



10 CFR 50.55a

*A subsidiary of Pinnacle West Capital Corporation*

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102-05545-SAB/TNW/RJR  
August 10, 2006

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

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Unit 3, Docket No. STN 50-530  
Unit 3 Second 10-Year Interval – Twelfth Refueling Outage Inservice  
Inspection Summary**

Pursuant to 10 CFR 50.55a and IWA-6230 of Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, 1992 Edition, 1992 Addenda, Arizona Public Service Company (APS) hereby submits the PVNGS Unit 3 Inservice Inspection Report for the twelfth refueling outage, provided in the enclosure. APS completed Unit 3's Refueling Outage on May 12, 2006.

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,

SAB/TNW/RJR

Enclosure

cc: B. S. Mallett NRC Region IV Regional Administrator  
M. B. Fields NRC NRR Project Manager  
G. G. Warnick NRC Senior Resident Inspector for PVNGS

TN Weber for  
SA Bauer

A047

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Callaway □ Comanche Peak □ Diablo Canyon □ Palo Verde □ South Texas Project □ Wolf Creek

**ENCLOSURE**

**SECOND 10-YEAR ISI INTERVAL SUMMARY REPORT**

**TWELFTH REFUELING OUTAGE**

**PALO VERDE NUCLEAR GENERATING STATION, UNIT 3**

# PALO VERDE NUCLEAR GENERATING STATION

## UNIT 3

### INSERVICE INSPECTION REPORT

### TWELFTH REFUELING OUTAGE

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

PREPARED BY: J. Bayless DATE: 8/2/06  
REVIEWED BY: RL Branson RLB DATE: 8/3/06  
(All except B15.XX and C7.XX Pressure Testing)  
REVIEWED BY: Andrew J. DeLeon DATE: 8/3/06  
(B15.XX and C7.XX Pressure Testing)  
APPROVED BY: Michael Melton DATE: 8/3/06

COMMERCIAL SERVICE DATE: 01/08/88  
REPORT DATE: 08/02/2006

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# UNIT 3 INSERVICE INSPECTION REPORT

## 1.0 Introduction

This report is a summary of the examinations performed during the twelfth 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 3, which was conducted from April 1, 2006 through May 12, 2006. Palo Verde Unit 3 began commercial operation on January 8, 1988.

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

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

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

## 2.0 Examination Summary

The evaluation of the results from the ISI examinations indicated the integrity of the systems has 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 ASME 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), Intech Inc, Westinghouse, Jamco 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 U3R12. The applicable records and reports for the specific maintenance repair or replacements performed after the last summary report are maintained on file at Palo Verde. The applicable NIS-2 forms are an attachment to Appendix D and are submitted for review with this report.

## **APPENDIX A**

### **INSERVICE INSPECTION SUMMARY REPORT**

## APPENDIX A

### Definition of Terms

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

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

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

Zone No - Area designation per PVNGS design

Comp/Sys - Component or system description

Insp Per - Inspection period

Amt Req'd - 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
AF -	Auxiliary Feedwater
Aux -	Auxiliary
Atmos -	Atmospheric
Bldn -	Blowdown
CEDM -	Control Element Drive Mechanism
Circ -	Circumferential
Cont -	Containment
CS -	Containment Spray
CSP -	Containment Spray Pump
Dsch -	Discharge
Dwncomr -	Downcomer
FW -	Feedwater
HPSI -	High Pressure Safety Injection
HTRS -	Heaters
ICI -	In Core Instrumentation
IEB -	Inspection and Enforcement Bulletin
Int -	Interval
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
RF -	Refueling
RPV -	Reactor Vessel
SD -	Shutdown
SG -	Steam Generator
Snub -	Snubber Reduction Program
Suct -	Suction
Surf -	Surface
UT -	Ultrasonic Testing
Vis -	Visual
Vol -	Volumetric

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME	Zone Comp/Sys	Insp	Amt	Amt	Item ID		Reports		Remarks
Item no		Per	Req	Comp		Vol	Surf	Visual	
<b>ASME Class 2 Augmented High Energy Piping</b>									
AHE5.51	47 MS SG1	One	12	12	47-1	00-3443	00-3388		
& 5.52					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		
	48 MS SG 1	Two	12	12	48-1	UT-04-169	MT-04-099		
					48-2	UT-04-170	MT-04-100		
					48-4	UT-04-172	MT-04-102		
					48-8	UT-04-174	MT-04-104		
					48-12	UT-04-176	MT-04-106		
					48-16	UT-04-178	MT-04-108		
					48-20	UT-04-180	MT-04-110		
					48-24	UT-04-182	MT-04-112		Code case N-460
					48-25	UT-04-183	MT-04-113		
					48-28	UT-04-185	MT-04-115		
					48-29	UT-04-186	MT-04-116		
					48-30	UT-04-187	MT-04-117		
	51 ADV 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		
		Two	16	16	51-26	UT-04-190	MT-04-120		
					51-27	UT-04-191	MT-04-121		
					51-28	UT-04-192	MT-04-122		
					51-29	UT-04-193	MT-04-123		
					51-30	UT-04-194	MT-04-124		
					51-31	UT-04-195	MT-04-125		
					51-32	UT-04-196	MT-04-126		
					51-33	UT-04-197	MT-04-127		
					51-34	UT-04-198	MT-04-128		
					51-35	UT-04-199	MT-04-129		
					51-36	UT-04-200	MT-04-130		
					51-37	UT-04-201	MT-04-131		
					51-49	UT-04-202	MT-04-132		
					51-55	UT-04-203	MT-04-133		

## APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					51-56	UT-04-204	MT-04-134		
					51-57	UT-04-205	MT-04-135		
	53 Steam to AF	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		
		Two	9	9	53-1	UT-04-226	MT-04-156		
					53-2	UT-04-227	MT-04-157		
					53-4	UT-04-228	MT-04-158		
					53-5	UT-04-229	MT-04-159		
					53-6	UT-04-230	MT-04-160		
					53-7	UT-04-231	MT-04-161		
					53-8	UT-04-232	MT-04-162		
					53-9	UT-04-233	MT-04-163		
					53-10	UT-04-234	MT-04-164		
	56 FW SG1	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 Dwncmr 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		
		Two	5	5	60-2	UT-04-248	MT-04-178		
					60-3	UT-04-249	MT-04-179		
					60-4	UT-04-250	MT-04-180		
					60-5	UT-04-251	MT-04-181		
					60-6	UT-04-252	MT-04-182		
	61 FW SG 2	Two	5	5	61-2	UT-04-253	MT-04-183		
					61-3	UT-04-254	MT-04-184		
					61-4	UT-04-255	MT-04-185		
					61-5	UT-04-256	MT-04-186		
					61-6	UT-04-257	MT-04-187		
	66 Bldn SG1	One	9	9	66-1	00-3146	00-3093		
					66-2	00-3145	00-3093		
					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		

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					66-25	00-3275	00-3206		
AHE5.61	51 ADV SG1	Two	20	20	51-65	UT-04-206	MT-04-136		
					51-66	UT-04-207	MT-04-137		
					51-67	UT-04-208	MT-04-138		
					51-68	UT-04-209	MT-04-139		
					51-69	UT-04-210	MT-04-140		
					51-70	UT-04-211	MT-04-141		
					51-71	UT-04-212	MT-04-142		
					51-72	UT-04-213	MT-04-143		
					51-73	UT-04-214	MT-04-144		
					51-74	UT-04-215	MT-04-145		
					51-75	UT-04-216	MT-04-146		
					51-76	UT-04-217	MT-04-147		
					51-77	UT-04-218	MT-04-148		
					51-78	UT-04-219	MT-04-149		
					51-79	UT-04-220	MT-04-150		
					51-80	UT-04-221	MT-04-151		
					51-81	UT-04-222	MT-04-152		
					51-82	UT-04-223	MT-04-153		
					51-83	UT-04-224	MT-04-154		
					51-84	UT-04-225	MT-04-155		
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		
	48 MS SG 1	Two	9	9	48-3	UT-04-171	MT-04-101		
					48-07	UT-04-173	MT-04-103		
					48-11	UT-04-175	MT-04-105		
					48-15	UT-04-177	MT-04-107		
					48-19	UT-04-179	MT-04-109		
					48-23	UT-04-181	MT-04-111		
					48-27	UT-04-184	MT-04-114		
					48-34	UT-04-188	MT-04-118		
					48-35	UT-04-189	MT-04-119		Limited UT

**ASME Class I**

B 1.22	02 Closure Head	One	33%	16%	2-4	00-3417 00-3419 00-3421 00-3423	00-3082		Accessible Areas, RR#14
B 1.30	01 RPV	One	50%	50%	1-14	*			Examined 0°-180°. *Separate Report by Wesdyne. Exam Completed in 3R7
B 1.40	02 Closure Head	One	33%	33%	2-1	00-3416 00-3418 00-3420 00-3422	00-3082		Examined 0°-120°
		Two	33%	33%	2-1	UT-04-143	MT-04-092		Examined 120°-240°, UT Code Case N-460
		Three	34%	34%	2-1	UT-06-015	MT-06-001		Code case N-460, 240 to 360 deg



**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME	Zone Comp/Sys	Insp	Amt	Amt	Item ID		Reports		Remarks
Item no		Per	Req	Comp		Vol	Surf	Visual	
B 2.11 & 2.12	05 PZR	One	66%	66%	5-2	00-3085 00-3087 00-3089 00-3091			Examined 0° - 240°
					5-3	00-3086 00-3088 00-3090 00-3092			1' long seam for 5-2
		Two	66%	66%	5-8	UT-03-003 UT-03-006 UT-03-009			Examined 0°-240°
					5-6	UT-03-007 UT-03-013			inc 1' long seam for 5-8
		Three	34%	34%	5-2	UT-06-016			Examined 240° - 360°
					5-8	UT-06-017			Examined 240° - 360° Code case N-460
B2.31 & 2.32	03 SG 1	One	33%	33%	3-5	01-3078			Examined 0°-120°
					3-3	01-3077			
					3-10	01-3081			
		Two	33%	33%	3-5	UT-04-144			Examined 120° -240°
B2.40	03 SG 1	One	50%	50%	3-6	01-3079			Examined 0° -180°
	04 SG 2	Two	50%	50%	4-6	UT-04-147			Examined 180°-360°
B 3.90	01 RPV	One	2	2	1-15	*			*Separate Report by Wesdyne. Exam Completed in 3R7
					1-18	*			
B 3.100	01 RPV	One	2	2	1-15	*			
					1-18	*			
B3.110	05 PZR	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			
		Three	2	2	5-12	UT-06-018			Code case N-460
					5-14	UT-06-019			Code case N-460
B3.120	05 PZR	One	2	2	5-9	01-3192			
					5-11	01-3274			
		Two	2	2	5-10	UT-03-005			
					5-13	UT-03-014			
		Three	2	2	5-12	UT-06-007			Code case N-460
					5-14	UT-06-008			Code case N-460
B3.130	03 SG 1	One	1	1	3-8	01-3080			
		Two	1	1	3-7	UT-04-145			Code case N-460
	04 SG 2	One	1	1	4-9	01-3394			
		Two	1	1	4-7	UT-04-148			Code case N-460
B 3.140	03 SG 1	One	1	1	3-8	01-3388			
		Two	1	1	3-7	UT-04-135			
	04 SG 2	One	1	1	4-9	01-3387			
		Two	1	1	4-7	UT-04-136			
B 4.11	02 RPV	Two	0	0	Vent Noz		*	VT-04-725	Aug. (EA-03-009), *Separate report by Westinghouse
		Three	0	0	Vent Noz	UT *	ECT *	VT-06-006	Aug BMI, NRC Order EA-03- 009 * Report # WDI-PJF- 1303192-FSR-001
B 4.12	02 CEDM	One	8	8	CEDM Noz			00-3543	

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME	Zone Comp/Sys	Insp	Amt	Amt	Item ID		Reports		Remarks
Item no		Per	Req	Comp		Vol	Surf	Visual	
		Two	8	8	CEDM Noz			VT-03-430 VT-04-797	Aug. all (EA-03-009)
		Three	9	9	CEDM-Noz	UT *	ECT *	VT-06-706 VT-06-004	ISI Aug BMI All, NRC Order EA-03-009, * Report # WDI-PJF-1303192-FSR-001
B 4.13	01 RPV ICI	One	5	5	Instru			00-3543	
		Two	5	5	Instru			VT-03-428 VT-04-669 VT-04-805	Aug. all (IEB 2003-02)
		Three	6	6	ICI			VT-06-705 VT-06-003 VT-06-686	ISI Aug BMI All, NRC Order EA-03-009
B 4.20	5 PZR	One	12	12	Heaters			00-3543	
		Two	12	12	Heaters			VT-03-431 VT-04-796	Aug. All standpipe & heater noz. CE INFO Bulletin 89-06
		Three	12	12	Heaters			VT-06-007	ISI & All for CE IB 89-06
B 5.40	20 PZR Surge	One	2	2	5-34	01-3194	01-3083		
	31 PZR Safety				5-29	01-3275	01-3272		
	20 PZR Surge	Two	2	2	5-34			VT-04-765	Aug. BMI VT
	29 PZR Spray				5-33	UT-04-159 RT-04-002	PT-04-082	VT-04-683	Aug. UT and VT (BMI)
	31 PZR Safety				5-29	UT-04-160	PT-04-083	VT-04-729	Aug Vol, Surf & VT (BMI)
					5-30	UT-04-161	PT-04-084	VT-04-726	Aug Vol, Surf & VT (BMI)
					5-31	UT-04-162 RT-04-005	PT-04-085	VT-04-727	Aug. BMI VT
					5-32	UT-04-163	PT-04-086	VT-04-728	Aug Vol, Surf & VT (BMI)
B 5.40	20 PZR Surge	Three	2	0	5-34			VT-06-008	AUG BMI (IN 2004-11)
	29 PZR Spray				5-33			VT-06-017 VT-06-614	AUG BMI (IN 2004-11) Aug VT for Thermal Sleeve integrity
	31 PZR Safeties				5-29			VT-06-018	AUG BMI (IN 2004-11)
					5-30			VT-06-019	AUG BMI (IN 2004-11)
					5-31			VT-06-020	AUG BMI (IN 2004-11)
					5-32			VT-06-021	AUG BMI (IN 2004-11)
B 6.10	02 RPV Nuts	One	18	18	1 thru 18		00-3200	00-3207	
		Two	18	18	19 thru 36		MT-03-019	VT-03-224	
		Three	18	18	37 thru 54		MT-06-017	VT-06-615	
B 6.30	02 RPV Studs	One	18	18	1 thru 18	01-3338	00-3200		
		Two	18	18	19 thru 36	UT-03-024	MT-03-018		
		Three	18	18	37 thru 54	UT-06-001	MT-06-002		
B 6.50	02 RPV Washers	One	18	18	1 thru 18			00-3207	
		Two	18	18	19 thru 36			VT-03-223	
		Three	18	18	37 thru 54			VT-06-617	
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 VT-04-623	+ Aug. incl all - IEIN 80-27 & IEB 82-02
		Three	6	6	11 thru 16	UT-06-003		VT-06-622	Aug all (IEIN 80-27 & IEB 82-02)
	17 RCP 1B	One	5	5	1 thru 5	01-3006 01-3454	01-3004	00-3210 01-3003 01-3236	
		Two	5	5	6 thru 10	UT-03-036		VT-03-364 VT-04-626	+ Aug. incl all - IEIN 80-27 & IEB 82-02
		Three	6	6	11 thru 16	UT-06-004		VT-06-625	Aug all (IEIN 80-27 & IEB 82-02)
	18 RCP 2A	One	5	5	1 thru 5	01-3455		00-3211	

# APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME	Zone Comp/Sys	Insp	Amt	Amt	Item ID		Reports		Remarks
Item no		Per	Req	Comp		Vol	Surf	Visual	
		Two	5	5	6 thru 10	UT-03-037		VT-03-375 VT-04-629	+ Aug. incl all - IEIN 80-27 & IEB 82-02
		Three	6	6	11 thru 16	UT-06-005		VT-06-628	Aug all (IEIN 80-27 & IEB 82-02)
	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 VT-04-632	+ Aug. incl all - IEIN 80-27 & IEB 82-02
		Three	6	6	11 thru 16	UT-06-006		VT-06-631	Aug all (IEIN 80-27 & IEB 82-02)
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	
		Three	6	6	11 thru 16			VT-06-621	
	17 RCP 1B	One	5	5	1 thru 5			00-3210 01-3003 01-3236	
		Two	5	5	6 thru 10			VT-03-326	
		Three	6	6	11 thru 16			VT-06-624	
	18 RCP 2A	One	5	5	1 thru 5			00-3211	
		Two	5	5	6 thru 10			VT-03-328	
		Three	6	6	11 thru 16			VT-06-627	
	19 RCP 2B	One	5	5	1 thru 5			00-3212	
		Two	5	5	6 thru 10			VT-03-354	
		Three	6	6	11 thru 16			VT-06-630	
B 7.20	05 PZR	One	20	20	20 studs/nuts			00-3187 01-3005 01-3314	
		Two	20	20	20 studs/nuts		MT-03-017	VT-03-210 VT-04-621	IEB 82-02 Aug IEB 82-02, removed
		Three	20	20	20 studs/nuts			VT-06-620	ISI & Aug (IEB 82-20)
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 VT-04-619	IEB 82-02 Aug IEB 82-02, removed
		Three	40	40	40 studs/nuts			VT-06-618	ISI & Aug (IEB 82-20)
	04 SG 2	One	40	40	40 studs/nuts			00-3189 01-3316	
		Two	40	40	40 studs/nuts		MT-03-012	VT-03-209 VT-04-620	IEB 82-02 Aug IEB 82-02, removed
		Three	40	40	40 studs/nuts			VT-06-619	ISI & Aug (IEB 82-20)
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 VT-04-654	IEB 82-02 Aug IEB 82-02, removed
					PSV201		MT-03-014	VT-03-423 VT-04-656	IEB 82-02 Aug IEB 82-02, removed
					PSV202		MT-03-015	VT-03-424 VT-04-658	IEB 82-02 Aug IEB 82-02, removed

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					PSV203		MT-03-016	VT-03-425 VT-04-660	IEB 82-02 Aug IEB 82-02, removed
		Three	2	2	PSV200			VT-06-633	ISI & Aug (IEB 82-02), Installed
					PSV201			VT-06-634	ISI & Aug (IEB 82-02), Installed
					PSV202			VT-06-636	ISI & Aug (IEB 82-02), Installed
					PSV203			VT-06-637	ISI & Aug (IEB 82-02), Installed
B 7.60	37 Charging	One	1	1	V435			00-3254	
	16 RCP 1A	One	5	5	1 thru 5			00-3209 00-3113	
		Two	5	5	6 thru 10			VT-03-317	
		Three	6	6	11 thru 16			VT-06-623	
	17 RCP 1B	One	5	5	1 thru 5			00-3210 00-3113 01-3002 01-3007	PSE (16 studs)
		Two	5	5	6 thru 10			VT-03-327	
		Three	6	6	11 thru 16			VT-06-626	
	18 RCP 2A	One	5	5	1 thru 5			00-3211 00-3113	
		Two	5	5	6 thru 10			VT-03-345	
		Three	6	6	11 thru 16			VT-06-629	
	19 RCP 2B	One	5	5	1 thru 5			00-3113 00-3212	
		Two	5	5	6 thru 10			VT-03-404	
B 7.60	19 RCP 2B	Three	6	6	11 thru 16			VT-06-632	
B 7.70	21 SD Cooling A	One	1	1	UV653			00-3006	
	22 SD Cooling B	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	RR #4
	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	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	
		Three	2	2	PSV201			VT-06-635	
					PSV203			VT-06-638	
	32 Drain 1A	One	2	2	V234			00-3038	
					V334			00-3038 01-3512	
	33 Drain 1B	Two	2	2	V235			VT-03-117	

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**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					V335			VT-03-119	
	34 Drain 2A	Two	2	2	V233			VT-03-227	
					V333			VT-03-228	
	35 Drain Line 2B	Three	2	2	V232			VT-06-653	
					V332			VT-06-654	
	36 Letdown Line	Three	2	2	V515			VT-06-655	
					V516			VT-06-656	
	37 Charging	One	1	1	PDV240			00-3208	
	38 Drain Line	One	1	1	V215			01-3048	
	38 Drain Line 1	Three	1	1	V216			VT-06-657	
	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	02 Closure Head	One	1	1	2-21			00-3270	CEDM 92
					2-21			00-3270	CEDM 96
		Three	1	1	2-21			VT-06-616	CEDM 96
B 8.20	05 PZR	One	67%	67%	5-1	00-3278 00-3279 00-3280 00-3281	00-3069		Examined 0°-240° Code Limited Relief Required
		Three	33%	33%	5-1	UT-06-002	MT-06-003		240 to 360 deg, Limited UT Coverage and MT OD only.
B 8.30	03 SG 1	One	33%	33%	3-1	01-3325	01-3317		Examined 0° -120°
	04 SG 2	Two	33%	33%	4-1	UT-04-146	MT-04-093		120° to 240°, Surf ID & OD
B 9.11	06 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		
					17-2	01-3407	01-3345		
		Two	6	6	16-1	UT-03-023	MT-03-005		100%
					17-1	UT-03-016	MT-03-010		100%
					18-1	UT-03-018	MT-03-007		100%
					19-1	UT-03-021	MT-03-006		100%
					3-28	UT-03-019	MT-03-020		100%
					4-28	UT-03-017	MT-03-021		100%
	20 PZR Surge	One	1	1	20-1	01-3195	01-3083		
		Two	0	0	6-10			VT-04-743	Aug. BMI VT
		Three	3	0	6-10			VT-06-009	AUG BMI (IN 2004-11)
	21 SD Cooling A	One	3	3	6-11	01-3076 01-3075	01-3196		
					21-18	01-3073	01-3196		
					21-20	01-3074	01-3196		
		Two	0	0	6-11			VT-04-673	Aug. BMI VT
		Three	2	0	6-11			VT-06-010	AUG BMI (IN 2004-11)
					21-14	UT-06-026			
					21-15	UT-06-027			
	22 SD Cooling B	One	2	2	22-11	00-3148	00-3108		
					22-23	00-3149	00-3172		
		Two	1	1	7-9	UT-04-153	PT-04-070	VT-04-761	Aug. BMI VT
		Three	3	0	22-1	UT-06-028			
					22-6	UT-06-029			
					7-9			VT-06-061	AUG BMI (IN 2004-11)

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
	23 SI 1A	One	4	4	9-10	01-3049 01-3050	01-3026		
					23-1	01-3051	01-3026		
					23-2	01-3052	01-3026		
					23-4	01-3055 01-3053	01-3026		
					23-6	01-3056 01-3054	01-3026		Aug.
		Two	0	0	9-10			VT-04-678	Aug. BMI VT
		Three	2	0	9-10			VT-06-011	AUG BMI (IN 2004-11)
	24 SI 1B	Two	0	0	24-6	UT-04-154	PT-04-071		Aug IN 97-19, Limited UT
					11-10			VT-04-762	Aug. BMI VT
		Three	5	0	24-1	UT-06-030			
					11-10			VT-06-012	AUG BMI (IN 2004-11)
	25 SI 2A	One	2	2	25-26	00-3083	00-3033		
					25-29	00-3084	00-3081		
		Two	1	1	13-10	UT-04-156	PT-04-073	VT-04-682	Aug. BMI VT
					25-6	UT-04-155	PT-04-072		Aug IN 97-19, Limited UT
		Three	3	0	25-1	UT-06-031			
					13-10			VT-06-013	AUG BMI (IN 2004-11)
	26 SI 2B	One	2	2	26-9	00-3190	00-3176		
					26-11	00-3191	00-3175		
		Two	0	0	26-6	UT-04-158	PT-04-074		Aug IN 97-19, Limited UT
					15-9			VT-04-746	Aug. BMI VT
		Three	3	0	26-1	UT-06-032			
					15-9			VT-06-014	AUG BMI (IN 2004-11)
	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
		Three	3	3	29-1	UT-06-033	PT-06-003		PSE
					29-2	UT-06-034	PT-06-004		PSE
					29-3	UT-06-035	PT-06-005		PSE
					29-4	UT-06-036	PT-06-006		PSE
					29-5	UT-06-037	PT-06-007		PSE
					29-9	UT-06-038	PT-06-008		PSE
	31 PZR Safety	One	1	1	31-1	01-3276	01-3272		
		Three	2	0	31-6	UT-06-041			
					31-10	UT-06-042			
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		
		Two	3	3	27-8		PT-04-075		
					27-10		PT-04-076		
					27-16		PT-04-077		
					9-11			VT-04-677	Aug. BMI VT
		Three	4	0	9-11			VT-06-015	AUG BMI (IN 2004-11)
	28 PZR Spray	One	4	4	28-31		00-3070		
					28-32		00-3070		
					28-39		00-3070		
					28-40		00-3070		
		Two	4	4	28-9		PT-04-078		
					28-11		PT-04-079		
					11-11		PT-04-080	VT-04-674	Aug. BMI VT

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					28-20		PT-04-081		
		Three	3	0	11-11			VT-06-016	AUG BMI (IN 2004-11)
	30 Aux PZR Spray	One	2	2	30-1	00-3053			Aug.
					30-2	00-3053			Aug.
					30-4		00-3068		
					30-7		00-3068		
		Three	2	0	30-1	UT-06-039	PT-06-012		PSE, AUG UT (IEB 88-08 & IN 97-19) Limited UT
					30-2	UT-06-040	PT-06-009		PSE, AUG UT (IEB 88-08 & IN 97-19) Limited UT
	32 Drain 1A	One	3	3	8-18		00-3034		
					32-1		00-3034		
					32-2		00-3034		
		Two	0	0	8-18			VT-04-675	Aug. BMI VT
		Three	0	0	8-18			VT-06-022	AUG BMI (IN 2004-11)
	33 Drain 1B	Two	3	3	33-1		PT-04-087		
					33-5		PT-04-088		
					10-18		PT-04-089	VT-04-676	Aug. BMI VT
		Three	0	0	10-18			VT-06-023	AUG BMI (IN 2004-11)
	34 Drain 2A	Two	0	0	12-18			VT-04-679	Aug. BMI VT
		Three	3	0	12-18			VT-06-024	AUG BMI (IN 2004-11)
	36 Letdown	One	4	4	36-8		00-3201		
					36-9		00-3201		
					36-28		00-3255		
					36-35		00-3255		
		Two	0	0	14-18			VT-04-763	Aug. BMI VT
		Three	9	0	14-18			VT-06-025	AUG BMI (IN 2004-11)
	37 Charging	One	5	5	37-41		00-3202		
					37-42		00-3202		
					37-43		00-3202		
					37-45		00-3202		
					37-47		00-3202		
		Two	1	1	13-11		PT-04-177	VT-04-680	Aug. BMI VT
		Three	6	0	13-11			VT-06-026	AUG BMI (IN 2004-11)
	39 HPSI A	One	2	2	39-1		00-3204		
					39-5		00-3203		
		Two	3	3	39-12	UT-04-164	PT-04-091		Aug UT
					39-13	UT-04-165	PT-04-092		Aug UT
					39-24	UT-04-166	PT-04-093		Aug UT, Limited UT
	40 HPSI B	One	3	3	40-1		01-3346		
					40-2		01-3346		
					40-3		01-3346		
		Two	2	2	40-6	UT-04-167	PT-04-094		Aug UT
					40-7	UT-04-168	PT-04-095		Aug UT
B 9.31	06 RCS Piping	One	1	1	9-8	01-3408	01-3345		
		Two	1	1	13-8	UT-03-020	MT-03-009		
		Three	3	0	6-8	UT-06-024			
					11-8	UT-06-025			
B 9.32	06 RCS Piping	One	1	1	8-17		00-3030		
		Two	1	1	13-9		MT-03-008		
	22 SD Cooling B	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		

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME	Zone Comp/Sys	Insp	Amt	Amt	Item ID		Reports		Remarks
Item no		Per	Req	Comp		Vol	Surf	Visual	
B10.10	22 SD Cooling 2	Three	1	1	SI193H023		PT-06-001		
	26 SI 2B	Three	1	1	SI179H010		PT-06-002		
	36 Letdown	One	1	1	RC091H005		00-3255		
					RC091H006		00-3255		
		Two	1	1	RC091H006		PT-03-004		
B 12.20	17 RCP 1B	One	1	1	Pump			01-3001	Disassembled
B12.40	31 PZR Safeties	Three	1	1	PSV200-Welds	RT-06-007			Dresser PSV - SN BS-08614
B12.50	24 SI 1B	Interval	2	2	V543-Internals			VT-04-644	Dissassembled
	25 SI 2A				V217-Internals			VT-04-647	Dissassembled
	31 PZR Safeties	Three	1	1	PSV200-Internals			VT-06-649	Dresser PSV - SN BS-08614
B 13.10	01 RPV	One	100%	100%	Internal			01-3397 01-3398	Accessible areas
		Two	100%	100%	Internal			VT-04-764	Accessible areas
		Three	1	1	INTERNALS			VT-06-640	Accessible areas
B 14.10	02 Closure Head	One	4	4	2-9	00-3060 00-3061	00-3199		CEDM # 84
					2-9	00-3062 00-3063	00-3199		CEDM # 88
					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, Limited
					2-10	UT-03-025	PT-03-006		CEDM # 89, Limited
		Three	6	6	CEDM-10-71	UT-06-009			
					CEDM-10-79	UT-06-010			
					CEDM-10-82	UT-06-011			
					CEDM-9-71	UT-06-012			
					CEDM-9-79	UT-06-013			
					CEDM-9-82	UT-06-014			
B 15.10, 20, 30, 40, 50, 60, 70	RCS Piping	One	ALL	ALL	Press Bound			00-3543 00-3112 01-3058 01-3065 01-3396 01-3464 01-3467 01-3508 01-3509 01-3513 01-3514	Bolting RR 11&12
		Two	ALL	ALL	Press Bound			VT-03-429 VT-04-686 VT-04-691 VT-04-778 VT-04-790 VT-04-798 VT-04-801 VT-04-802 VT-04-804	*100% ea. Outage Bolting RR 11&12
	Closure Head	Three	0	0	Head			VT-06-005	Aug BMI All, NRC Order EA-03-009
	RCS Piping	Three	1	*	RCS Pres Test			VT-06-027	*100% ea. Outage, Code Case N-498, Bolting RR 11 & 12
F 1.10	20 PZR Surge	One	2	2	RC028H001			00-3010	
					RC028H002			00-3011	
		Two	2	2	RC028H842			VT-03-342	
					RC028H844			VT-03-344	



