/02 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	(MR/PO/WO NO.)
3JRCEPSV0201	N/A	BS-08566	N/A	739353

19. Planner Barbara Vidal 9/16/02 Print Name Barbara Vidal
Signature Date

20. ISI Engineer Alan Morrow 9/24/02 Print Name Alan Morrow
Signature Date

21. ANII Robert Hogstrom 10-20-02 Print 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 09/16/02
Name

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

2. Plant Palo Verde Nuclear Generating Station Unit 3
Name

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2511514
Address Work Order Number

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

Authorization No. N/A

5801 S. Wintersburg Rd Tonopah AZ 85354 Expiration Date N/A
Address

4. Identification of System RC - Reactor Coolant System

5. (a) Applicable Construction Code ASME Sec III Class 1 19 74 Edition, '75 S Addenda, 1711 Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
PSV	Dresser	BS-08566	N/A	3JRCEPSV201	1979	Replacement	Yes

7. Description of Work _____

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

Other ☐ Pressure 2460 psi Test Temp. 653 °F
avg 9/26/02
by 10-2-02

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

FORM NIS-2 (Back)

9. Remarks WO # 2511514, PSV being replaced as part of routine maintenance. (SN BS-08566)

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. repair or replacement

Type Code Symbol Stamp N/A

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

Signed R.L. Brown RLB 4-28-03 Date 4-28-03
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 10-2-02 to 4-28-03, 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.L. Brown
Inspector's Signature

Commissions NS 9685 "AWIC" AZ 264
National Board, State, Province, and Endorsements

Date 4-28-03

ASME SECTION XI - REPAIR/REPLACEMENT

Page ____ of ____

1. Component ID 3JRCEPSV0202 2. Code Class ASME Section III, Class 1
3. Item Description Pressurizer Safety Relief Valve
4. N-5 Package Number 3RC03-3 5. W.O. Number 2511515
6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda
8. Work Description Replace the Pressurizer safety valve with a reconditioned spare.

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

10. Evaluation of the suitability of this work as per the requirements of 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.

11. Repair/Replacement Work Organization Arizona Public Service
12. Replacement Item Construction or reconciled Code/Edition ASME III, Class 1, 1974 Edition, S 1975 Addenda
13. Repair/Replacement Activity Construction Code/Edition ASME III, Class 1, 1974 Edition, W 1975 Addenda
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
BV 09/16/02 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
BV 09/16/02 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date

- BV 09/16/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
- BV 09/16/02 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MB/POWO NO.
3JRCEPSV0202	N/A	BS-08592	N/A	739364

19. Planner Barbara Vidal 9/16/02 Print Name Barbara Vidal
Signature Date

20. ISI Engineer Alan Morrow 9/26/02 Print Name Alan Morrow
Signature Date

21. ANII Robert Hogstrom 10-20-02 Print 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 09/16/02
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address
2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2511515
Address Work Order Number
3. Work Performed by Arizona Public Service Type Code Symbol Stamp None
Name
5801 S. Wintersburg Rd Tonopah AZ 85354 Authorization No. N/A
Address Expiration Date N/A
4. Identification of System RC - Reactor Coolant System
5. (a) Applicable Construction Code ASME Sec III Class 1 19 74 Edition, '75 S Addenda, 1711 Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
PSV	Dresser	BS-08592	N/A	3JRCEPSV202	1979	Replacement	Yes

7. Description of Work _____

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

Other ☐ Pressure 2460 psi Test Temp. 653 °F
9/29/02
10-2-02

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

FORM NIS-2 (Back)

9. Remarks WO # 2511515, PSV being replaced as part of routine maintenance. (SN BS-08592)

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. repair or replacement

Type Code Symbol Stamp N/A

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

Signed R-L. Browning RLB SI ENL Date 4-28-03
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 10-2-02 to 4-28-03, 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-L. Browning
Inspector's Signature

Commissions NB 7685 "ASIC" Az 264
National Board, State, Province, and Endorsements

Date 4-28-03

ASME SECTION XI - REPAIR/REPLACEMENT

Page ____ of ____

1. Component ID 3JRCEPSV0203 2. Code Class ASME Section III, Class 1
3. Item Description Pressurizer Safety Relief Valve
4. N-5 Package Number 3RC03-3 5. W.O. Number 2511516
6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda
8. Work Description Replace the Pressurizer safety valve with a reconditioned spare.

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

10. Evaluation of the suitability of this work as per the requirements of 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.

11. Repair/Replacement Work Organization Arizona Public Service
12. Replacement Item Construction or reconciled Code/Edition ASME III, Class 1, 1974 Edition, S 1975 Addenda
13. Repair/Replacement Activity Construction Code/Edition ASME III, Class 1, 1974 Edition, W 1975 Addenda
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
BV 09/16/02 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
BV 09/16/02 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
- BV 09/16/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
- BV 09/16/02 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MB/POW/NO.
3JRCEPSV0203	N/A	BS-08568	N/A	739369

19. Planner Barbara Vidal 9/14/02 Print Name Barbara Vidal
Signature Date

20. ISI Engineer Alan Morrow 9/26/02 Print Name Alan Morrow
Signature Date

21. ANII Robert Hogstrom 10-2-02 Print 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 09/16/02
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address
2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2511516
Address Work Order Number
3. Work Performed by Arizona Public Service Type Code Symbol Stamp None
Name
5801 S. Wintersburg Rd Tonopah AZ 85354 Authorization No. N/A
Address Expiration Date N/A
4. Identification of System RC - Reactor Coolant System
5. (a) Applicable Construction Code ASME Sec III Class 1 19 74 Edition, '75 S Addenda, 1711 Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
PSV	Dresser	BS-08568	N/A	3JRCEPSV203	1979	Replacement	Yes

7. Description of Work _____

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-1 ☐
 Other ☐ Pressure am 9/26/02 2460 psi Test Temp. am 9/26/02 653 °F

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

FORM NIS-2 (Back)

9. Remarks WO # 2511516, PSV being replaced as part of routine maintenance. (SN BS-08568)

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. repair or replacement

Type Code Symbol Stamp N/A

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

Signed R-L. Browning ALB ISI ENL Date 4-28-03
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 10-2-02 to 4-28-03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

B. L. Lytton
Inspector's Signature

Commissions NB 9685 "ASIC" Az 264
National Board, State, Province, and Endorsements

Date 4-28-03

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 3MRCEP01D 2. Code Class ASME Section III Class 1
 3. Item Description Reactor Coolant Pump
 4. N-5 Package Number 3RC02-6 5. W.O. Number 2511550
 6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition
 7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda
 8. Work Description Mechanical Seal Replacement as a part of normal maintenance.

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

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

11. Repair/Replacement Work Organization APS
 12. Replacement Item Construction or reconciled Code/Edition ASME Section III, Class 1, 1974 Ed
 13. Repair/Replacement Activity Construction Code/Edition ASME Section III, Class 1, 1974 Ed, Winter 1975 Add.
 14. ASME Section XI Code/Edition 1992 Edition, 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
BV 09/18/02 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
BV 09/18/02 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
BV 09/18/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
BV 09/18/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or
Initial Date replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
3rd Stage Seal Retainer	1663509	Q96-574 SN-9A		N/A

19. Planner Barbara Vidal 11/12/02 Print Name Barbara Vidal
Signature Date
 20. ISI Engineer Alan Morrow 11/13/02 Print Name Alan Morrow
Signature Date
 21. ANII R. G. Hogstrom 11-13-02 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 09/18/02
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address
2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2511550
Address Work Order Number
3. Work Performed by Arizona Public Service Type Code Symbol Stamp None
Name
Authorization No. N/A
5801 S Wintersburg Rd Tonopah, AZ 85354 Expiration Date N/A
Address

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

5. (a) Applicable Construction Code Section III Class 1 19 74 Edition, W75 Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
3rd Stage Retainer	Sulzer	9916574 SU-9A	N/A	3MRCEP01D	1985	Replacement	Yes

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

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-1 ☐
Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

9. Remarks WO# 2511550 to replace mechanical seals in RCP 3MRCEP01D as part of normal maintenance.

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. repair or replacement

Type Code Symbol Stamp N/A

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

Signed FRED POTEET SR. ISI ENGINEER Date 4/28/03
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 11-13-02 to 4-28-03, 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.

Rick D. Lygsten
Inspector's Signature

Commissions NS 9685 "ASIC" Az 264
National Board, State, Province, and Endorsements

Date 4-28-03

Page 1 of 1

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: 09/12/2002

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2533773

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: Volume 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)
Disc & Stud Ass'y	Borg-Warner	190697	N/A	3PCHNV471	2002	Replacement	NO

7. Description of Work: Rework 3" check valve to correct leakage past the seat.

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# 2533773 for the rework of 3" check valve, 3PCHNV471, to correct leakage past the seat.

INSTALLED IN EXISTING BORG WARNER VALVE 3" G1537 mfg. 1980.

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: *James P. [Signature]* SR. FSI ENGINEER Date: 9/16/02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 9-12-02 to 9-16-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspectors Signature

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

Date: 9-16-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 3MEWAE01 2. Code Class ASME Section III Class 3
3. Item Description ESSENTIAL COOLING WATER HEAT EXCHANGER "B"
4. N-5 Package Number 3EW01-1 5. W.O. Number 2537300
6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda.
7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda.
8. Work Description WELD BUILD-UP MATERIAL REPAIR OF DEFECTS IDENTIFIED IN THE TUBE (Spray Pond) SIDE OF THE HEAT EXCHANGER.
9. ☐ ISI Flaw NDE Method of Flaw Detection _____
Report Number _____
10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
WELD REPAIR REQUIRED AFTER INSPECTION OF THE METAL SURFACES PRIOR TO PERIODIC COATING, THERE WAS NO FAILURE OF THE CODE PRESSURE BOUNDARY.
11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition Sec. III Cl.3/'74 Edition '75 Winter Addenda
13. Repair/Replacement Activity Construction Code/Edition Sec. III Cl.3/'74 Edition '75 Winter Addenda
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
KOS 4/14/2003 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
KOS 4/14/2003 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
KOS 4/14/2003 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
KOS 4/14/2003 18. Include a step in the W.O. to record below all applicable numbers for repaired or
Initial Date replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
3MEWAE01	N/A	N/A	N/A	N/A

19. Planner Karl V. Savage 04/14/03 Print Name KARL V. SAVAGE
Signature Date
20. ISI Engineer Wiley Ahlstrom 4-14-03 Print Name WILEY AHLSTROM
Signature Date
21. ANII Robert G. Hogstrom 4-15-03 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 04/14/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address

2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2537300
Address Work Order Number

3. Work Performed by Arizona Public Service Company Type Code Symbol Stamp None
Name
5801 S. Wintersburg Rd., Tonopah Arizona, 85354-7529 Authorization No. N/A
Address Expiration Date N/A

4. Identification of System EW, ASME Section III, Class 3

5. (a) Applicable Construction Code Section III, Class 3 19 74 Edition, W/75 Addenda, Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
3A EW Ht. Exch.	Struther Wells Corp.	17606329151	14610	3MEWAE01	'80	Repaired	Yes

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

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-1 ☒
 Other ☐ Pressure psi Test Temp. °F

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

FORM NIS-2 (Back)

9. Remarks Pressure Test per N-416-1, Performed Weld Repair/Build-up of Eroded areas designated by
Engineering in the Tube (Spray Pond) Side of the Heat Exchanger.

W.O. 2537300

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. repair or replacement

Type Code Symbol Stamp _____


Certificate of Authorization No. _____ Expiration Date _____

Signed Alan Monow ISI Engineer Date 4/19/03
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel
Inspectors and the State or Province of Arizona and employed by HSBI & I CO.
of Hartford, Connecticut, have inspected the components described in this Owner's Report during
the period 4-15-03 to 4-19-03, and state that to the best of my knowledge and
belief, the Owner has performed examinations and taken corrective measures described in this Owner's
Report in accordance with the requirements of the ASME Code, Section XI.

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

 Commissions NB 9685 "N" "I" AZ264
Inspector's Signature National Board, State, Province, and Endorsements

Date 4-19-03

ASME SECTION XI - REPAIR / REPLACEMENT

1. Component ID 3PSGEL005
2. Code Class ASME Section III Class 2
3. Item Description: Main Steam Feedwater SG# 2
4. N-5 Data Package Number: 3SG02-1
5. W.O. Number: 2541395
6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Replace the 45° Elbows and associated piping on line 03PSGEL005, Spool S012, with > 0.1% Chrome content materials. Ref. 03-P-SGF-119.

9. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

Replacement of piping sections with higher chromium (min. 0.1%) material to prevent wall thinning due to FAC.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 2, 1974 w/ Summer 1975
13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 2, 1974 w/Winter 1975
14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda

15. Preservice Inspection Required:

☒ YES

☐ NO

Initial HL

Date 10/25/02

If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required:

☒ YES

☐ NO

Initial HL

Date 10/25/02

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

Initial HL

Date 10/25/02

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

Initial HL

Date 10/25/02

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

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
14" Pipe SA 106 Gr. B	APN 00070175	N/A	74933	706954
14", 45° Elbow SA 420 Gr. WPL6	APN 00070174	N/A	2431B	694992

19. Planner

Harbort L. Green
Signature

10/25/02
Date

Printed Name:

Harbort L. Green

20. ISI

R.P. Indap
Signature

1/15/03
Date

Printed Name:

R.P. Indap

21. ANII

R.G. Hogstrom
Signature

1-16-03
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: 10/21/2002

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2541395

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Main Steam Feedwater

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
SG Feedwater Pipe Spool S012	N/A	N/A	N/A	3PSGEL005	2003	Replacement	NO

7. Description of Work: Replace replace Spool S012 and associated piping on line 03PSGEL005 with > 0.1% Chrome content materials. Ref. 03-P-SGF-119.