**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
		Three	3	3	RC028H003			VT-06-050	RR # 4
					RC028H004			VT-06-051	
					RC028H843			VT-06-052	RR # 4
	21 SD Cooling A	One	7	7	SI240H010			00-3007	
					SI240H011			00-3008	
					SI240H013			00-3009	
					RC051H001			01-3028	Support deleted
					RC051H002			01-3205	
					RC051H003			01-3206	
					RC051H821			01-3204	
		Two	7	7	RC051H004			VT-03-347	Snubber deleted
					RC051H005			VT-03-349	
					RC051H822			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
		Three	8	8	SI240H001			VT-06-053	Removed
					SI240H003			VT-06-054	RR # 4
					SI240H004			VT-06-055	RR # 4
					SI240H005			VT-06-056	RR # 4
					SI240H006			VT-06-057	Removed
					SI240H007			VT-06-058	RR # 4
					SI240H008			VT-06-059	RR # 4
					SI240H009			VT-06-060	RR # 4
	22 SD Cooling B	One	4	4	RC068H005			00-3097	
					RC068H006			00-3197	
					SI193H017			00-3095	
					SI193H019			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
		Three	5	5	RC068H001			VT-06-062	
					RC068H002			VT-06-063	Removed
					RC068H003			VT-06-064	
					RC068H004			VT-06-065	
					SI193H023			VT-06-066	
	23 SI 1A	One	1	1	SI207H005			01-3016	Support deleted
		Two	2	2	SI207H007			VT-03-140	
					SI207H011			VT-03-139	
		Three	2	2	SI207H001			VT-06-067	
					SI207H003			VT-06-068	
	24 SI 1B	One	2	2	SI223H003			00-3067	
					SI223H004			00-3002	
		Two	2	2	SI223H001			VT-03-162	RR #4
					SI223H002			VT-03-163	Snubber deleted
		Three	1	1	SI223H008			VT-06-069	RR # 4
	25 SI 2A	One	2	2	SI156H007			00-3076	
					SI156H009			00-3077	
		Two	1	1	SI160H001			VT-03-161	
		Three	1	1	SI160H004			VT-06-070	
	26 SI 2B	One	2	2	SI179H009			00-3001	
					SI179H011			00-3198	
		Two	3	3	SI175H021			VT-03-150	

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SI175H022			VT-03-153	Support deleted
					SI175H023			VT-03-155	
		Three	2	2	SI179H008			VT-06-071	
					SI179H010			VT-06-072	Removed
	27 PZR Spray 1A	One	9	9	RC062H026			00-3012	
					RC062H027			00-3013	
					RC062H028			00-3014	
					RC062H029			00-3015	
					RC062H030			00-3016	
					RC062H031			00-3017	
					RC062H032			00-3018	
					RC062H033			00-3019	
					RC062H034			00-3020	
		Two	8	8	RC016H005			VT-03-049	RR #4
					RC016H006			VT-03-051	RR #4
					RC016H007			VT-03-052	RR #4
					RC016H015			VT-03-053	RR #4, Snubber Deleted
					RC062H035			VT-03-056	RR #4
					RC062H036			VT-03-057	RR #4, Spring can deleted
					RC062H037			VT-03-058	RR #4
					RC062H038			VT-03-059	RR #4
		Three	8	8	RC062H020			VT-06-073	Removed
					RC062H021			VT-06-074	
					RC062H022			VT-06-075	Removed
					RC062H023			VT-06-076	RR # 4
					RC062H024			VT-06-077	RR # 4
					RC062H025			VT-06-078	Removed
					RC062H039			VT-06-079	RR # 4
					RC062H040			VT-06-080	Removed
	28 PZR Spray 1B	One	9	9	RC017H024			00-3003	
					RC017H034			00-3021	
					RC017H035			01-3021	
					RC017H036			00-3022	
					RC017H038			00-3023	
					RC017H039			00-3024	
					RC017H040			00-3025	
					RC017H041			00-3026	
					RC017H042			00-3027	
		Two	8	8	RC017H043			VT-03-065	RR #4
					RC017H044			VT-03-064	RR #4, Spring deleted
					RC017H045			VT-03-062	RR #4
					RC017H046			VT-03-063	RR #4
					RC018H009			VT-03-061	RR #4
					RC018H010			VT-03-070	RR #4, Spring deleted
					RC018H011			VT-03-060	RR #4, Snubber deleted
					RC018H012			VT-03-055	RR #4
		Three	11	11	RC017H025			VT-06-081	Removed
					RC017H026			VT-06-082	
					RC017H027			VT-06-083	Removed
					RC017H028			VT-06-084	Removed
					RC017H029			VT-06-085	
					RC017H030			VT-06-086	
					RC017H031			VT-06-087	
					RC017H032			VT-06-088	
					RC017H033			VT-06-089	

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					RC017H047			VT-06-090	
					RC017H048			VT-06-091	
	29 PZR Spray	One	2	2	RC018H016			00-3037	
					RC018H018			00-3036	
		Two	1	1	RC018H017			VT-03-187	
	30 PZR Spray	Three	2	2	CH-521H00A			VT-06-092	RR # 4
					CH-521H00B			VT-06-093	RR # 4
	32 Drain 1A	One	2	2	RC060H00A			00-3039	
					RC060H00B			00-3040	
	33 Drain 1B	Two	2	2	RC058H00A			VT-03-114	
					RC058H00B			VT-03-116	Snubber deleted
	34 Drain 2A	Two	2	2	RC096H00A			VT-03-225	
					RC096H00B			VT-03-226	Snubber deleted
	35 Drain Line 2B	Three	1	1	RC089H00E			VT-06-094	
	36 Letdown	One	9	9	RC091H001			00-3256	
					RC091H005			00-3257	
					RC091H006			00-3258	
					RC091H00B			00-3216	
					RC091H00D			00-3213	
					RC091H00E			00-3218	
					RC091H00Y			00-3214	
					RC091H00Z			00-3215	
					RC091H0AA			00-3219	
					RC091H0AK			00-3217	
		Two	10	10	RC091H002			VT-03-211	RR #4
					RC091H006			VT-03-212	RR #4
					RC091H00P			VT-03-216	RR #4
					RC091H00Q			VT-03-217	RR #4
					RC091H00R			VT-03-218	RR #4
					RC091H00S			VT-03-219	RR #4
					RC091H00T			VT-03-220	RR #4
					RC091H0AJ			VT-03-213	RR #4
					RC091H0AP			VT-03-214	RR #4
					RC091H0AQ			VT-03-215	RR #4
		Three	11	11	CH001H00A			VT-06-095	
					RC091H0AB			VT-06-096	RR # 4
					RC091H0AC			VT-06-097	RR # 4
					RC091H0AD			VT-06-098	RR # 4
					RC091H0AM			VT-06-099	RR # 4
					RC091H0AN			VT-06-100	RR # 4
					RC091H00F			VT-06-101	RR # 4
					RC091H00J			VT-06-102	RR # 4
					RC091H00U			VT-06-103	
					RC091H00V			VT-06-104	RR # 4
					RC091H00W			VT-06-105	RR # 4
	37 Charging	One	14	14	CH005H002			00-3231	
					CH005H003			00-3232	
					CH005H020			01-3473	PSE
					CH005H025			00-3233	
					CH005H026			00-3225	
					CH005H027			00-3224	
					CH005H028			00-3222	
					CH005H030			00-3226	
					CH005H034			00-3220	
					CH005H035			00-3221	

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					CH005H036			00-3223	
					CH005H042			00-3234	
					CH005H043			00-3486	
					CH005H044			00-3235	
					CH005H0AA			00-3236	
		Two	9	9	CH005H013			VT-03-240	RR #4
					CH005H017			VT-03-243	RR #4
					CH005H018			VT-03-244	RR #4
					CH005H019			VT-03-247	RR #4
					CH005H020			VT-03-251	RR #4
					CH005H021			VT-03-242	RR #4
					CH005H022			VT-03-252	RR #4
					CH005H032			VT-03-253	RR #4
					CH005H037			VT-03-241	RR #4
		Three	10	10	CH005H004			VT-06-106	
					CH005H007			VT-06-107	
					CH005H008			VT-06-108	
					CH005H009			VT-06-109	
					CH005H011			VT-06-110	RR # 4
					CH005H012			VT-06-111	RR # 4
					CH005H014			VT-06-112	
					CH005H033			VT-06-113	
					CH005H038			VT-06-114	RR # 4
					CH005H039			VT-06-115	RR # 4
	38 Drain Line 1	Three	1	1	RC070H00B			VT-06-116	RR # 4
	39 HPSI A	One	4	4	SI248H026			00-3228	
					SI248H027			00-3227	
					SI248H028			00-3229	
					SI248H030			00-3230	
		Two	5	5	SI248H017			VT-03-148	
					SI248H018			VT-03-154	Snubber deleted
					SI248H019			VT-03-152	
					SI248H020			VT-03-416	RR #4
					SI248H029			VT-03-149	
		Three	5	5	SI248H021			VT-06-117	
					SI248H022			VT-06-118	
					SI248H023			VT-06-119	
					SI248H024			VT-06-659	
					SI248H025			VT-06-660	
	40 HPSI B	One	3	3	SI199H013			01-3029	
					SI199H014			01-3030	
					SI199H021			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
		Three	2	2	SI199H022			VT-06-120	
					SI199H023			VT-06-121	
F 1.40	01 Reactor Vessel	Three	4	4	1-40			VT-06-028	RR # 4
					1-41			VT-06-029	RR # 4
					1-42			VT-06-030	RR # 4
					1-43			VT-06-031	RR # 4
	03 SG 1	One	1	1	3-40			01-3319	
	04 SG 2	Two	1	1	4-40			VT-04-471	
	05 PZR	Three	1	1	5-40			VT-06-032	

## APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
	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	
		Three	4	4	16-19			VT-06-033	
					16-20			VT-06-034	
					16-21			VT-06-035	
					16-22			VT-06-036	
	17 RCP 1B	One	2	2	17-17			00-3527	
					17-18			00-3527	
		Two	4	4	17-12			VT-03-322	
					17-13			VT-03-323	
					17-14			VT-03-324	
					17-15			VT-03-325	
		Three	4	4	17-19			VT-06-037	
					17-20			VT-06-038	
					17-21			VT-06-039	
					17-22			VT-06-040	
	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	
		Three	4	4	18-19			VT-06-041	
					18-20			VT-06-042	
					18-21			VT-06-043	
					18-22			VT-06-044	
	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	
		Three	4	4	19-19			VT-06-045	
					19-20			VT-06-046	
					19-21			VT-06-047	
					19-22			VT-06-048	
BFLYWH	16 RCP 1A	One	1	1	Fly Wheel	01-3426			
		Two	1	1	Fly Wheel	UT-04-149			
		Three	1	1	FLY WHEEL	UT-06-020	ET-06-001		
	17 RCP 1B	One	1	1	Fly Wheel	01-3427			
		Two	1	1	Fly Wheel	UT-04-288			
		Three	1	1	FLY WHEEL	UT-06-021	ET-06-002		
	18 RCP 2A	One	1	1	Fly Wheel	01-3428			
		Two	1	1	Fly Wheel	UT-04-289			
		Three	1	1	FLY WHEEL	UT-06-022	ET-06-003		
	19 RCP 2B	One	1	1	Fly Wheel	01-3429			
		Two	1	1	Fly Wheel	UT-04-290			
		Three	1	1	FLY WHEEL	UT-06-023	ET-06-004		

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME	Zone Comp/Sys	Insp	Amt	Amt	Item ID		Reports		Remarks
Item no		Per	Req	Comp		Vol	Surf	Visual	
<b>ASME Class 2</b>									
C 1.10	41 SG 1	One	1	1	41-3	01-3403			Examined 0° -180°
					41-4	01-3402			Examined 0° -180°
	68 Reg Ht Exch.	One	3	3	68-3	01-3328			
					68-5	01-3330			
					68-7	01-3332			
	69 Letdown Ht Exch	One	50%	50%	69-1	00-3276			Examined 0°-180°
	84 SD HT Exch	Two	50%	50%	74-123	UT-04-141			Examined 180° - 360°
C 1.20	41 SG 1	One	1	1	41-5	01-3395			Examined 0° -180°
	68 Reg Ht Exch.	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 UT-03-030			Examined 0° -180°
	68 Reg Ht Exch.	One	4	4	68-1	01-3326			
					68-2	01-3327			
					68-8	01-3333			
					68-9	01-3334			
	69 Letdown Ht Exch	One	50%	50%	69-2	00-3277			Examined 0° -180°
	84 SD HT Exch	Two	50%	50%	74-124	UT-04-142			Examined 180° - 360°
C 2.21	41 SG1	One	1	1	41-62	01-3342	01-3324		
		Two	2	2	41-9	UT-04-150	MT-04-094		
					41-10	UT-04-151	MT-04-096		
	42 SG 2	One	1	1	42-63	01-3341	01-3323		
	84 SD HT Exch	Two	1	1	74-122	UT-04-140	MT-04-189		
C2.22	41 SG1	Two	2	2	41-9	UT-04-137			
					41-10	UT-04-138			
	84 SD HT Exch	Two	1	1	74-122	UT-04-139			
C 3.10	41 SG 1	One	1	1	41-36		01-3400		
	42 SG 2	Two	1	1	42-37		MT-04-098		
	68 Reg Ht Exch.	One	2	2	68-10		01-3311		
					68-11		01-3311		
C 3.20	43 MS (East) SG1	Three	2	2	SG036H016		MT-06-008		
					SG036H017		MT-06-009		
	44 MS SG1	Two	1	1	SG033H016		MT-03-027		
	45 MS SG2	One	1	1	SG042H014		00-3072		
		Two	2	2	SG042H015		MT-03-025		
					SG042H016		MT-03-026		
		Three	1	1	SG042H017		MT-06-010		
	46 MS (West) SG2	Three	1	1	SG045H016		MT-06-011		
	54 FW SG 1	Three	1	1	SG002H001		MT-06-012		
	55 Feedwater	One	1	1	SG005H009		01-3320		
					SG005H006		00-3282		First Interval RR 14
		Three	1	1	SG005H001		MT-06-013		
	62 AF SG1	Two	1	1	AF018H001		PT-04-119		
	64 Blowdown	One	2	2	SG039H015		01-3343		
					SG039H017		01-3071 01-3343		
		Two	2	2	SG039H001		MT-03-002		
					SG053H005		MT-03-001 PT-03-001		PT performed for inaccessible MT areas
		Three	2	2	SG039H022		MT-06-014		Code case N-460, 92.79%

## APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SG053H001		MT-06-015		
	65 Blowdown	One	2	2	SG048H020		01-3344		
					SG052H001		01-3022		
					SG048H023		00-3283		First Interval RR 14
		Two	3	3	SG048H014		MT-03-028		
					SG048H016		MT-03-004		
					SG048H026		MT-03-003		
		Three	1	1	SG052H005		MT-06-016		
	71 LPSI Dsch	One	1	1	SI087H011		00-3392		
	76 CS Suct	One	1	1	SI009H004		00-3393		
	83 SD Cooling A	Two	2	2	SI087H004		PT-04-128		
					SI090H001		PT-04-129		
	88 SI East Wrap	One	1	1	SI072H013		00-3055		
	89 SI East Wrap	One	1	1	SI194H014		00-3054		
	91 SI West Wrap	One	4	4	SI070H009		00-3265		
					SI070H011		00-3485		
					SI070H012		00-3261		
					SI070H016		00-3485		
	92 West Wrap	One	1	1	SI241H021		00-3488		
		Two	2	2	SI239H001		PT-04-140		
					SI241H016		PT-04-141		
	93 SI West Wrap	Two	1	1	SI089H013		PT-04-144		
	94 SI Pipe Chase	Two	2	2	SI070H005		PT-04-147		
					SI070H008		PT-04-148		
	96 LPSI to Loop 1A	Three	1	1	SI202H017		PT-06-010		
	99 LPSI B	Two	1	1	SI174H013		PT-03-009		
	100 LPSI A Suct	One	1	1	SI369H001		00-3151		
		Two	1	1	84-5		PT-03-012		
	101 LPSI Sump B	Three	1	1	85-5		PT-06-011		
	102 SI A	One	3	3	SI307H002		01-3242		
					SI307H003		01-3240		
					SI307H015		01-3242		
	103 RF Suct A	Two	2	2	CH142H020		PT-03-011		
					CH424H006		PT-03-002		
	104 SI Suct B	Two	1	1	SI308H003		PT-03-003		
	113 HPSI	One	1	1	SI107H022		01-3244		
C 3.30	72 LPSI	One	3	3	72-3A		01-3213		
					72-3B		01-3213		
					72-3C		01-3213		
	75 LPSI B	Two	3	3	73-3A		PT-04-122		
					73-3B		PT-04-123		
					73-3C		PT-04-124		
	78 Cont Spray A	Two	3	3	80-3-A		PT-04-125		
					80-3-B		PT-04-126		
					80-3-C		PT-04-127		
	116 HPSI A	One	4	4	116-1A		01-3233		
					116-1B		01-3233		
					116-1C		01-3233		
					116-1D		01-3233		
	117 HPSI B	Two	4	4	117-1A		PT-04-168		Limited PT
					117-1B		PT-04-169		
					117-1C		PT-04-170		
					117-1D		PT-04-171		Limited PT
C 4.40	47 MS SG 1	One	20	20	V170	01-3469			
	48 MS SG 1	One	20	20	V180	01-3469			

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
	56 FW SG1	Two	40	40	V132	UT-03-028			
					V174	UT-03-029			
C 5.11	58 AF	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
		Two	0(1)	0(1)	58-1	RT-04-004	PT-04-176		Aug IEB 79-13 & SER 83-07
		Three	2(1)	0	58-19	RT-06-008			
	59 AF	One	0	3	59-6	01-3460 01-3463	01-3447		PSE
					59-37	01-3461 01-3462	01-3447		PSE
		Two	2(1)	2(1)	59-1	RT-03-001	PT-03-010		PSE, Aug IEB 79-13 & SER 83-07
					59-16C	RT-04-003	PT-04-116		
					59-34	UT-04-247	PT-04-117		
	62 AF SG1	Two	1	1	62-24	UT-04-258	PT-04-118		Limited UT
	63 AF	One	1	1	63-4	01-3446	01-3392		
		Two	1	1	63-30	UT-04-259	PT-04-120		Limited UT
	70 & 73LPSI	One	1	1	70-58	00-3455	00-3448		
	Suct A & B	Two	1	1	70-61	UT-04-261	PT-04-121		
	82 & 85 SD	One	2	2	72-50	00-3479	00-3390		
	Cooling A & B				73-49	01-3347	01-3245		
	83 & 86 SD	One	4	4	74-19	00-3480	00-3391		
	Cooling A & B				74-21	00-3482	00-3391		
					74-22	00-3481	00-3391		
					74-105	00-3483	00-3391		
	88 & 91 East &	One	6	6	78-16	00-3195	00-3147		
	West Wrap				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		
		Two	7	7	78-9J	UT-04-262	PT-04-132		
					78-11	UT-04-263	PT-04-133		
					79-14	UT-04-264	PT-04-134		Limited UT
					76-7	UT-04-265	PT-04-136		Limited UT
					76-8	UT-04-266	PT-04-137		
					77-8	UT-04-267	PT-04-138		
					77-16	UT-04-268	PT-04-139		Limited UT
	93 SI West Wrap	Two	1	1	84-9	UT-04-269	PT-04-143		Limited UT
	94 & 95 SI	One	1	1	74-40	01-3216	01-3215		
		Two	2	2	74-37	UT-04-270	PT-04-145		
					74-38	UT-04-271	PT-04-146		
	96 - 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		
		Two	2	2	77-22	UT-04-272	PT-04-149		
					77-27	UT-04-273	PT-04-150		Limited UT
	100 & 101 LPSI Suct	Two	2	2	70-121	UT-04-274	PT-04-151		Limited UT
					84-3	UT-04-275	PT-04-152		Limited UT
	102 SI A	One	1	1	84-12	01-3277	01-3240		
	103 RF Suct A	One	1	1	86-57	01-3252	01-3239		



**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME	Zone Comp/Sys	Insp	Amt	Amt	Item ID		Reports		Remarks
Item no		Per	Req	Comp		Vol	Surf	Visual	
	104 SI Suct B	One	1	1	85-46	01-3468	01-3391 01-3458		PSE
	105 RF Suct B	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		
		Two	3	3	108-1	UT-04-276	PT-04-159		
					108-4	UT-04-277	PT-04-160		
					108-25	UT-04-278	PT-04-161		
	110 & 111 HPSI	One	2	2	110-6	01-3203	01-3071		
					110-39	01-3198	01-3071		
		Two	3	3	110-17	UT-04-279	PT-04-162		Limited UT
					110-52	UT-04-280	PT-04-163		Limited UT
					111-34	UT-04-281	PT-04-164		Limited UT
	112 & 113 HPSI	One	3	3	112-1	01-3251	01-3238		
					112-33	01-3250	01-3238		
					112-45	01-3249	01-3238		
		Two	2	2	113-21	UT-04-282	PT-04-165		Limited UT
					113-28	UT-04-283	PT-04-166		Limited UT
	114 & 115 HPSI	One	1	1	115-13	01-3336	01-3393		
	118 & 119 HPSI	Two	4	4	118-49	UT-04-284	PT-04-172		Limited UT
					119-26	UT-04-285	PT-04-173		
					119-52	UT-04-286	PT-04-174		Limited UT
					119-53	UT-04-287	PT-04-175		Limited UT
C 5.30	106 & 107 HPSI	One	1	1	107-53		01-3237		
C 5.41	82 & 85 SD Cooling	One	1	1	72-49B		00-3390		
& 5.42	88 & 91 Wraps	One	1	1	74-102		00-3262		
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	1	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	1	55-1	UT-03-033	MT-03-023		PSE
					55-15	UT-03-032	MT-03-024		PSE
					55-26	UT-04-235	MT-04-165		
	58 AF 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 Aug.
					(58-13)	00-3047	00-3031		examinations
					(58-16)	00-3046	00-3031		
					(58-16A)	00-3045	00-3031		
		Two	1(4)	1(4)	58-12	UT-04-236	MT-04-167		Aug IEB 79-13 & SER 83-07
					58-13	UT-04-237	MT-04-168		Aug IEB 79-13 & SER 83-07
					58-16	UT-04-238	MT-04-169		Aug IEB 79-13 & SER 83-07
					58-16A	UT-04-239	MT-04-170		Aug IEB 79-13 & SER 83-07
					58-25	UT-04-240	MT-04-171		
	59 AF SG2	One	0(5)	0(5)	(59-1)	00-3269	00-3260		
					(59-12)	00-3044	00-3032		

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME	Zone Comp/Sys	Insp	Amt	Amt	Item ID		Reports		Remarks
Item no		Per	Req	Comp		Vol	Surf	Visual	
					(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
		Two	1(4)	1(4)	59-12	UT-04-242	MT-04-173		Aug IEB 79-13 & SER 83-07
					59-13	UT-04-243	MT-04-174		Aug IEB 79-13 & SER 83-07
					59-16	UT-04-244	MT-04-175		Aug IEB 79-13 & SER 83-07
					59-16A	UT-04-245	MT-04-176		Aug IEB 79-13 & SER 83-07
					59-25	UT-04-246	MT-04-177		
		Three	1(4)	0	59-18	UT-06-043			
	64 Blowdown	One	1	1	64-1	01-3339	01-3322		
		Two	1	1	64-30	UT-04-260	MT-04-188		
	65 Blowdown	One	1	1	65-28	01-3340	01-3321		
		Three	2	0	65-52	UT-06-044			
C 6.10	116 HPSI A	One	1	1	116-2		01-3243		
	117 HPSI B	Two	1	1	117-1		PT-04-167		
C 7.10, 7.30, 7.50, 7.70	Periodic Pressure Test	One	n/a	n/a	n/a			01-3054 01-3057 01-3061 01-3062 01-3065 to 01-3067 01-3069 01-3070 01-3220 to 01-3232 01-3355 01-3360 01-3361 01-3365 to 01-3381 01-3390 01-3396 01-3464 to 01-3467 01-3504 01-3505 01-3508 to 01-3511 01-3514 to 01-3516 01-3518 to 01-3520 01-3522 01-3523 01-3525 02-3010 to 02-3013 02-3015 02-3021 02-3022 02-3024 to 02-3040 02-3047	
		Two	n/a	n/a	n/a			VT-03-432 VT-04-685 VT-04-687 to VT-04-697 VT-04-701 to VT-04-706 VT-04-709 VT-04-718 to VT-04-720 VT-04-722 VT-04-739 to	

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
								VT-04-741 VT-04-744 VT-04-745 VT-04-747 to VT-04-752 VT-04-767 VT-04-768 VT-04-770 to VT-04-772 VT-04-776 to VT-04-779 VT-04-786 VT-04-788 to VT-04-795 VT-04-799 to VT-04-804 VT-05-1143 to VT-05-1146 VT-05-600 VT-05-604 to VT-05-606 VT-05-608 VT-05-615 to VT-06-618 VT-06-021 to VT-06-630 VT-06-632 to VT-05-638 VT-05-640	
F1.20	41 SG 1	One	2	2	41-36			01-3443	
& F1.40					41-37			01-3445	
	42 SG 2	Two	2	2	42-36			VT-04-472	
					42-37			VT-04-473	
	43 MS SG 1 90	One	2	2	SG036H017			00-3075	
					SG036H884			00-3410	
					SG036H885			00-3411	
		Two	1	1	SG036H011			VT-03-359	
		Three	2	2	SG036H011			VT-05-558 VT-06-687	RR # 4, Aug RR # 4, PSE
					SG036H016			VT-05-559	RR # 4
					SG036H017			VT-05-560	RR # 4
	44 MS SG1 270	One	2	2	SG033H017			00-3078	
					SG033H018			00-3079	
		Two	3	3	SG033H016			VT-03-393	
					SG033H881			VT-03-255	RR #4
					SG033H882			VT-03-256	RR #4
		Three	1	1	SG033H011			VT-05-561	RR # 4
					SG033H016			VT-05-562	RR # 4, Aug
					SG033H017			VT-05-563 VT-06-688	RR # 4, Aug RR # 4, PSE
	45 MS SG 2 270	One	1	1	SG042H014			00-3074	
		Two	3	3	SG042H011			VT-03-257	RR #4
					SG042H015			VT-03-258 VT-04-670	Snubber deleted
					SG042H016			VT-03-394 VT-04-671	RR #4
		Three	3	3	SG042H011			VT-05-564 VT-06-689	RR # 4, Aug RR # 4, PSE
					SG042H016			VT-05-565	RR # 4, Aug
					SG042H017			VT-05-566	RR # 4
					SG042H890			VT-06-122	

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SG042H891			VT-06-123	
	46 MS SG 2 90	One	2	2	SG045H017			00-3098	
					SG045H018			00-3099	
		Two	3	3	SG045H011			VT-03-362	
					SG045H887			VT-03-365	
					SG045H888			VT-03-367	
		Three	1	1	SG045H011			VT-05-567	RR # 4, Aug
					SG045H016			VT-05-568	RR # 4
					SG045H017			VT-05-569 VT-06-690	RR # 4, Aug RR # 4, PSE
	47 MS SG1 270	One	1	1	SG206H001			00-3529	
	48 MS SG 1	Two	1	1	SG207H001			VT-04-474	
	51 ADV SG1	One	1	1	SG059H006			00-3449	
		Two	1	1	SG070H006			VT-04-475	
	53 Steam to AF	One	4	4	SG081H001			00-3106	
					SG081H002			00-3105	
					SG083H001			00-3104	
					SG083H002			00-3103	
		Two	2	2	SG081H004			VT-03-261	Snubber Deleted
					SG083H004			VT-03-262	Snubber Deleted
	54 FW SG 1	One	7	7	SG002H004			01-3208	
					SG002H005			01-3209	
					SG002H012			01-3018	
					SG002H013			01-3214	
					SG002H014			01-3210	
					SG002H015			01-3211	
					SG002H803			01-3019	
		Two	6	6	SG013H001			VT-03-395	RR #4
					SG013H802			VT-03-412	RR #4
					SG002H009			VT-03-396	RR #4
					SG002H010			VT-03-397	RR #4
					SG002H011			VT-03-402	RR #4
					SG002H806			VT-03-415	Support deleted
		Three	6	6	SG002H001			VT-06-124	
					SG002H002			VT-06-125	RR # 4
					SG002H003			VT-06-126	RR # 4
					SG002H006			VT-06-127	
					SG002H008			VT-06-128	
					SG002H807			VT-06-129	RR # 4
	55 FW SG 2	One	8	8	SG005H009			01-3350	
					SG005H010			01-3348	
					SG005H011			01-3349	
					SG005H012			01-3011	
					SG005H805			01-3012	
					SG005H809			01-3014	Support deleted
					SG014H001			01-3013	
					SG014H804			01-3015	
		Two	7	7	SG005H004			VT-03-133	RR #4
					SG005H005			VT-03-134 VT-03-385	RR #4 RR #4, Re-exam
					SG005H006			VT-03-259	RR #4
					SG005H007			VT-03-130	RR #4
					SG005H008			VT-03-132	RR #4
					SG005H013			VT-03-131	RR #4
					SG005H014			VT-03-260	RR #4