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

Other ☐ Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

9. Remarks: Replace the 45° Elbows and associated piping on line 03PSGEL005, Spool S012, with > 0.1% Chrome content materials IAW work order 2541695. Ref. 03-P-SGF-119.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. L. Browning R. L. Browning Date: 4-28-03
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 1-16-03 to 4-28-03, 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. L. Browning

Inspectors Signature

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

Date: 4-28-03

ASME SECTION XI - REPAIR / REPLACEMENT

1. Component ID 3PSGEL013 2. Code Class ASME Section III Class 2
 3. Item Description: Main Steam Feedwater SG# 1
 4. N-5 Data Package Number: 3SG01-1 5. W.O. Number: 2541396
 6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
 7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
 8. Work Description: Replace a section of 14" pipe and fittings on line 3PSGEL013 with > 0.1% Chrome content materials. Ref. 03-P-SGF-119.

9. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

Replacement of piping sections with higher chromium (0.1% min.) material to prevent wall thinning due to FAC.

*Rphndap
1/15/03*

11. Repair/Replacement Work Organization: Arizona Public Service
 12. Replacement Items Construction or reconciled Code/Edition: ASME Section III Class 2, 1974 w/ Summer 1975
 13. Repair/Replacement Activity Construction Code/Edition: ASME Section III Class 2, 1974 w/Winter 1975
 14. ASME Section XI Code/Edition: 1992 Edition, 1992 Addenda

15. Preservice Inspection Required: ☒ YES ☐ NO

Initial HL Date 10/21/02 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial HL Date 10/21/02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial HL Date 10/21/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial HL Date 10/21/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/ROS No.
14" Pipe SA 106 Gr. B	APN 00070175	N/A	74933	693303
14", 45° Elbow SA 420 Gr. WPL6	APN 00070174	N/A	2431B	693229

19. Planner Herbert L. Green 10/21/02
 Signature Date

Printed Name: HERBERT L. GREEN

20. ISI R.P. Indap 1/15/03
 Signature Date

Printed Name: R. P. INDAP

21. ANII R.G. Hogstrom 1-16-03
 Signature Date

Printed Name: R.G. HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 10/21/2002

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2541396

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Main Steam Feedwater

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
SG Feedwater Pipe Spool S002	N/A	N/A	N/A	3PSGEL013	2003	Replacement	NO

7. Description of Work: Replace a section of 14" pipe and fittings on line 3PSGEL013 with > 0.1% Chrome content materials. Ref. 03-P-SGF-119.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ N-416-1 ☒
Other ☐ Pressure psi Test Temperature °F

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

FORM NIS-2 (Back)

9. Remarks: Replace a section of 14" pipe and fittings on line 3PSGEL013 with > 0.1% Chrome content materials. Ref. 03-P-SGF-T19.

W.O. 2541396

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. Brooking RLB ISLNC Date: 4-28-03
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 4-16-03 to 4-28-03, 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. L. Brooking

Inspector's Signature

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

Date: 4-28-03

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 10/21/2002

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2541397

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Main Steam Feedwater

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
SG Feedwater Pipe Spool S002	N/A	N/A	N/A	3PSGEL014	2003	Replacement	NO

7. Description of Work: Replace replace Spool S002 and associated piping on line 03PSGEL014 with > 0.1% Chrome content materials. Ref. 03-P-SGF-119.

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

Other ☐ Pressure _____ psi

Test Temperature _____ °F

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

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 10/21/2002

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2541397

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Main Steam Feedwater

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
SG Feedwater Pipe Spool S002	N/A	N/A	N/A	3PSGEL014	2003	Replacement	NO

7. Description of Work: Replace replace Spool S002 and associated piping on line 03PSGEL014 with > 0.1% Chrome content materials. Ref. 03-P-SGF-119.

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

Other ☐

Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

9. Remarks: Replace the 45° Elbows and associated piping on line 03PSGEL014, Spool S002, with > 0.1% Chrome content materials IAW work order 2541697. Ref. 03-P-SGF-119.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. L. Browning RLB BISNG Date: 4-28-03
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 1-16-03 to 4-28-03, 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.

RLB

Inspectors Signature

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

Date: 4-28-03

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 3JEWALV0091 2. Code Class ASME Section III CL3, 74 ED, W75 ADD

3. Item Description ECWS Surge Tank A Level Makeup Valve

4. N-5 Package Number 3EW01-2

5. W.O. Number 2550099

6. Original Construction Code Edition ASME Sect III CL3, 74 ED, W75 ADD

7. Original Installation Code Edition ASME Sect III CL3, 74 ED, W75 ADD

8. Work Description Rework valve internals to correct the problem with the valve not opening. Make body to benner seal weld RPT 10/22/02
TRCK
10/22/02 GEN

9. ☐ ISI Flaw

NDE Method of Flaw Detection _____

Report Number _____

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

No failure of ASME boundry.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition ASME Sect III CL3, 74 ED, W75 ADD

13. Repair/Replacement Activity Construction Code/Edition ASME Sect III CL3, 74 ED, W75 ADD

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

15. Preservice Inspection Required.

☐ YES

☒ NO

hco 9/5/02 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required

☐ YES

☒ NO

hco 9-5-02 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date

hco 9-5-02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date

hco 9-5-02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.
Initial Date

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

19. Planner Gerald Osmundson 8/28/02 Print Name Gerald Osmundson
Signature Date

20. ISI Engineer R.P. Indap 9/5/02 Print Name R.P. INDAP
Signature Date

21. ANII R.G. Hugstrom 9-5-02 Print Name R.G. Hugstrom
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: 08/29/02

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2550099

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 3EW01-2

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	9	n/a	3jewalv-91	1978	Repaired	YES

7. Description of Work: remove bonnet tack, reworked internals, replaced bonnet tack

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 1/2 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: ref wo# 2550099 , removed the tack weld , reworked valve internals, sec xi internal parts were not replaced, just reworked, reinstalled the tack weld

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: RR Indap, Consulting Metallurgical Engineer Date: 10-22-2002
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 9-5-02 to 10-22-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RR Indap
Inspectors Signature

Commissions: NB 9685 'N' 'T' AZ264
National Board, State, Province, and Endorsements

Date: 10-22-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID S/N - BS 08585 2. Code Class ASME III, CLASS 2
 3. Item Description MAIN STEAM SAFETY VALVE; DRESSER - 3707RA-RT25 ; 1315 PSIG
 4. N-5 Package Number N/A 5. W.O. Number 2552261
 6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA
 7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA
 8. Work Description Maintenance overhaul of Main Steam safety valve. Code part replacement from spare valves or from approved purchased spare parts based upon inspection results.

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

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME Sec. III boundary. The Disc replacement is to enhance performance.