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME	Zone Comp/Sys	Insp	Amt	Amt	Item ID		Reports		Remarks
Item no		Per	Req	Comp		Vol	Surf	Visual	
		Three	4	4	SG005H001			VT-06-130	
					SG005H002			VT-06-131	RR # 4
					SG005H003			VT-06-132	RR # 4
					SG005H808			VT-06-133	
	56 FW SG1	Two	1	1	SG202H001			VT-04-476	RR #4
	58 AF	One	7	7	SG008H002			01-3436	
					SG008H003			01-3435	
					SG008H004			01-3434	
					SG008H005			01-3433	
					SG008H020			01-3432	
					SG008H901			01-3431	
					SG008H903			01-3430	
		Two	7	7	SG008H006			VT-03-147	
					SG008H007			VT-03-160	RR #4
					SG008H008			VT-03-151	
					SG008H009			VT-03-158	RR #4
					SG008H010			VT-03-137	RR #4
					SG008H011			VT-03-138	RR #4
					SG008H017			VT-03-143	RR #4
		Three	8	8	AF004H001			VT-06-134	
					SG008H012			VT-06-135	
					SG008H013			VT-06-136	
					SG008H014			VT-06-137	
					SG008H015			VT-06-138	
					SG008H016			VT-06-139	
					SG008H018			VT-06-140	
					SG008H019			VT-06-141	
	59 AF	One	6	6	AF006H001			00-3238	
					SG011H008			00-3240	
					SG011H009			00-3239	
					SG011H010			00-3241	
					SG011H011			00-3242	
					SG011H012			00-3237	
		Two	6	6	SG011H013			VT-03-358	RR #4
					SG011H014			VT-03-360	RR #4
					SG011H015			VT-03-361	RR #4
					SG011H016			VT-03-363	RR #4
								VT-04-477	
					SG011H018			VT-03-368	RR #4
					SG011H019			VT-03-370	RR #4
		Three	9	9	SG011H002			VT-06-142	
					SG011H003			VT-06-143	RR # 4
					SG011H004			VT-06-144	RR # 4
					SG011H005			VT-06-145	RR # 4
					SG011H006			VT-06-146	
					SG011H007			VT-06-147	
					SG011H017			VT-06-148	
					SG011H020			VT-06-149	
					SG011H902			VT-06-150	RR # 4
	60 FW SG1	One	1	1	SG200H009			00-3530	
					SG200H013			00-3534	PSE
					SG200H014			00-3533	PSE
	61 FW SG 2	One	0	0	SG203H013			00-3531	PSE
					SG203H014			00-3532	PSE
		Two	2	2	SG203H013			VT-04-478	

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SG203H014			VT-04-479	
	62 AF SG1	One	1	1	AF004H003			00-3102	
		Two	1	1	AF018H001			VT-04-480	
	63 AF SG2	One	2	2	AF006H002			00-3100	
					AF016H001			00-3101	
		Two	2	2	AF006H003			VT-04-481	
					AF006H005			VT-04-482	
	64 Blowdown	One	10	10	SG039H010			01-3032	
					SG039H011			01-3033	Support deleted
					SG039H012			01-3034	
					SG039H013			01-3035	Support deleted
					SG039H014			01-3036	Support deleted
					SG039H015			01-3037	
					SG039H016			01-3038	
					SG039H017			01-3039	Support deleted
					SG039H026			01-3040	
					SG053H002			01-3020	Support deleted
		Two	12	12	SG039H001			VT-03-386	Snubber deleted
					SG039H002			VT-03-069	Support deleted
					SG039H003			VT-03-104	Snubber deleted
					SG039H004			VT-03-105	RR #4
					SG039H005			VT-03-106	RR #4
					SG039H006			VT-03-107	Snubber deleted
					SG039H027			VT-03-108	Snubber deleted
					SG053H003			VT-03-066	Support deleted
					SG053H004			VT-03-109	RR #4
					SG053H005			VT-03-111	
					SG053H006			VT-03-067	Support deleted
					SG053H007			VT-03-068	Snubber deleted
		Three	6	6	SG039H009			VT-06-151	RR # 4
					SG039H018			VT-06-152	RR # 4
					SG039H022			VT-06-153	
					SG039H024			VT-06-154	
					SG039H025			VT-06-155	RR # 4
					SG053H001			VT-06-156	
	65 Blowdown	One	10	10	SG048H002			01-3010	Support deleted
					SG048H003			01-3043	Support deleted
					SG048H004			01-3044	
					SG048H019			01-3045	Support deleted
					SG048H020			01-3046	Support deleted
					SG048H021			01-3047	
					SG052H001			01-3008	Support deleted
					SG052H002			01-3009	Support deleted
					SG052H003			01-3041	Support deleted
					SG052H004			01-3042	
		Two	11	11	SG048H013			VT-03-110	Snubber deleted
					SG048H014			VT-03-389	
					SG048H015			VT-03-113	Snubber deleted
					SG048H016			VT-03-115	
					SG048H017			VT-03-426	RR #4, Snubber deleted
					SG048H018			VT-03-118	
					SG048H022			VT-03-120	Snubber deleted
					SG048H023			VT-03-123	RR #4
					SG048H024			VT-03-126	RR #4
					SG048H025			VT-03-128	Snubber deleted

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SG048H026			VT-03-129	Snubber deleted
		Three	6	6	SG048H005			VT-06-157	RR # 4
					SG048H010			VT-06-158	
					SG048H011			VT-06-159	
					SG048H027			VT-06-160	RR # 4
					SG048H028			VT-06-161	RR # 4
					SG052H005			VT-06-162	RR # 4
	68 Reg Ht Exch.	One	2	2	68-10			01-3312	
					68-11			01-3312	
	70 LPSI Suct A	One	1	1	SI067H004			00-3249	
	71 LPSI Dsch A	One	1	1	SI087H011			00-3394	
		Two	5	5	SI078H001			VT-03-335	RR #4
					SI078H002			VT-03-334	RR #4
					SI087H001			VT-03-331	RR #4
					SI087H002			VT-03-332	RR #4
					SI087H003			VT-03-333	RR #4
	72 LPSI	One	3	3	72-3A			01-3207	
					72-3B			01-3207	
					72-3C			01-3207	
	73 LPSI Suct B	One	0	0	SI308H012			00-3120	PSE
		Two	1	1	SI308H014			VT-03-112	RR #4
	75 LPSI B	Two	3	3	73-3A			VT-04-483	
					73-3B			VT-04-484	
					73-3C			VT-04-485	
	76 CS Suct A	One	1	1	SI009H004			00-3395	
					SI067H001			01-3256	PSE
					SI067H003			01-3257	PSE
	77 CS Dsch A	One	4	4	SI79H001			00-3243	
					SI79H002			00-3244	
					SI079H003			00-3246	
					SI079H004			00-3245	
		Two	3	3	SI079H005			VT-04-486	RR #4
					SI079H006			VT-04-487	RR #4
					SI082H002			VT-04-488	RR #4
	78 Cont Spray A	Two	3	3	80-3A			VT-04-489	
					80-3B			VT-04-490	
					80-3C			VT-04-491	
	79 CS Suct B	One	3	3	SI034H001			00-3169	
					SI034H002			00-3168	
					SI034H003			00-3167	
					SI034H001			00-3128	PSE
					SI034H003			00-3122	PSE
					SI033H004			00-3117	PSE
					SI034H006			00-3196	PSE
		Two	1	1	SI033H004			VT-04-492	RR #4
	80 CS Dsch B	One	3	3	SI119H007			00-3166	
					SI119H008			00-3165	
					SI119H009			00-3164	
		Two	4	4	SI119H001			VT-04-493	RR #4
					SI119H002			VT-04-494	RR #4
					SI119H003			VT-04-495	RR #4
					SI119H004			VT-04-496	RR #4
	82 SD Cooling A	One	2	2	SI078H005			00-3248	
					SI079H010			00-3247	
	83 SD Cooling A	One	4	4	SI087H009			00-3250	

## APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SI089H001			00-3253	
					SI089H002			00-3251	
					SI089H003			00-3252	
		Two	3	3	SI087H004			VT-04-497	
					SI090H001			VT-04-498	
					SI090H002			VT-04-499	
	85 SD Cooling B	One	3	3	SI119H010			00-3158	
					SI123H006			00-3160	
					SI123H007			00-3159	
		Two	6	6	SI119H011			VT-04-500	RR #4
					SI119H013			VT-04-723	RR #4
					SI119H014			VT-04-724	RR #4
					SI123H002			VT-04-501	RR #4
					SI123H005			VT-04-502	RR #4
					SI123H008			VT-04-503	RR #4
	86 SD Cooling B	One	3	3	SI129H010			00-3157	
					SI129H011			00-3156	
					SI129H012			00-3155	
		Two	7	7	SI072H005			VT-04-504	RR #4
					SI072H006			VT-04-505	RR #4
					SI129H007			VT-04-506	RR #4
					SI129H008			VT-04-507	RR #4
					SI135H001			VT-04-508	RR #4
					SI135H002			VT-04-509	RR #4
					SI135H003			VT-04-510	RR #4
	88 East Wrap	One	8	8	SI072H011			00-3056	
					SI072H013			00-3058	
					SI072H014			00-3057	
					SI072H021			01-3451	
					SI072H022			01-3452	
					SI073H001			01-3448	
					SI073H002			01-3449	
					SI073H003			01-3450	
	89 East Wrap	One	4	4	SI194H012			00-3154	
					SI194H013			00-3153	
					SI194H014			00-3059	
					SI194H023			00-3152	
					SI194H013			00-3177	PSE
	90 SI East Wrap	Two	2	2	SI134H009			VT-04-511	RR #4
					SI134H010			VT-04-512	RR #4
	91 West Wrap	One	7	7	SI070H009			00-3398	
					SI070H010			00-3397	
					SI070H011			00-3413	
					SI070H012			00-3399	
					SI070H013			00-3414	
					SI070H014			00-3415	
					SI070H015			00-3396	
					SI070H016			00-3412	
		Two	2	2	SI071H002			VT-04-513	RR #4
					SI071H003			VT-04-514	RR #4
	92 West Wrap	One	5	5	SI239H003			00-3402	
					SI241H009			01-3260	PSE
					SI241H011			01-3261	PSE
					SI241H012			00-3274	
								01-3262	PSE



**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SI241H014			00-3400 01-3263	PSE
					SI241H015			00-3401	
					SI241H021			00-3490	
		Two	5	5	SI239H001			VT-04-515	
					SI239H002			VT-04-516	
					SI241H009			VT-04-517	RR #4
					SI241H011			VT-04-518	RR #4
					SI241H016			VT-04-519	Support deleted
	93 SI West Wrap	Two	2	2	SI089H010			VT-04-520	RR #4
					SI089H013			VT-04-521	RR #4
	94 LPSI A	One	3	3	SI089H007			00-3467	
					SI089H008			00-3466	
					SI089H009			00-3465	
					SI241H005			01-3258	PSE
					SI241H007			01-3259	PSE
					SI241H008			01-3271	PSE
		Two	6	6	SI241H006			VT-03-189	RR #4
					SI241H007			VT-03-190	RR #4
					SI241H008			VT-03-191	RR #4
					SI241H017			VT-03-192	
					SI070H004			VT-04-522	RR #4
					SI070H008			VT-04-524	
	95 LPSI B	One	6	6	SI072H008			00-3464	
					SI072H010			00-3459	
					SI134H011			00-3458	
					SI134H012			00-3542	
					SI194H003			00-3506	
					SI194H005			00-3511	
					SI194H005			00-3126	PSE
					SI194H007			00-3125	PSE
					SI194H015			00-3124	PSE
					SI194H021			00-3119	PSE
		Two	10	10	SI072H007			VT-03-135	
					SI072H009			VT-03-136	
					SI194H004			VT-04-525	RR #4
					SI194H007			VT-04-526	RR #4
					SI194H008			VT-04-527	RR #4
					SI194H009			VT-04-528	RR #4
					SI194H010			VT-04-529	RR #4
					SI194H011			VT-04-530	RR #4
					SI194H015			VT-04-531	RR #4
					SI194H021			VT-04-532	
	96 LPSI 1A	One	3	3	SI202H007			00-3496	
					SI202H008			00-3495	
					SI202H009			00-3494	
		Two	8	8	SI202H002			VT-03-232 VT-04-533	RR #4
					SI202H003			VT-03-233 VT-04-534	RR #4
					SI202H004			VT-03-234 VT-04-535	RR #4
					SI202H005			VT-03-235 VT-04-536	RR #4, Snubber deleted

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SI202H006			VT-03-236 VT-04-537	RR #4
					SI202H010			VT-03-237 VT-04-538	RR #4, Snubber deleted
					SI202H011			VT-03-238 VT-04-539	RR #4, Snubber deleted
					SI202H015			VT-03-239 VT-04-540	RR #4
		Three	5	5	SI202H01			VT-06-164	RR # 4
					SI202H012			VT-06-165	RR # 4
					SI202H016			VT-06-166	RR # 4
					SI202H017			VT-06-167	
					SI202H018			VT-06-168	
	97 LPSI to Loop 1B	One	10	10	SI220H009			00-3505	
					SI220H010			00-3504	
					SI220H011			00-3503	
					SI220H012			00-3502	
					SI220H013			00-3501	
					SI220H014			00-3500	
					SI220H015			00-3499	
					SI220H019			00-3498	
					SI220H022			00-3497	
					SI220H008			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
		Three	7	7	SI220H003			VT-06-169	Removed
					SI220H005			VT-06-170	
					SI220H007			VT-06-171	
					SI220H023			VT-06-172	
					SI220H024			VT-06-173	
					SI220H027			VT-06-174	
					SI220H029			VT-06-175	
	98 LPSI to 2A	One	2	2	SI155H005			00-3163	
					SI155H006			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 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
		Three	4	4	SI174H004			VT-06-176	
					SI174H005			VT-06-177	
					SI174H011			VT-06-178	
					SI174H012			VT-06-179	
	100 LPSI A Suct	One	2	2	SI241H019			00-3029	
					SI369H001			00-3161	
		Two	1	1	84-5			VT-03-399	

## APPENDIX A

## INSERVICE INSPECTION SUMMARY REPORT

ASME	Zone Comp/Sys	Insp	Amt	Amt	Item ID		Reports		Remarks
Item no		Per	Req	Comp		Vol	Surf	Visual	
	101 LPSI B Suct	Three	8	8	85-5			VT-06-180	
					SI194H016			VT-06-181	
					SI194H018			VT-06-182	
					SI194H022			VT-06-183	
					SI194H025			VT-06-184	
					SI194H026			VT-06-185	
					SI368H001			VT-06-186	
					SI368H002			VT-06-187	
	102 SI A	One	6	6	SI008H004			01-3254	PSE
					SI009H001			01-3255	PSE
					SI307H002			01-3264 01-3281	PSE
					SI307H003			01-3282	
					SI307H004			01-3470	Support deleted
					SI307H005			01-3265 01-3283	PSE
					SI307H006			01-3266	PSE
					SI307H007			01-3267	PSE
					SI307H008			01-3471	
					SI307H015			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 Suct A	One	6	6	CH142H013			00-3519	
					CH142H014			00-3518	
					CH142H015			00-3517	
					CH142H019			00-3516	
					CH142H022			00-3515	
					CH424H001			00-3520	
					CH424H002			01-3269	PSE
					CH424H003			01-3270	PSE
					SI142H003			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 Suct B	One	7	7	SI033H001			00-3512	
					SI033H002			00-3513	
					SI033H003			00-3514	
					SI308H005			00-3507	
					SI308H008			00-3508	
					SI308H010			00-3509	
					SI308H011			00-3510	
					SI031H001			00-3127	PSE
					SI308H002			00-3180	PSE
					SI308H004			00-3181	PSE
					SI308H005			00-3182	PSE
					SI308H009			00-3115	PSE
		Two	7	7	SI308H001			VT-03-167	RR #4

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					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 VT-04-731	RR #4
	105 RF Water	One	7	7	CH149H003			00-3116	PSE
					CH149H005			00-3123	PSE
					CH149H007			00-3121	PSE
					CH149H008			00-3184	PSE
					CH149H012			00-3179	PSE
					CH149H014			00-3178	PSE
					CH149H021			00-3118	PSE
					CH149H009			01-3285	
					CH149H010			01-3286	
					CH149H012			01-3287	
					CH149H013			01-3288	
					CH149H014			01-3289	
					CH149H021			01-3280	
					CH149H028			01-3290	
		Two	7	7	CH149H004			VT-03-182 VT-04-732	
					CH149H005			VT-03-183 VT-04-733	
					CH149H006			VT-03-184 VT-04-734	
					CH149H007			VT-03-185 VT-04-735	
					CH149H025			VT-03-186 VT-04-736	RR #4
					CH149H026			VT-03-391 VT-04-737	RR #4
					CH149H027			VT-03-392 VT-04-738	RR #4
	106 HPSI A Dsch	One	8	8	SI099H001			01-3422	
					SI099H002			01-3423	
					SI100H001			01-3417	
					SI100H002			01-3418	
					SI100H003			01-3419	
					SI100H005			01-3420	
					SI100H034			01-3421	
					SI106H001			01-3424	
		Two	7	7	SI100H009			VT-04-557	
					SI100H010			VT-04-558	
					SI100H011			VT-04-559	
					SI105HB			VT-04-560	
					SI105HC			VT-04-561	
					SI105HD			VT-04-562	
					SI105HE			VT-04-563	
	107 HPSI B Dsch	One	6	6	SI107H003			01-3352	
					SI107H011			01-3293	
					SI107H012			01-3292	
					SI112H00C			01-3353	
					SI112H00G			01-3351	

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SI112H00H			01-3291	
		Two	6	6	SI107H005			VT-04-564	RR #4
					SI107H006			VT-04-565	RR #4
					SI107H007			VT-04-566	RR #4
					SI107H008			VT-04-567	RR #4
					SI107H009			VT-04-568	RR #4
					SI107H010			VT-04-569	RR #4
	108 HPSI Dsch	One	11	11	SI100H022			00-3468	
					SI100H023			00-3469	
					SI100H024			00-3470	
					SI100H025			00-3471	
					SI100H026			00-3472	
					SI100H027			00-3473	
					SI100H028			00-3474	
					SI100H029			00-3475	
					SI100H031			00-3476	
					SI100H032			00-3478	
					SI100H035			00-3477	
		Two	11	11	SI100H012			VT-04-570	RR#4
					SI100H013			VT-04-571	
					SI100H018			VT-04-572	RR#4
					SI100H019			VT-04-573	RR#4
					SI100H020			VT-04-574	RR#4
					SI100H021			VT-04-575	
					SI118H00A			VT-04-576	
					SI118H00B			VT-04-577	
					SI118H00D			VT-04-578	
					SI118H00R			VT-04-579	
					SI118H00S			VT-04-580	
	109 HPSI	One	7	7	SI107H013			01-3437	
					SI107H014			01-3438	
					SI107H015			01-3439	
					SI107H016			01-3440	
					SI107H021			01-3441	
					SI107H047			01-3442	
					SI107H050			01-3425	Support deleted
		Two	7	7	SI107H019			VT-04-581	RR#4
					SI107H020			VT-04-582	RR#4
					SI107H025			VT-04-583	
					SI107H026			VT-04-584	RR#4
					SI107H027			VT-04-585	
					SI107H028			VT-04-586	
					SI107H029			VT-04-587	
	110 HPSI	One	7	7	SI103H00B			01-3298	
					SI103H00D			01-3299	
					SI103H00E			01-3300	
					SI218H001			01-3294	
					SI218H002			01-3295	
					SI218H003			01-3296	
					SI218H004			01-3297	
		Two	7	7	SI107H039			VT-04-588	RR #4
					SI107H041			VT-04-589	RR #4
					SI107H042			VT-04-590	RR #4
					SI107H043			VT-04-591	RR #4
					SI107H044			VT-04-592	RR #4

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/Sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
					SI107H045			VT-04-593	RR #4
					SI107H049			VT-04-594	
	111 HPSI	One	3	3	SI100H037			01-3302	
					SI100H00A			01-3354	
					SI100H00B			01-3301	
		Two	4	4	SI236H001			VT-04-595	
					SI236H002			VT-04-596	
					SI236H003			VT-04-597	
					SI236H004			VT-04-598	
	112 HPSI	One	3	3	SI176H001			01-3303	
					SI176H002			01-3304	
					SI176H003			01-3305	
		Two	3	3	SI100H017			VT-04-599	
					SI102H00A			VT-04-600	
					SI102H00B			VT-04-601	
	113 HPSI	One	5	5	SI107H022			01-3309	
					SI107H024			01-3310	
					SI157H002			01-3306	
					SI157H003			01-3307	
					SI157H004			01-3308	
		Two	4	4	SI108H00A			VT-04-602	
					SI109H00A			VT-04-603	
					SI157H00A			VT-04-604	
					SI176H00A			VT-04-605	
	114 HPSI 1A & 1B	Three	2	2	SI218H005			VT-06-188	
					SI236H005			VT-06-189	
	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 A	One	4	4	116-1A			01-3234	
					116-1B			01-3234	
					116-1C			01-3234	
					116-1D			01-3234	
	117 HPSI B	Two	4	4	117-1A			VT-04-606	
					117-1B			VT-04-607	
					117-1C			VT-04-608	
					117-1D			VT-04-609	

**APPENDIX B**

**CODE LIMITATIONS**

# REFUELING OUTAGE NUMBER TWELVE

## CODE LIMITATIONS

<u>ASME ITEM</u>	<u>ZONE/COMPONENT</u>	<u>ITEM ID</u>	<u>REPORT NO.</u>
B 8.20	5 PZR	5-1	UT-06-002 & MT-06-003
<u>Limitation</u>	The weld for the Pressurizer skirt is limited due to geometrical configuration. Volumetric examination of the weld is estimated at 75% coverage of the code required examination volume. The surface examination is limited to the OD.		



# **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
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This report is a summary of the second interval 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 12-8-2004 TO 5-12-2006
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 7/3/06 SIGNED: ARIZONA PUBLIC SERVICE COMPANY BY Michael Melchior

### CERTIFICATE OF INSERVICE INSPECTION

I, THE UNDERSIGNED, HOLDING A VALID COMMISSION ISSUED BY THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS AND THE STATE OR PROVINCE OF ARIZONA EMPLOYED BY HSB CT OF HARTFORD, CONNECTICUT HAVE INSPECTED THE COMPONENTS DESCRIBED IN THIS OWNERS REPORT DURING THE PERIOD 12-8-04 TO 5-12-06, 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 RS [Signature] COMMISSIONS NB 9685 "A, N, I, C" Az 264  
DATE 8-3-06 NAT'L BOARD, STATE, PROVINCE

## **APPENDIX D**

### **FORMS NIS-2**

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PRCEL018
2. Item Description: 4" Pressurizer Spray Line
3. N-5 Data Package Number: 3RC03-2
4. W.O. Number: 219337
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: To remove the 4" Pressurizer Spray line adjacent to the Pressurizer per Eng-DM 219184
8. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

The Pressurizer Spray Line and Aux. Spray Line are subjected to the highest Thermal Stress Loading in the Reactor Coolant System; the piping is being replaced to ensure continued safe operation of the Pressurizer. Reference Eng-DM 219184 Evaluation.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☒ YES ☐ NO

Initial KVS Date 10/26/2005 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial KVS Date 10/26/2005 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial KVS Date 10/26/2005 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial KVS Date 10/26/2005 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
4" Pipe	APN 00053306		HT# 408P10	MR 1006793
4" Elbow	APN 00054113		HT# MHPU-1	MR 1006793
4" Reducing Tee	APN 00054469		HT# MHLD-1	MR 1006793
2" Pipe	APN 43510642		HT# 505244	MR 1006793
1" Weldolet	APN 43541147		HT# 3139ANA	MR 1006793

18. Planner Karl V. Savage 10/26/2005 Printed Name: Karl V. Savage  
Signature Date

19. ISI R.P. Indap 10/26/2005 Printed Name: R.P. INDAP Log Entry RPP  
Signature Date

20. ANII R.G. Hogstrom 10-26-05 Printed Name: R.G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 10/26/2005

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 219337

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, 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)
4" Pipe	N/A	N/A	N/A	3PRCEL018	2005	Replacement	NO
4" Elbow	N/A	N/A	N/A	3PRCEL018	2005	Replacement	NO
4" Reducing Tee	N/A	N/A	N/A	3PRCEL018	2005	Replacement	NO
2" Pipe	N/A	N/A	N/A	3PRCEL018	2005	Replacement	NO

7. Description of Work: Replacement of the Pressurizer Spray and Aux Spray lines adjacent to the Pressurizer

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

N-416-2 ☐ Other Pressure 2130 psi

Test Temperature 207 °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 219337, Replacement of Pressurizer Spray, Aux. Spray piping and vent valve assembly.  
Reference Eng-DM 219184.

NOT 2565°F

Pre-Pressured Test WO Review—ISI

ANII

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: [Signature] Date: 5/10/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-26-05 to 5-10-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspectors Signature

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

Date: 5-10-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3JSIBFE0348
- Item Description: Conatinent Spray Pump "B" Discharge Flow Element
3. N-5 Data Package Number: 3SI07-6
4. W.O. Number: 2591421
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove flow element and approximately 2 foot of upstream piping, install new flange, spool and annubar IAW DMWO 2316467.
8. ☐ ISI Flaw. NDE Method of Flaw Detection: \_\_\_\_\_  
Report Number: \_\_\_\_\_
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Replacement is IAW DMWO 2316467

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☒ NO Per telecon Wiley Ahlstrom  
MRB 4/16/06

Initial ME Date 11/05/2005 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☒ YES ☐ NO  
Initial ME Date 11/05/2005 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial ME Date 11/05/2005 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial ME Date 11/05/2005 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Flanged Pipe Section	00065137	13715.2.2	N/A	MR# 1046158-0001
Annubar Flow Element	00065137	13715.1.2	N/A	MR# 1046158-0001
10" RF Flange	00068314	N/A	AT# CQX	MR# 1046155-0005
Red threaded 1.125"	4314-0308	N/A	HT# MYM	P.O. 336 05537
HEX HEX nut 1.125"	4312-0595	N/A	HT# TCK 280	P.O. 300272185 04.001

18. Planner Glenn E. Moore 11/5/05 Printed Name: Glenn E. Moore  
Signature Date

19. ISI Ramakant Indap 12/6/05 Printed Name: Ramakant Indap  
Signature Date

20. ANII Robert Hogstrom 12-7-05 Printed Name: Robert Hogstrom  
Signature Date



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

As Required by the Provisions of the ASME Code Section XI

Owner: Arizona Public Service Company, et. al.

Date: 12/06/05

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 2591421

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection System (SI) ASME Sect. III Class 2

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Flanged Pipe Section	Dietrich Standard	13715.2.2	N/A	3JSIBFE0348	2006	Replacement	Yes
Annubar Flow Element	Dietrich Standard	13715.1.2	N/A	3JSIBFE0348	2006	Replacement	Yes
10" RF Pipe Flange	N/A	Ht. # CQX	N/A	3JSIBFE0348	2006	Replacement	No
Threaded Rod 1.125"	N/A	Ht. # MYM	N/A	3JSIBFE0348	2006	Replacement	No
Heavy Hex Nut 1.125"	N/A	Ht. # TCK280	N/A	3JSIBFE0348	2006	Replacement	No

7. Description of Work: Remove flow element and section of pipe and install new spool and annubar element.

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

Other ☐ Pressure 40 psi

Test Temperature 72 °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: Flow Element 1JSIBFE0348 to be removed along with upstream flange and approximately 2 feet of piping.  
This will be replaced with a new flange and spool assembly containing an annubar element IAW EDC 2003-00487 and  
W.O. 2591421.

Pre-Pressured Test WO Review - ISI

SPR 4/24/06

ANII

N/A

### Certificate of Compliance

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

Type Code Symbol Stamp

N/A

Certificate of Authorization No.

N/A

Expiration Date:

N/A

Signed:

[Signature]

Owner or Owner's Designee, Title

ISI EDC

Date:

4-25-06

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 12-7-05 to 4-25-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Inspectors Signature

Commissions:

NB 9685 "A.N.I.C" Az 264

Date:

4-25-06

**FORM NPP-1 CERTIFICATE HOLDERS= DATA REPORT FOR FABRICATED  
NUCLEAR PIPING SUBASSEMBLIES\***

**As Required by the Provisions of the ASME Code, Section III, Division 1**

1. Fabricated and certified by Dieterich Standard Inc., Box 9000, 5601 North 71st Street, Boulder, CO 80301
2. Fabricated for Pinnacle West Capital Corp. PO Box 53940 Phoenix Az. 85072-3940
3. Location of Installation: APS- Palo Verde 5801 South Wintersburg Rd. Tonopah Az 85354
4. Identification 13715.1.2 CRN-n/a SU-10348 AB Nat'l Bd. #- n/a 2006
5. ASME Code, Section III, 1974 Edition, Winter 1975 Addenda. Class 2 Code Case- N/A
6. Shop hydrostatic test 1512 psi at Ambient room temperature degrees F. (if performed)
7. Description of piping- Annubar flow sensor model NFF+26S
8. Certificate Holders= Data Report properly identified and signed by Commissioned Inspectors have been furnished for the following items of this Report: N/A
9. Remarks: NA

**CERTIFICATE OF SHOP COMPLIANCE**

We certify that the statements made in this Report are correct and that the fabrication of the described piping conforms to the rules for construction of the ASME Code, Section III.