11. Repair/Replacement Work Organization NWS Technologies
 12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., S'75 ADD.
 13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.
 14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☒ NO
DMG 01/27/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date
 16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
DMG 01/27/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
DMG 01/27/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
DMG 01/27/03 18. Include a step in the W.O. to record below all applicable numbers for repaired or
Initial Date replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
DISC	APN# 64290	ADG06		PO# 500238999
SPRING ASSEMBLY	APN# 65849		8962195	PO# 500267841.01.001

19. Planner David M Goodlet 1-27-03 Print Name David Goodlet
Signature Date
 20. ISI Engineer Ramakant Indap 2/4/03 Print Name Ramakant Indap
Signature Date
 21. ANII Robert Hogstrom 2-4-03 Print 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 01/27/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address
2. Plant Palo Verde Nuclear Generating Station Unit N/A
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2552261
Address Work Order Number
3. Work Performed by NWS Technologies Type Code Symbol Stamp None
Name
131 Venture Blvd., Spartanburg, S.C., 29301 Authorization No. N/A
Address Expiration Date N/A

4. Identification of System SG - Main Steam

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
DISC	Dresser	ADG06	NA	NA	2003	Replacement	No
SPRING ASSEMBLY	DRESSER	NA	NA	HT# 8962195	2003	REPLACEMENT	NO

7. Description of Work Overhaul & testing of Main Steam safety valve S/N BS-08585

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐
Other ☐ Pressure psi Test Temp. °F

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

FORM NIS-2 (Back)

9. Remarks Work Order #2552261 for disassembly, inspection, reconditioning and testing of spare Main Steam safety valve. A new design Disc will be installed to enhance performance. Other parts will be replaced on an as-needed basis based upon the inspection. These parts will be obtained from other spare valves or from approved purchased spare parts.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp _____ N/A

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

Signed R. Priddy Consulting Metallurgical Engineer Date 4/1/03
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 2-4-03 to 4-1-03, 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. S. Priddy
Inspector's Signature

Commissions NB 9685 ASIC AZ 264
National Board, State, Province, and Endorsements

Date 4-1-03

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID S/N - BS 08600 2. Code Class ASME III, CLASS 2
 3. Item Description MAIN STEAM SAFETY VALVE; DRESSER - 3707RA-RT25 ; 1290 PSIG
 4. N-5 Package Number N/A 5. W.O. Number- 2552261
 6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA
 7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA
 8. Work Description Maintenance overhaul of Main Steam safety valve. Code part replacement from spare valves or from approved purchased spare parts based upon inspection results.

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

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME Sec. III boundary. The Disc replacement is to enhance performance.

11. Repair/Replacement Work Organization NWS Technologies
 12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., S'75 ADD.
 13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.
 14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☒ NO
DMG 01/27/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date
 16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
DMG 01/27/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
DMG 01/27/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
DMG 01/27/03 18. Include a step in the W.O. to record below all applicable numbers for repaired or
Initial Date replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
DISC	APN# 64290	ADG05		PD# 500238999

19. Planner David Goodlet 1-27-03 Print Name David Goodlet
Signature Date
 20. ISI Engineer Ramakant Indap 2/4/03 Print Name Ramakant Indap
Signature Date
 21. ANII Robert Hogstrom 2-4-03 Print 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 01/27/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address
2. Plant Palo Verde Nuclear Generating Station Unit N/A
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2552261
Address Work Order Number
3. Work Performed by NWS Technologies Type Code Symbol Stamp None
Name
131 Venture Blvd., Spartanburg, S.C., 29301 Authorization No. N/A
Address Expiration Date N/A
4. Identification of System SG - Main Steam
5. (a) Applicable Construction Code ASME III Class 2 19 74 Edition, S'75 Addenda, Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
DISC	Dresser	AD405	NA	NA	2003	Replacement	No

7. Description of Work Overhaul & testing of Main Steam safety valve S/N BS-08600

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐
- Other ☐ Pressure psi Test Temp. °F

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

FORM NIS-2 (Back)

9. Remarks Work Order #2552261 for disassembly, inspection, reconditioning and testing of spare Main Steam safety valve. A new design Disc will be installed to enhance performance. Other parts will be replaced on an as-needed basis based upon the inspection. These parts will be obtained from other spare valves or from approved purchased spare parts.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed R. J. Lupton, Consulting Metallurgical Engineer Date 4/1/03
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 2-4-03 to 4-1-03, 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. J. Lupton
Inspector's Signature

Commissions NB 9685 ASIC AZ 264
National Board, State, Province, and Endorsements

Date 4-1-03

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID S/N - BS 08606 2. Code Class ASME III, CLASS 2
 3. Item Description MAIN STEAM SAFETY VALVE; DRESSER - 3707RA-RT25 ; 1315 PSIG
 4. N-5 Package Number N/A 5. W.O. Number 2552261
 6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA
 7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA
 8. Work Description Maintenance overhaul of Main Steam safety valve. Code part replacement from spare valves or from approved purchased spare parts based upon inspection results.

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

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME Sec. III boundary. The Disc replacement is to enhance performance.

11. Repair/Replacement Work Organization NWS Technologies
 12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., S'75 ADD.
 13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.
 14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☒ NO
DMG 01/27/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date
 16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
DMG 01/27/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
DMG 01/27/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
DMG 01/27/03 18. Include a step in the W.O. to record below all applicable numbers for repaired or
Initial Date replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
DISC	APN # 64290	ADE38		FD 500238999

19. Planner David Goodlet 1-27-03 Print Name David Goodlet
Signature Date
 20. ISI Engineer Ramakant Indap 2/4/03 Print Name Ramakant Indap
Signature Date
 21. ANII Robert Hogstrom 2-1-03 Print 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 01/27/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address
2. Plant Palo Verde Nuclear Generating Station Unit N/A
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2552261
Address Work Order Number
3. Work Performed by NWS Technologies Type Code Symbol Stamp None
Name
131 Venture Blvd., Spartanburg, S.C., 29301 Authorization No. N/A
Address Expiration Date N/A
4. Identification of System SG - Main Steam
5. (a) Applicable Construction Code ASME III Class 2 19 74 Edition, S'75 Addenda, Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
DISC	Dresser	ADE38	NA	NA	2003	Replacement	No

7. Description of Work Overhaul & testing of Main Steam safety valve S/N BS-08606
8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐
 Other ☐ Pressure psi Test Temp. °F

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

FORM NIS-2 (Back)

9. Remarks Work Order #2552261 for disassembly, inspection, reconditioning and testing of spare Main Steam safety valve. A new design Disc will be installed to enhance performance. Other parts will be replaced on an as-needed basis based upon the inspection. These parts will be obtained from other spare valves or from approved purchased spare parts.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed R. P. H. D. G. Consulting Metallurgical Engineer Date 4/1/03
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 2-4-03 to 4-1-03, 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. P. H. D. G.
Inspector's Signature

Commissions NB 9685 N1C A2 264
National Board, State, Province, and Endorsements

Date 4-1-03

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID S/N - BT 01667 2. Code Class ASME III, CLASS 2
 3. Item Description MAIN STEAM SAFETY VALVE; DRESSER - 3707RA-RT25 ; 1315 PSIG
 4. N-5 Package Number N/A 5. W.O. Number 2552261
 6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA
 7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA
 8. Work Description Maintenance overhaul of Main Steam safety valve. Code part replacement from spare valves or from approved purchased spare parts based upon inspection results.

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

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
No failure in the ASME Sec. III boundary. The Disc replacement is to enhance performance.

11. Repair/Replacement Work Organization NWS Technologies
 12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., S'75 ADD.
 13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'75 ADD.
 14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required. ☐ YES ☒ NO
DMG 01/27/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date
 16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
DMG 01/27/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
DMG 01/27/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
DMG 01/27/03 18. Include a step in the W.O. to record below all applicable numbers for repaired or
Initial Date replacement items.

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
DISC	APN# 6A290	ADF99		FD 500238999

19. Planner David Goodlet 1-27-03 Print Name David Goodlet
Signature Date
 20. ISI Engineer Ramakant Indap 2/4/03 Print Name Ramakant Indap
Signature Date
 21. ANII Robert Hogstrom 2-4-03 Print 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 01/27/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address
2. Plant Palo Verde Nuclear Generating Station Unit N/A
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2552261
Address Work Order Number
3. Work Performed by NWS Technologies Type Code Symbol Stamp None
Name
131 Venture Blvd., Spartanburg, S.C., 29301 Authorization No. N/A
Address Expiration Date N/A
4. Identification of System SG - Main Steam
5. (a) Applicable Construction Code ASME III Class 2 19 74 Edition, S'75 Addenda, Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
DISC	Dresser	ADF99	NA	NA	2003	Replacement	No

7. Description of Work Overhaul & testing of Main Steam safety valve S/N BT-01667
8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐
 Other ☐ Pressure psi Test Temp. °F

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

FORM NIS-2 (Back)

9. Remarks Work Order #2552261 for disassembly, inspection, reconditioning and testing of spare Main Steam safety valve. A new design Disc will be installed to enhance performance. Other parts will be replaced on an as-needed basis based upon the inspection. These parts will be obtained from other spare valves or from approved purchased spare parts.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed R. P. Poretsky, Consulting Metallurgical Engineer Date 4-1-03
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 2-4-03 to 4-1-03, 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. S. Poretsky
Inspector's Signature

Commissions NB 9685 ASIC AZ 264
National Board, State, Province, and Endorsements

Date 4-1-03

ASME SECTION XI - REPAIR/REPLACEMENT

Page ____ of ____

1. Component ID 3JRCEPSV0202 2. Code Class ASME Section III, Class 1
3. Item Description Pressurizer Safety Relief Valve; Dresser 31790R
4. N-5 Package Number 3RC03-3 5. W.O. Number 2552272
6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda
8. Work Description Off-site reconditioning and testing of spare valve in preparation for replacement of existing installed valve. Parts to be replaced based on inspection.

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

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
No failure of ASME III pressure boundary.

11. Repair/Replacement Work Organization Arizona Public Service
12. Replacement Item Construction or reconciled Code/Edition ASME III, Class 1, 1974 Edition, S 1975 Addenda
13. Repair/Replacement Activity Construction Code/Edition ASME III, Class 1, 1974 Edition, W 1975 Addenda
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
BV 03/17/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

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

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
3JRCEPSV0202	N/A	BS-08592	N/A	N/A
Spring Assy	APN 00066798	SS0735EUN	96565-2	PO# 500249344.07.001

19. Planner Barbara Vidal 3/17/03 Print Name Barbara Vidal
Signature Date

20. ISI Engineer R. P. Indap 3/20/03 Print Name R. P. INDAP
Signature Date

21. ANII Robert Hogstrom 3-20-03 Print 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 03/17/03
Name

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

Address

Sheet 1 of 2

2. Plant Palo Verde Nuclear Generating Station

Name

Unit 3

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

Address

2552272

Work Order Number

3. Work Performed by Arizona Public Service

Name

Type Code Symbol Stamp None

Authorization No. N/A

5801 S. Wintersburg Rd Tonopah AZ 85354

Address

Expiration Date N/A

4. Identification of System RC - Reactor Coolant System

5. (a) Applicable Construction Code ASME Sec III Class 1 1974 Edition, '75 S Addenda, 1711 8/3/20/03 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)
Spring Assy	Dresser	SS0735EUN	N/A	BS-08592	2002	Replacement	Yes

7. Description of Work Off-site reconditioning and testing of spare Pressurizer Safety Valve.

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

Other ☐

Pressure _____ psi

Test Temp. _____ °F

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

FORM NIS-2 (Back)

9. Remarks WO # 2552272 for off-site reconditioning and testing of spare PSV. Replacement parts to be obtained from approved spares. (SN BS-08592)

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed

R. Pridap, ISI Engineer
Owner or Owner's Designee, Title

Date 4/1/03

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 3-20-03 to 4-1-03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. A. Lytton
Inspector's Signature

Commissions NB 9685 ASIC Az 264
National Board, State, Province, and Endorsements

Date 4-1-03

ASME SECTION XI - REPAIR/REPLACEMENT

Page ____ of ____

1. Component ID 3JRCEPV0100E 2. Code Class ASME Section III Class 1
3. Item Description Pressurizer Spray Control Valve
4. N-5 Package Number 3RC01-2 5. W.O. Number 2557057
6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda
8. Work Description Replace the plug/stem assembly during valve repack.

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

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
No failure of ASME III pressure boundary. The stem needs to be replaced. Replacing the plug/stem assembly is an ALARA effort.

11. Repair/Replacement Work Organization Arizona Public Service
12. Replacement Item Construction or reconciled Code/Edition ASME III, Class 1, 1974 Edition, W 1975 Addenda
13. Repair/Replacement Activity Construction Code/Edition ASME III, Class 1, 1974 Edition, W 1975 Addenda
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
BV 01/10/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
BV 01/10/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date

- BV 01/10/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date

- BV 01/10/03 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
100E Plug/Stem Assy	45160213	AC2452-3	721044	00712429-0004

19. Planner Barbara Vidal 01/10/03 Print Name Barbara Vidal
Signature Date

20. ISI Engineer Alan Morrow 1/17/03 Print Name Alan Morrow
Signature Date

21. ANII Robert G. Hagstrom 1-23-03 Print Name ROBERT G. HAGSTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 01/10/03

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2557057

3. Work Performed by: Arizona Public Service Company

Type of Code Stamp None

5801 S. Wintersburg Rd., Tonopah, Arizona 85454-7529

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, 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	Fisher	6558899	N/A	3JRCEPV100E	1979	Repair	Yes
Plug/Stem	Fisher	AC2452-3	N/A	3JRCEPV100E	2003	Replacement	Yes

7. Description of Work: Replaced plug/stem assembly

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. 2557057. No failure of ASME III pressure boundary. The stem needs to be replaced. Replacing the plug/stem assembly is an ALARA effort.

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: 4/26/03
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 1-28-03 to 4-26-03, 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: 4-26-03

ASME SECTION XI - REPAIR/REPLACEMENT

Page ____ of ____

1. Component ID 3JRCEPV0100F 2. Code Class ASME Section III Class 1
3. Item Description Pressurizer Spray Control Valve
4. N-5 Package Number 3RC01-2 5. W.O. Number 2557063
6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda
8. Work Description Replace the plug/stem assembly during valve repack.

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

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
No failure of ASME III pressure boundary. The stem needs to be replaced. Replacing the plug/stem assembly is an ALARA effort.