NPT Certificate of Authorization No. N-1728 Expires: April 29, 2007

Date: 2/28/2006

Dieterich Standard Corp.

Signed: Bill King

**CERTIFICATE OF SHOP INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Colorado, and employed by One Beacon America Insurance Company of Boston have inspected the component described in this Data Report on 2/28/2006 and state that, to the best of my knowledge and belief, the Certificate Holder has constructed this component in accordance with the ASME Code, Section III.

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

Date: 2/28/2006 Signed [Signature]

Commissions: NB 9625, ANB Colo. 326

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

1. Dieterich Standard Inc., Box 9000, 5601 North 71<sup>st</sup> Street, Boulder CO 80301
2. Pinnacle West Capital Corp. PO Box 53940 Phonex AZ. 85072-3940
3. APS- Palo Verde 5801 South Wintersburgh Rd. Tonopah AZ 85354
4. N13715.1.2 CRN- n/a SU-10348 BA Nat'l Bd. #- n/a Code Case- n/a 2006
5. Annubar flow sensor model NFF+26s 316/316Lss

Head	SA-479
Transition	SA-312
Support disc & Sensor Flange	SA-182
Velocity probe (sensor) & tip	SA-240
Sensor tubes	SA-213
Weld filler, Tag ring	SFA 5.9

Certificate holder *Eric Rign* date 2/28/06

Authorized inspector  date 2/28/06

**FORM NPP-1 CERTIFICATE HOLDERS= DATA REPORT FOR FABRICATED  
NUCLEAR PIPING SUBASSEMBLIES\***

**As Required by the Provisions of the ASME Code, Section III, Division 1**

1. Fabricated and certified by Dieterich Standard Inc., Box 9000, 5601 North 71st Street, Boulder, CO 80301
2. Fabricated for Pinnacle West Capital Corp. PO Box 53940 Phoenix Az. 85072-3940
3. Location of Installation: APS- Palo Verde 5801 South Wintersburg Rd. Tonopah Az 85354
4. Identification 13715.2.2 CRN-n/a SU-10348 AB Nat'l Bd. #- n/a 2006
5. ASME Code, Section III, 1974 Edition, Winter 1975 Addenda. Class 2 Code Case- N/A
6. Shop hydrostatic test 1512\_psi at Ambient room temperature degrees F. (if performed)
7. Description of piping- Model MCJSFN01 Flanged pipe section
8. Certificate Holders= Data Report properly identified and signed by Commissioned Inspectors have been furnished for the following items of this Report: N/A
9. Remarks: NA

**CERTIFICATE OF SHOP COMPLIANCE**

We certify that the statements made in this Report are correct and that the fabrication of the described piping conforms to the rules for construction of the ASME Code, Section III.

NPT Certificate of Authorization No. N-1728 Expires: April 29, 2007

Date: 2/28/2006

Dieterich Standard Corp.

Signed: Bill Rign

**CERTIFICATE OF SHOP INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Colorado, and employed by One Beacon America Insurance Company of Boston have inspected the component described in this Data Report on 2/28/2006 and state that, to the best of my knowledge and belief, the Certificate Holder has constructed this component in accordance with the ASME Code, Section III.

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

Date: 2/28/2006 Signed [Signature]

Commissions: NB 9625, ANB Colo. 326

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

1. Dieterich Standard Inc., Box 9000, 5601 North 71<sup>st</sup> Street, Boulder CO 80301
2. Pinnacle West Capital Corp. PO Box 53940 Phoenix AZ. 85072-3940
3. APS- Palo Verde 5801 South Wjnersburg Rd. Tonopah AZ. 85384
4. 13715.2.2 CRN- n/a SU- 10348 AB Nat'l Bd. #- n/a Code Case- n/a 2006
5. Flanged pipe section MCJSFN01

Pipe section 10" sch 40 SA-312

Flanges 10" 400#, Flanged pipet, Socket weld fitting,  
Opposite side support plug SA-182

Studs SA-564

Nuts SA-194

Weld filler, Tag ring. SFA 5.9

Certificate holder *Bill King* date 2/28/06

Authorized inspector  date 2/28/06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page \_\_\_\_\_ of \_\_\_\_\_

1. Component ID 3MCHEX07
- 2.. Item Description: Charging pump pulsation dampener
3. N-5 Data Package Number: 3CH04-1      4. W.O. Number: 2607584
5. Original Construction Code Edition: 1977 Edition, Winter 1977 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: 5 year PM for replacement of bladder and rubber seals.
8. ☐ ISI Flaw      NDE Method of Flaw Detection: \_\_\_\_\_  
Report Number: \_\_\_\_\_

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

Not a failure of the ASME pressure boundary. The ASME retaining ring is being replaced because it is part of an assembly with the rubber anti-extrusion ring

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

Initial Dmg Date 1-6-05      If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Dmg Date 1-6-05      If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Dmg Date 1-6-05      16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Dmg Date 1-6-05      17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Retaining Ring	APN 45150602	n/a	865884	MR 249657

18. Planner David Goodlet 1-6-05  
Signature      Date

Printed Name: David Goodlet

19. ISI R.P. Indap 1-6-05  
Signature      Date

Printed Name: R.P. INDAP Log Entry RPE

20. ANII RL Houston 1-6-05  
Signature      Date

Printed Name: RL Houston

# 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: 1-6-2005

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 2607584

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 1977 Edition, Winter 1977 Addenda, \_\_\_\_\_ Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Retaining Ring	ABB- Greer hyd	n/a	n/a	3MCHEX07	2005	Replacement	NO

7. Description of Work: \_\_\_\_\_

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

N-416-2 ☐ Other Pressure \_\_\_\_\_ psi

Test Temperature \_\_\_\_\_ °F

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



## FORM NIS-2 (Back)

9. Remarks: The retaining ring for 3MCHEX07 was replaced as part of the 5 year PM under wo# 2607584.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: DP Podak, Consulting Metallurgical Engineer Date: 1-6-2005  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 1-6-05 to 1-6-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspectors Signature

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

Date: 1-6-05

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3JCHNPSV0115
2. Item Description: CROSBY RELIEF VALVE
3. N-5 Data Package Number: 3CH03-3
4. W.O. Number: 2636962
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: VALVE REPLACEMENT
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A  
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Not a failure of the ASME presure boudary. Spare valve is being installed to expedite work.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1976 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☐ YES ☒ NO

Initial Dmg Date 5-18-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Dmg Date 5-18-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Dmg Date 5-18-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Dmg Date 5-18-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
3JCHNPSV0115	APN 45000473	N61177-00-0003	n/a	WO 1146362

18. Planner David Gooldet 5-18-05 Printed Name: DAVID GOOLDET  
Signature Date
19. ISI Alan Morrow 6-23-05 Printed Name: Alan Morrow Log Entry am  
Signature Date
20. ANII R.G. Houston 6-23-05 Printed Name: R.G. Houston  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/18/2005

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 2636962

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: CHEMICAL AND VOLUME CONTROL

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
VALVE	CROSBY	N61177-00-0003	n/a	3JCHNPSV 0115	1979	Replacement	YES

7. Description of Work: REPLACEMENT OF VALVE

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

N-416-2 ☐ Other Pressure        psi

Test Temperature        °F

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

## FORM NIS-2 (Back)

9. Remarks: VALVE 3ICHNPSV0115 WAS REPLACED WITH A SPARE VALVE UNDER 2636962 TO EXPIDITE WORK ACTIVITY.

Pre-Pressured Test WO Review – ISI N/A  
ANII N/A

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Morrow ISI Engineer Date: 6/23/05  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 6-23-05 to 6-23-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

25 Lytton  
Inspectors Signature

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

Date: 6-23-05

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PEWBV225  
 2.. Item Description: 2" Globe Valve  
 3. N-5 Data Package Number: 3EW02-1 4. W.O. Number: 2732624  
 5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda  
 6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda  
 7. Work Description: Replace valve disc  
 8. ☐ ISI Flaw NDE Method of Flaw Detection:  
 Report Number:

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

Replacement of disc is to stop seat leakage. No failure in the ASME boundary.

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

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

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

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

Initial SW Date 10/04/04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial SW Date 10/04/04 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Disc and stem assembly	70277300S407	ABT 13	N/A	MR 906353

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

19. ISI Alan Morrow 10/4/04 Printed Name: Alan Morrow Log Entry am  
 Signature Date

20. ANII R.G. Hogstrom 10-4-04 Printed Name: R.G. Hogstrom  
 Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 09/24/2004

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 2732624

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Disc & stem assembly	Dresser	A6T 13	N/A	3PEWBV225	1992	Replacement	Yes

7. Description of Work: Replaced the Disc and stem assembly

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

N-416-2 ☐ Other Pressure      psi

Test Temperature      °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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: WO# 2732624 for replacing disc and stem assembly.

Pre-Pressured Test WO Review – ISI

N/A

ANII

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: [Signature] SR. ENGINEER Date: 8/11/05  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 10-4-04 to 8-11-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

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

Date: 8-11-05

INDUSTRIAL VALVES

DRESSER

ALEXANDRIA, LOUISIANA

P.O. No. 60216078

QUALITY DOCUMENTS

PAGE 3 of 6

FORM N-2 N OR NPT CERTIFICATE HOLDERS' DATA REPORT FOR IDENTICAL  
NUCLEAR PARTS AND APPURTENANCES\*As Required by the Provisions of the ASME Code, Section III, Div. 1  
Not To Exceed One Day's Production

Page 1 of 1

Dresser Industries, Inc., Dresser Valve &amp; Controls Div., Industrial Valve

1. Manufactured and certified by Operations, Intersection Hwy. 167 & 3225 North, Alexandria, LA 71309-1430  
(name and address of certificate holder)

2. Manufactured for Arizona Public Service Co., P. O. Box 53940, Phoenix, AZ 85072

(name and address of purchaser)

3. Location of installation Arizona Public Service Co., Wintersburg, Arizona 85343

(name and address)

4. Type DS407, Rev. 13 AMS 5387 N/A N/A 1992  
(drawing no.) (mat'l spec no.) (tensile strength) (CRN) (year built)5. ASME Code, Section III: 1974 Summer 1975 2 N/A  
(edition) (addenda) (class) (Code Case No.)6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A  
(No.)

7. Remarks: N/A

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

9. When applicable, Certificate Holders' data reports are attached for each item of this report.

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(1) ABT11	
(2) ABT12	
(3) ABT13	
(4)	
(5)	
(6)	
(7)	
(8)	
(9)	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. in Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure N/A psi Temp. N/A °F Hydro test pressure N/A at temp. °F

\*Supplemental information in form of lists, sketches or drawings may be used provided, (1) size is 8-1/2 x 11, (2) information in items 2 &amp; 3 on this data report is included on each sheet, (3) sheet is numbered and number of sheets is recorded at top of this form, and (4) each additional sheet shall be signed by the Certificate Holder and the ANI.



CERTIFICATE OF DESIGN				
Design specifications certified by	N/A	P.E.	N/A	Reg. no. N/A
(when applicable)				
Design report <sup>a</sup> certified by	N/A	P.E.	N/A	Reg. no. N/A

CERTIFICATE OF SHOP COMPLIANCE	
We certify that the statements made in this report are correct and that this (these) <u>discs assy.</u> conform to the rules of construction of the ASME Code, Section III.	
NPT Certificate of Authorization No.	N-2434 Expires May 20, 1995
Date <u>6-22-92</u> Name <u>See Line 1</u> Signed <u>R. R. Thomas</u> (NPT Certificate Holder) (authorized representative)	

CERTIFICATE OF SHOP COMPLIANCE	
I, the undersigned, holding a valid commission by the National Board of Boiler and Pressure Vessel Inspector and the state or province of Louisiana and employed by The Hartford Steam Boiler Inspection & Insurance Co., of Hartford, CT, have inspected these items described in this data report on <u>6-22-92</u> , and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III. Each part listed has been authorized for stamping on the date shown above.	
By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied concerning the equipment described in this data report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.	
Date <u>6/24/92</u> Signed <u>[Signature]</u> Commissions <u>66664</u> (Authorized Inspector) (Nat'l Bd. (incl. endorsements) state or prov. and no)	

P.O. No. 60216078  
 QUALITY DOCUMENTS  
 PAGE 4 of 6

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2JEWALV0091
2. Item Description: Essential Chill Water System Surge Tank "A" Level Makeup Valve.
3. N-5 Data Package Number: 2EW01-3
4. W.O. Number: 2744635
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove and replace valve body / bonnet and perform internal rework.
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
No failure in the ASME boundry. replacement is to correct seat leakage  
RPT 12/21/04

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

Initial Geo Date 12/15/04 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Geo Date 12/15/04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Geo Date 12/15/04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Geo Date 12/15/04 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
76HH-001 Valve Body	00086699	7441		MR/00930715-0001 PO/50007551-01.001
Main Disc	4502-000497	21A		MR/00930715-0001 PO/50007551-01.001
Main Disc	4502-000497	21A		MR/00930715-0001 PO/50007551-01.001
Bonnet	4506-0111	327		MR/00930715-0001 PO/50007551-01.001

18. Planner G. Osmundson 12/15/04 Printed Name: G. Osmundson  
Signature Date

19. ISI R.P. Indap 12/21/04 Printed Name: R.P. INDAP Log Entry RPT  
Signature Date

20. ANII R.G. Hogstrom 12-21-04 Printed Name: R.G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 2/3/2004

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2744635

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 2EW01-3

5. (a) Applicable Construction Code ASME Section III NB, Class 3 1974 Edition, Winter 1975 Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Valve	Target Rock	5	N/A	2JEWALV0091	1978	Replaced	Yes
Valve Body	Target Rock	7441	N/A	2JEWALV0091	2005	Replacement	Yes
Bonnet	Target Rock	327	N/A	2JEWALV0091	1990	Replacement	Yes
Main Disc	Target Rock	21A	N/A	2JEWALV0091	1991	Replacement	Yes

7. Description of Work: Remove/replace valve body & bonnet, rework valve internals, reinstall bonnet tack weld.

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

Other ☐

Pressure 120 psi

Test Temperature 70 °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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: remove bonnet tack, remove internals, replace valve body and bonnet, rework valve internals and reinstall bonnet tack

W.O. 2744635

Pre-Pressured Test WO Review - ISI

N/A

ANII

N/A

### Certificate of Compliance

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

Type Code Symbol Stamp

N/A

Certificate of Authorization No.