11. Repair/Replacement Work Organization Arizona Public Service
12. Replacement Item Construction or reconciled Code/Edition ASME III, Class 1, 1974 Edition, Summer 1975 Addenda
13. Repair/Replacement Activity Construction Code/Edition ASME III, Class 1, 1974 Edition, W 1975 Addenda
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
BV 01/10/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
BV 01/10/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date

- BV 01/10/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date

- BV 01/10/03 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
100F Plug/Stem Assy	45160213	AC2452-4	721044	00712453-0001

19. Planner Barbara Vidal 01/10/03 Print Name Barbara Vidal
Signature Date

20. ISI Engineer Alan Morrow 11/17/03 Print Name Alan Morrow
Signature Date

21. ANII Robert C. Holstrom 1-28-03 Print Name Robert C. 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: 01/10/03

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2557063

3. Work Performed by: Arizona Public Service Company

Type of Code Stamp None

5801 S. Wintersburg Rd., Tonopah, Arizona 85454-7529

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, 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	Fisher	6558900	N/A	3JRCEPV100F	1979	Repair	Yes
Plug/Stem	Fisher	AC2452-4	N/A	3JRCEPV100F	2003	Replacement	Yes

7. Description of Work: Replaced plug/stem assembly

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. 2557063. No failure of ASME III pressure boundary. The stem needs to be replaced. Replacing the plug/stem assembly is an ALARA effort.

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: 4/26/03
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 1-23-03 to 4-26-03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. A. Johnson

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264

National Board, State, Province, and Endorsements

Date: 4-26-03

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 3MRCEB05 2. Code Class ASME Section III, Class 1
3. Item Description REACTOR COOLANT SYSTEM PRESSURIZER HEATER
4. N-5 Package Number 3RC01-2 5. W.O. Number 2558065
6. Original Construction Code Edition ASME Section III, Class 1, 1971 Edition, Winter 1973 Addenda
7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda
8. Work Description Replace Defective Pressurizer Heater, Make Fillet Weld between Pressurizer Nozzle and new Heater Sleeve.
9. ☐ ISI Flaw NDE Method of Flaw Detection N/A
Report Number N/A

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.
Electrical Portion of Heater Failed, No Failure on ASME Pressure Retaining Boundary.

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition ASME Sec.III Cl.1/'71 Edition '73 Winter Addenda
13. Repair/Replacement Activity Construction Code/Edition ASME Sec. III, Class 1/'74 Edition, '75 Winter Addenda
14. ASME Section XI Code/Edition ASME Section XI, 1992 Edition, 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
N/A N/A If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date
16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
N/A N/A If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
- KVS 1/8/2004 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
- KVS 1/8/2003 18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.
Initial Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
Heater	44450049	1	08055 sleeve A138P2 End cap	719989-07

19. Planner Karl V. Savage 1/8/2003 Print Name Karl V. Savage
Signature Date
20. ISI Engineer Ramakant P. Indap 1/15/03 Print Name Ramakant P. Indap
Signature Date
21. ANII Robert G. Hogstrom 1-15-03 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 01/08/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address

2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2558065
Address Work Order Number

3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None
Name
5801 S. Wintersburg Rd., Tonopah, AZ 85354-7529 Authorization No. N/A
Address Expiration Date N/A

4. Identification of System RC

5. (a) Applicable Construction Code ASME III Class 1 19 71 Edition, W '73 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Pzr. Heater	Combustion Eng.	1	N/A	3MRCEB05	1985	Replacement	Yes

7. Description of Work Replace defective Pzr. Htr, make fillet weld between Pzr. nozzle and htr.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

9. Remarks WO# 2558065 To Replace Pressurizer Proportional Heater 3MRCEB05.

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.
repair or replacement

Type Code Symbol Stamp NA

Certificate of Authorization No. NA Expiration Date n/a

Signed Alan Monow ISI Engineer Date 4/21/03
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 1-15-03 to 4-25-03, 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.

29 S. Light Commissions NB 9685 "N" "I" AZ 264
Inspector's Signature National Board, State, Province, and Endorsements

Date 4-25-03

ASME SECTION XI - REPAIR / REPLACEMENT

Page of

1. Component ID 3JCHELV0110P
2. Code Class ASME Section III Class 2
3. Item Description: Level Control Valve, Stem/Plug assembly
4. N-5 Data Package Number: 3CH15-1
5. W.O. Number: 2560407
6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Disassemble spare valve (APN 45003056) to use the Stem/Plug assembly in 3JCHELV0110P due to defects identified in the stem resulting in packing leakage.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No pressure boundary flaw identified. Stem/Plug assembly replaced to address defects in existing stem.

11. Repair/Replacement Work Organization: Arizona Public Service
12. Replacement Items Construction or reconciled Code/Edition: Sec. III C1.2, 1974 Edition Summer 1975 Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III C1.2, 1974 Edition 1975 Winter Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
15. Preservice Inspection Required: ☐ YES ☒ NO

Initial Dus Date 10/24/02 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Dus Date 10/24/02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Dus Date 10/24/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Dus Date 10/24/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Stem/Plug assembly	14A3722X122	N/A	N/A	WO 2560407
BONNET STUDS	N/A	N/A	QK 5	MR# 694900
BONNET NUTS	N/A	N/A	Y6B	WO 2560407

19. Planner DW Shaffer 10/24/02 Printed Name: David Shaffer
Signature Date

20. ISI Alan Morrow 10/24/02 Printed Name: Alan Morrow
Signature Date

21. ANII R.G. Hogstrom 10-24-02 Printed Name: R.G. Hogstrom
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 10-26-2002

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2560407

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)
Stem /Plug ass'y	Fisher	n/a	n/a	3JCHELV-0110P	1979	Replacement	NO
Bonnet Studs	n/a	n/a	n/a	3JCHELV-0110p	2002	Replacement	NO

7. Description of Work: Disassembled spare valve from stores to obtain stem/plug assembly. Replaced stem/plug assembly due to defects identified on the stem causing packing 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 1/2 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 # 2560407 for valve 3JCHELVO110P. Disassembled and replaced stem/plug assembly and bonnet studs. Stem was found with scratches and pitting and bonnet studs were damaged during maintenance.

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: 10/30/02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-24-02 to 10-30-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Pat A. Lyman

Inspectors Signature

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

Date: 10-30-02

Page 1 of 1

73DP-92ZA7

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 10-15-2002

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2560420

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	N61180-00-0002	n/a	3JCHNPSV-0345	1979	Replacement	YES

7. Description of Work: Installed spare valve. Existing valve was subjected to pressure transients.

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: Valve 3JCHNPSV0345 was replaced with spare under wo# 2560420 due to possible damage during pressure transient..

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 Sr ISI Eng Date: 10/17/02
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-15-02 to 10-17-02, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Inspectors Signature

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

Date: 10-17-02

ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 3MRCEP01B 2. Code Class ASME Section III Class 1
3. Item Description Reactor Coolant Pump
4. N-5 Package Number 3RC02-6 5. W.O. Number 2576892
6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition
7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda
8. Work Description Mechanical Seal Replacement as a part of normal maintenance.

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

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

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition ASME Section III, Class 1, 1974 Ed
13. Repair/Replacement Activity Construction Code/Edition ASME Section III, Class 1, 1974 Ed, Winter 1975 Add.
14. ASME Section XI Code/Edition 1992 Edition, 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
BV 02/07/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
BV 02/07/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
- BV 02/07/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
- BV 02/07/03 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.
Initial Date

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
3rd Stage Seal Retainer	1663509	Q95-1876 SN-10		N/A

19. Planner Barbara Vidal 2/7/03 Print Name Barbara Vidal
Signature Date
20. ISI Engineer R.P. Indap 2/12/03 Print Name R.P. INDAP
Signature Date
21. ANII R.G. Holstrom 2-14-03 Print 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 02/07/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address
2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2576892
Address Work Order Number
3. Work Performed by Arizona Public Service Type Code Symbol Stamp None
Name
5801 S Wintersburg Rd Tonopah, AZ 85354 Authorization No. N/A
Address Expiration Date N/A
4. Identification of System RC, ASME Section III Class 1
5. (a) Applicable Construction Code Section III Class 1 19 74 Edition, Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
3rd Stage Retainer	Sulzer	<u>Q45-1896</u> <u>SN 10</u>	N/A	3MRCEP01B		Replacement	Yes

7. Description of Work Replacement of 3rd stage seal retainer on RCP 1B

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-1 ☐
- Other ☐ Pressure psi Test Temp. °F

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

FORM NIS-2 (Back)

9. Remarks WO# 2576892 to replace mechanical seals in RCP 3MRCEP01B as part of normal maintenance.

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. repair or replacement

Type Code Symbol Stamp N/A

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

Signed FRED POTEET SR. ISE ENGINEER Date 4/28/03
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 2-14-03 to 4-28-03, 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 "ASIC" dz 264
National Board, State, Province, and Endorsements

Date 4-28-03

ASME SECTION XI - REPAIR/REPLACEMENT

Page ____ of ____

1. Component ID 3JSIBUV0648
2. Code Class 1
3. Item Description SI LINE TO RC LOOP 1A DRAIN VALVE
4. N-5 Package Number 3RC01-3
5. W.O. Number 2579445
6. Original Construction Code Edition ASME SECT. III, CL 1, 1974 EDITION, S75 ADD.
7. Original Installation Code Edition ASME SECT. III, CL 1, 1974 EDITION, W75 ADD.
8. Work Description REPLACE VALVE PLUG TO CORRECT SEAT LEAKAGE AND REPLACE THE LEAKOFF PIPE PER THE REQUIREMENTS OF 13-PN-204..

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

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
THIS IS NOT A PRESSURE BOUNDARY FAILURE. VALVE PLUG REPLACEMENT IS TO CORRECT SEAT LEAKAGE. JP 2/27/03

11. Repair/Replacement Work Organization ARIZONA PUBLIC SERVICE
12. Replacement Item Construction or reconciled Code/Edition ASME SECT. III, CL 1, 1974 EDITION, S75 ADD.
13. Repair/Replacement Activity Construction Code/Edition ASME SECT. III, CL 1, 1974 EDITION, W75 ADD.
14. ASME Section XI Code/Edition ASME SECT. III, 1992 EDITION, 92 ADD.

15. Preservice Inspection Required. ☐ YES ☒ NO
JD 02/21/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
JD 02/21/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date

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

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.
Pipe Cap	43550610	1248 ANA 1248 ANA	1248 ANA	500253082

19. Planner [Signature] 2-21-03 Print Name JAMES I. DAVIS
Signature Date

20. ISI Engineer Alan Morrow 2/26/03 Print Name Alan Morrow
Signature Date

21. ANII [Signature] 2-27-03 Print 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 02/21/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address

2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2579445
Address Work Order Number

3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None
Name
5801 S. Wintersburg Rd., Tonopah, Az 85354-7529 Authorization No. N/A
Address Expiration Date N/A

4. Identification of System Safety Injection

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Fisher Controls	6540519	5086	3JSIBUV0648	1979	Repaired	Yes
Pipe Cap	N/A	N/A	N/A	3JSIBUV0648	2003	Replacement	No

7. Description of Work Replace leakoff line

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐
 Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

9. Remarks Work Order 2579445 replaced the valve plug/stem assembly in 3JSIBUV0648 to correct seat leakage and replaced the leakoff pipe per the requirements of 13-PN-0204.
- _____
- _____
- _____
- _____

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.
repair or replacement

Type Code Symbol Stamp N/A

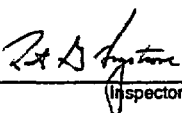
Certificate of Authorization No. N/A Expiration Date N/A

Signed Alan Monow IST Engineer Date 4/14/03
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 2-27-03 to 4-14-03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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


Inspector's Signature

Commissions NB 9685 "ANIC" Az 264
National Board, State, Province, and Endorsements

Date APRIL 14, 2003

ASME SECTION XI - REPAIR/REPLACEMENT

Page ____ of ____

1. Component ID 3PRCEV240 2. Code Class ASME Section III Class 1
 3. Item Description Bonnet and Bonnet Retainer
 4. N-5 Package Number 3RC01-2 5. W.O. Number 2593614
 6. Original Construction Code Edition 1974 Edition Winter 1975 Addenda
 7. Original Installation Code Edition 1974 Edition Winter 1975 Addenda
 8. Work Description Replaced Bonnet, Replaced Retainer

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, REPAIRED PARTS DUE TO
ALARA CONSIDERATIONS.

11. Repair/Replacement Work Organization Arizona Public Service
 12. Replacement Item Construction or reconciled Code/Edition Sec. III Class 1, 1974 Edition Winter 1975 Addenda
 13. Repair/Replacement Activity Construction Code/Edition Sec. III Cl 1, 1992 Edition 1992 Addenda
 14. ASME Section XI Code/Edition 1992 Edition 1992 Addenda

15. Preservice Inspection Required. ☒ YES ☐ NO
DMG 4-11-03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
DMG 4-11-03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date

DMG 4-11-03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date

DMG 4-11-03 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
BONNET	73666	12	N/A	MR 739301
BONNET RETAINER	71676	N/A	3H48	MR 739301

19. Planner David M. Goodlet 4-11-03 Print Name DAVID M. GOODLET
Signature Date

20. ISI Engineer Alan Morrow 4/11/03 Print Name Alan Morrow
Signature Date

21. ANII Robert Hagstrom 4-11-03 Print Name Robert 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: 4/28/03

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number: 2593614

3. Work Performed by: Arizona Public Service

Type of Code Stamp: None

5801 S. Wintersburg Rd., Tonopah, AZ 85454-7529

Authorization No. N/A

Expiration Date: N/A

4. Identification of System: Reactor Coolant

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Valve	Borg-Warner	51717	N/A	3PRCEV240	1979	Repaired	Yes
Bonnet	Borg-Warner	RS 221260 SN 12	N/A	3PRCEV240	1992	Replacement	Yes
Bonnet Retainer	Borg-Warner	N/A	N/A	3PRCEV240	2003	Replacement	No

7. Description of Work: Replaced bonnet and bonnet retainer.

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: Replace bonnet and bonnet retainer per work instructions of WO# 2593614.

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A _____

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

Signed: RL BROWN RLB IS/ENG Date: 4-28-03
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 4-11-03 to 4-28-03, 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.

RLB

Inspectors Signature

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

Date: 4-28-03

ASME SECTION XI - REPAIR/REPLACEMENT

Page ____ of ____

1. Component ID 3MRCEA01
2. Code Class ASME Section III, Class 1
3. Item Description REACTOR COOLANT SYSTEM PRESSURIZER HEATER
4. N-5 Package Number 3RC01-2
5. W.O. Number 2595493
6. Original Construction Code Edition ASME Section III, Class 1, 1971 Edition, Winter 1973 Addenda
7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 1975 Addenda
8. Work Description Install a Mechanical Nozzle Seal Assembly (MNSA) on the Pressurizer Heater Nozzle 3MRCEA01 to stop RCS leakage. Reference DFWO# 2594958.

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.
Evaluation of the installation of the MNSA is describes in Engineering DFWO 2594958. (The heater sleeve had through wall axial crack and MNSA installation was approved under Relief Request) Rfindap 4/28/03

11. Repair/Replacement Work Organization Arizona Public Service
12. Replacement Item Construction or reconciled Code/Edition ASME Sec. III CI 1, 1989 Edition
13. Repair/Replacement Activity Construction Code/Edition ASME Sec. III, CI 1, 1974 Ed., Winter 1975 Addenda
14. ASME Section XI Code/Edition 1992 Edition, 1992 Addenda, NRC Relief Request, NRC Docket NQ. STN-50-530

15. Preservice Inspection Required. ☒ YES ☐ NO
KVS 4/15/2003 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☒ YES ☐ NO
KVS 4/15/2003 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date

17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
KVS 4/15/2003

18. Include a step in the W.O. to record below all applicable numbers for replacement items.
KVS 4/15/2003

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/PO/WO NO.
MNSA Assembly	APN# 00064921	N/A	Serial No. 1	P.500241558

19. Planner Karl V. Savage 4/15/2003 Print Name Karl V. Savage
Signature Date

20. ISI Engineer Alan Morrow 4/15/03 Print Name Alan Morrow
Signature Date

21. ANII Robert G. Hogstrom 4-15-03 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: 4/15/03

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2595493

3. Work Performed by: Arizona Public Service Company

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: Reactor Coolant

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 Eng.	65373	22254	3MRCEX02	1981	Repaired	Yes
MNSA	Westinghouse	1	N/A	3MRCEA01	2003	Replacement	No

7. Description of Work: Install a Mechanical Nozzle Seal Assembly (MNSA) IAW DFWO 2594958.

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: Install a Mechanical Nozzle Seal Assembly (MNSA) on the Pressurizer Heater location 3MRCEA01 to stop RCS leakage. Reference DFWO 2594958. NRC Relief Request #17, NRC Docket Number STN-50-530. Work performed under W.O. 2595493.

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A _____

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

Signed: RL BROWN JR RLB ISI ENL Date: 4-28-03
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 4-15-03 to 4-28-03, 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. S. Hyatt


Inspector's Signature

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

Date: 4-28-03

Page ____ of ____

KWS 4/15/2003 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

21. ANII  4-15-03 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: 4/15/03

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2596122

3. Work Performed by: Arizona Public Service Company

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: Reactor Coolant

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 Eng.	65373	22254	3MRCEX02	1981	Repaired	Yes
MNSA	Westinghouse	2	N/A	3MRCEA15	2003	Replacement	No

7. Description of Work: Install a Mechanical Nozzle Seal Assembly (MNSA) IAW DFWO 2594958.

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: Install a Mechanical Nozzle Seal Assembly (MNSA) on the Pressurizer Heater location 3MRCEA15 to stop RCS leakage. Reference DFWO 2594958. NRC Relief Request #17, NRC Docket Number STN-50-530. Work performed under W.O. 2596122.

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 Brown, Jr. - ALB 1515NL Date: 4-28-03
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 4-15-03 to 4-28-03, 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-L Brown, Jr.

Inspectors Signature

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

Date: 4-28-03

Page _____ of _____

73DP-92217

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 04/11/03
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address

2. Plant Palo Verde Nuclear Generating Station Unit 3
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2597249
Address Work Order Number

3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None
Name
5801 S. Wintersburg Rd., Tonopah, AZ 85354-7529 Authorization No. N/A
Address Expiration Date N/A

4. Identification of System RC

5. (a) Applicable Construction Code ASME III Class 1 19 71 Edition, W '73 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Pzr. Heater	Combustion Eng.	93J	N/A	3MRCEA01	1982	Replacement	Yes

7. Description of Work Remove Pzr Htr., perform eddy current testing & install new htr.

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: Remove pressurizer heater perform eddy current testing and install new Pressurizer heater

W.O. 2597249

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. Pondag, Consulting Metallurgical Engineer Date: 4/25/03
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 4-11-03 to 4-25-03, 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. Pondag

Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264

National Board, State, Province, and Endorsements

Date: 4-25-03

ASME SECTION XI - REPAIR/REPLACEMENT

Page ____ of ____

1. Component ID 3PRCEV241 2. Code Class 1
3. Item Description RCEFV100F INLET ISOLATION VALVE
4. N-5 Package Number 3RC01-2 5. W.O. Number 2598405
6. Original Construction Code Edition ASME SECT. III, CL 1, 1974 EDITION, W75 ADD.
7. Original Installation Code Edition ASME SECT. III, CL 1, 1974 EDITION, W75 ADD.
8. Work Description REPLACE VALVE ITEMS AS REQUIRED TO CORRECT SEAT LEAKAGE.

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

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

No failure of the ASME pressure boundary. Valve opened for inspection and rework of the seating surfaces.

11. Repair/Replacement Work Organization ARIZONA PUBLIC SERVICE
12. Replacement Item Construction or reconciled Code/Edition ASME SECT. III, CL 1, 1974 EDITION, W75 ADD.
13. Repair/Replacement Activity Construction Code/Edition ASME SECT. III, CL 1, 1974 EDITION, W75 ADD.
14. ASME Section XI Code/Edition ASME SECT. III, 1992 EDITION, 92 ADD.

15. Preservice Inspection Required. ☐ YES ☒ NO

JD 04/18/03 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

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

JD 04/18/03 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date

JD 04/18/03 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date

JD 04/18/03 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

ITEM I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/POW/NO
<u>Gate</u>	<u>71333</u>	<u>RS225810</u>		<u>2598405</u>
<u>Bonnet</u>	<u>73666</u>	<u>13</u>		<u>2598405</u>
<u>STEM</u>	<u>73323</u>		<u>69762884682</u>	<u>2598405</u>

19. Planner [Signature] 04/18/03 Print Name JAMES I. DAVIS
Signature Date

20. ISI Engineer Alan Morrow 4/18/03 Print Name Alan Morrow
Signature Date

21. ANII [Signature] 4-18-03 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: 4/26/03

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2598405

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

5801 S. Wintersburg Rd., Tonopah, AZ 85454-7529

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Valve	Borg-Warner	80142	N/A	3PRCEV241	1983	Repaired	Yes
Bonnet	Borg-Warner	RS 221260 SN 13	N/A	3PRCEV241	1992	Replacement	Yes
Gate	Borg-Warner	225210	N/A	3PRCEV241	1993	Replacement	Yes
Stem	Borg-Warner	N/A	N/A	3PRCEV241	N/A	Replacement	No

7. Description of Work: Replace items as required 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 Work Order 2598405 replaced items as required to correct seat leakage.

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.
repair or replacement

Type Code Symbol Stamp N/A

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

Signed R.L. Brown ALB 151 ENC Date 4-28-03
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 4-18-03 to 4-28-03, 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. L. Brown
Inspector's Signature

Commissions NS 9685 "AWIC" AZ 264
National Board, State, Province, and Endorsements

Date 4-28-03