N/A

Expiration Date:

N/A

Signed:

RP Prady - Consulting Metallurgical Engineer Date: 2-3-2005  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 12-21-04 to 2-3-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RP Prady  
Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264

National Board, State, Province, and Endorsements

Date:

2-3-05

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

Pg. 1 of 2

1. Manufactured and certified by Target Rock, 1966E Broadhollow Rd.; E. Farmingdale, NY 11735  
(name and address of NPT Certificate Holder)
2. Manufactured for Arizona Public Service Co.; Phoenix, AZ 85072  
(name and address of Purchaser)
3. Location of Installation Palo Verde Nuclear Generating Station; Wintersburg Rd.; Tonopah, AZ  
(name and address)
4. Type 206134-1 SA182 F316L 75 ksi N/A 2005  
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III, Division 1: 1974 Winter 1975 1 None  
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A  
(no.)
7. Remarks: Valve Body, p/n 200928-1 with Sleeve p/n 102178-1 installed  
Spare part for valve model no. 76HH-001

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

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

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1) 7441	NA	(26)	
(2) ---		(27)	
(3)		(28)	
(4)		(29)	
(5)		(30)	
(6)		(31)	
(7)		(32)	
(8)		(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure N/A psi. Temp. N/A °F Hydro. Test pressure 425 psig at temp. °F  
(when applicable) Ambient

\* Supplemental Information in form of lists, sketches, or drawings may be used provided (1) size is 8½ x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88) This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300 REPRINT (7/91)

## FORM N-2 (BACK - Pg. 2 of 2)

Certificate Holder's Serial Nos. 206134-1 s/n 7441

## CERTIFICATION OF DESIGN

Design specifications certified by V. Nalarian/A.I. Pressman P.E. State AZ Reg. No. 10746/10409  
 (when applicable)  
 Design report\* certified by Albert J. Bradicich P.E. State NY Reg. No. 025990  
 (when applicable)

## CERTIFICATE OF COMPLIANCE

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

NPT Certificate of Authorization No. N-1948 Expires 03/11/2005

Date 1/11/2005 Name Target Rock Signed [Signature]  
 (NPT Certificate Holder) R. E. Glazier, QA Manager  
 (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of New York and employed by OneBeacon America Insurance Co. of Boston, MA have inspected the pump, or valve, described in this Data Report on 1/11/2005 and state that to the best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 1/11/2005 Signed [Signature] Commissions NY 5102  
 (Authorized Inspector) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

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

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

Pg. 1 of 1

Revised 11-6-91

1. Manufactured and certified by Target Rock Corp., 1966E Broadhollow Rd, E. Farmingdale, NY 11735  
(name and address of NPT Certificate Holder)
2. Manufactured for Arizona Public Service Co., Phoenix, Arizona  
(name and address of purchaser)
3. Location of installation Palo Verde Nuclear Generating Station, Wintersburg, Arizona  
(name and address)
4. Type 200861-1 SA 479 410 70 KSI N/A 1990  
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III: 1974 \*-S-76- Winter 3 N/A  
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A  
(no.)
7. Remarks: Spare Parts for a completed valve - Model 76HH-001  
"Bonnet Ass'y"

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

Part or Appurtenance Serial Number	National Board No. in Numerical Order	Part or Appurtenance Serial Number	National Board Number in Numerical Order
(1) 324	N/A	(26)	
(2) 323	N/A	(27)	
(3) 325	N/A	(28)	
(4) 327	N/A	(29)	
(5) 330	N/A	(30)	
(6) 333	N/A	(31)	
(7) 342	N/A	(32)	
(8) N/A	N/A	(33)	
(9)		(34)	
(10)		(35)	
(11)		(36)	
(12)		(37)	
(13)		(38)	
(14)		(39)	
(15)		(40)	
(16)		(41)	
(17)		(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure N/A psi. Temp. N/A °F. Hydro. test pressure 425 at temp. °F  
(when applicable)

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

112/861

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

E. Bajada / P.A. Manager  
Date 11/6/91

W.A. Roland, ANI  
Date 11/6/91

FORM N-2 (back)

205

Mfr. Serial No. See Front

## CERTIFICATION OF DESIGN

Design specifications certified by V. Najarian P.E. State AZ Reg. no. 10746  
(when applicable)

Design report\* certified by                      P.E. State              Reg. no.               
(when applicable)

## CERTIFICATE OF SHOP COMPLIANCE

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

NPT Certificate of Authorization No. 1948 Expires 12-12-92

Date 11/1/90 Name Target Rock Corporation Signed E. Bajada  
(NPT Certificate Holder) (Authorized representative)  
E. Bajada, Q.A. Manager

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State of Province of  
New York and employed by Commercial Union Insurance Company  
 of Boston, Mass. have inspected these items described in this Date Report on 11/1/90, and state that to the  
 best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section  
 III. Each part listed has been authorized for stamping on the date shown above.

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

Date 11/1/90 Signed William J. Reber Commissions N.Y. STATE COMMISSIONER OF LABOR  
(Authorized Inspector) ALSO COMMISSIONED IN PENN., OHIO & CONN.  
(Not. Bd. Incl. endorsements) state or prov. and no. 1



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

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

Pg. 1 of 1

1. Manufactured and certified by Target Rock Corp., 1966E Broadhollow Rd, E. Farmingdale, NY 11735  
(name and address of NPT Certificate Holder)
2. Manufactured for Arizona Public Service Co.; Phoenix, AZ 85072  
(name and address of purchaser)
3. Location of installation Palo Verde NGS; Wintersburg, AZ 95343  
(name and address)
4. Type 200931-1 SA-564 630 140,000 N/A 1991  
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III: 1974 Winter 1975 3 N/A  
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A  
(no.)
7. Remarks: Spare Parts for a completed valve assembly, Model Nos. 76HH-001  
and 76HH-004, P/N 200931-1

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

Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1) 17A	N/A
(2) 18A	N/A
(3) 19A	N/A
(4) 20A	N/A
(5) 21A	N/A
(6) 22A	N/A
(7) 23A	N/A
(8) N/A	N/A
(9)	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board Number In Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
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(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure N/A psi. Temp. N/A °F. Hydro. test pressure 305 psig at temp. AMB  
(when applicable)

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

(12/86)

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

## FORM N-2 (back)

Mfr. Serial No. N/A

## CERTIFICATION OF DESIGN

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

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

## CERTIFICATE OF SHOP COMPLIANCE

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

NPT Certificate of Authorization No. 1948 Expires 12-12-92

Date 4/29/91 Name Target Rock Corporation Signed [Signature]  
(NPT Certificate Holder) (Authorized Representative)  
E. Bajada, O.A. Manager

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of  
New York and employed by Commercial Union Insurance Company  
 of Boston, Mass. have inspected these items described in this Data Report on 4/30/91, and state that to the  
 best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section  
 III. Each part listed has been authorized for stamping on the date shown above.

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

Date 4/30/91 Signed William D. Holand N. Y. STATE COMMISSION NO. 2288  
(Authorized Inspector) COMMISSIONED IN PENN., OHIO & CONN.  
(Nat'l. Bd. (incl. endorsements) state or prov. and no.)

P.O. No. 60209410  
 QUALITY DOCUMENT'S  
 PAGE 20 of 36

# ASME SECTION XI - REPAIR / REPLACEMENT

Page \_\_\_\_\_ of \_\_\_\_\_

1. Component ID 45000471
2. Item Description: Crosby Safety Valve
3. N-5 Data Package Number: 3CH13-3
4. W.O. Number: 2749800
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Re-conditioning of spare valve removed from 3JCHNPSV0354 location at 3R11.
8. ☐ ISI Flaw NDE Method of Flaw Detection: \_\_\_\_\_  
Report Number: \_\_\_\_\_
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Not a failure of the ASME pressure boundary. Spare valve is being re-worked. Will replace nozzle and disc to correct seat leakage.

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

Initial DWG Date 12-14-04 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DWG Date 12-14-04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DWG Date 12-14-04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DWG Date 12-14-04 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
nozzle	APN 45070034	N92013-34-0007	n/a	MR 929749
Disc assembly	APN 45020265	K60886-37-0011 <u>38-0016</u> <u>032805</u>	n/a	MR <del>929925</del> <u>929749</u> <u>032805</u>

18. Planner David Goodlet 12-14-04 Printed Name: David Goodlet  
Signature Date
19. ISI Alan Morrow 1-7-05 Printed Name: Alan Morrow Log Entry an  
Signature Date
20. ANII RLC Hogstrom 1-11-05 Printed Name: RLC Hogstrom  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 12/14/2004

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 2749800

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, 1 Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Nozzle	Crosby	N92013-34-007	n/a	3JCHNPSV-0354	2004	Replacement	NO
Disc assembly	Crosby	K60886-38-016	n/a	JCHNPSV354	2004	Replacement	NO

7. Description of Work: Rework of spare valve (s/n# N61175-00-005), apn# 45000471, to correct seat leakage.

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

N-416-2 ☐ Other Pressure \_\_\_\_\_ psi

Test Temperature \_\_\_\_\_ °F

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

Remarks: WO# 2749800 for spare valve removed from 3JCHNPSV0354 during 3RI is being reworked to correct seat leakage. The nozzle and disc are being replaced. This spare valve is s/n# N61175-00-0005

Pre-Pressured Test WO Review - ISI

N/A

ANII

N/A

### Certificate of Compliance

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

Type Code Symbol Stamp

N/A

Certificate of Authorization No.

N/A

Expiration Date:

N/A

Signed:

RF Jordan, Consulting Metallurgical Engineer  
Owner or Owner's Designee, Title

Date: 3/30/05

### CERTIFICATE 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 1-11-05 to 3-30-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RF Jordan  
Inspector's Signature

Commissions: NB 9685 "N" "I" AZ264

National Board, State, Province, and Endorsements

Date:

3-30-05

# ASME SECTION XI - REPAIR / REPLACEMENT

Page      of

1. Component ID APN 45002024
2. Item Description: PSV
3. N-5 Data Package Number: 3SP02-3
4. W.O. Number: 2753321
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: valve seat changed out due to seat leakage. This valve will be returned to stock. Valve serial number 24.
8. ☐ ISI Flaw      NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
valve seat changed out due to seat leakage.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III C1 3, 1974 Edition 1976 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III C1 3, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required:      ☐ YES      ☒ NO

Initial MSK Date 12-8-04      If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MSK Date 12-8-04      If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MSK Date 12-8-04      16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial MSK Date 12-8-04      17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
seat nozzle	200872	106	n/a	2753321

18. Planner Martin J. Sullivan 12-8-04  
Signature      Date

Printed Name: Martin J. Sullivan

19. ISI Alan Morrow 12/9/04  
Signature      Date

Printed Name: Alan Morrow Log Entry am

20. ANII RG Houston 12-11-04  
Signature      Date

Printed Name: RG Houston

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 12/08/2004

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 2753321

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SP

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Safety Valve	Target Rock	24	N/A	APN45002024	1980	Repaired	Yes
Nozzle Seat	Target Rock	106	N/A	APN45002024	2004	Replacement	No

7. Description of Work: Valve seat changed out due to seat leakage. This valve will be returned to stock.

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

Other ☐

Pressure        psi

Test Temperature        °F

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

## FORM NIS-2 (Back)

9. Target Rock valve s/n 24, removed from location 3JSPBPSV0144, repaired under W.O. 2753321 and returned to the warehouse for restock.

### Certificate of Compliance

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

Type Code Symbol Stamp \_\_\_\_\_ N/A \_\_\_\_\_

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

Signed: RLB RLB 1515216 Date: 12/14/04  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 12-14-04 to 12-16-04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RLB  
Inspectors Signature

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

Date: 12-16-04



# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3JSGBHVG.78
2. Item Description: 12"-900# C-1 Atmospheric Dump Valve
3. N-5 Data Package Number: 3SG01-2
4. W.O. Number: 2760019
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Disassemble valve and recondition to correct seat leakage.
8. ☐ ISI Flaw N/A NDE Method of Flaw Detection: N/A  
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Not a failure of the ASME III pressure boundary. Plug is being replaced to expedite work completion.

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

Initial Dmg Date 4-23-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Dmg Date 4-23-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Dmg Date 4-23-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Dmg Date 4-23-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Valve	N/A	21408-7-2	N/A	N/A
Plug	APN 45021282	2	N/A	MR 1090814

18. Planner David Goodlet 4-23-06 Printed Name: David Goodlet  
Signature Date

19. ISI R. P. Tindap 4/24/06 Printed Name: R. P. TINDAP Log Entry RPT  
Signature Date

20. ANII RG Houston 4-24-06 Printed Name: RG 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: 4/23/2006

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 2760019

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG: Main Steam

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, 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	B&W	21408-7-2	N/A	3JSGBHV0178	1981	Repaired	YES
Plug <i>INSTALLED</i>	Control Components Inc.	2	N/A	3JSGBHV0178	2004	Replacement	YES
Plug <i>REMOVED</i>	CCI	NA	NA	HT No RND	1993	Repaired	YES

7. Description of Work: Disassembled and reconditioned valve to correct seat leakage.

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

N-416-2 ☐ Other Pressure \_\_\_\_\_ psi

Test Temperature \_\_\_\_\_ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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 # 2750019 disassembled valve 3JSGBHVO, '3 to correct seat leakage. The replacement stem/plug assembly was installed to expedite work completion. The removed plug will be reworked later and saved as a spare.

Pre-Pressured Test WO Review - ISI N/A

ANII N/A

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: DBH- Date: 5-3-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-24-06 to 5-3-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RA [Signature]  
Inspectors Signature

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

Date: 5-3-06

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

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

Pg. 1 of 2

1. Manufactured and certified by Control Components Inc. 22591 Avenida Empresa, Rancho Santa Margarita, CA 92688

(name and address of Certificate Holder)

2. Manufactured for ARIZONA PUBLIC SERVICE COMPANY, PHOENIX, AZ

(name and address of purchaser)

3. Location of installation PALO VERDE NUCLEAR GENERATING STATION, WINTERSBURG, AZ

(name and address)

4. Type 320601240  
(drawing no.)

SA182-F11  
(mat'l spec. no.)

70 KSI  
(tensile strength)

N/A  
(CRN)

2004  
(year built)

5. ASME Code, Section III, Division 1:

1974

(edition)

WINTER 1975

(addenda date)

2

(class)

N/A

(Code-Case-no.)

6. Fabricated in accordance with Const. Spec. (div. 2 only)

N/A

(no.)

Revision

N/A

Date

N/A

7. Remarks

PLUG FOR 12", 900# ATMOSPHERIC DUMP VALVE

CCI PROJECT ORDER 108058, CCI SFC 600144

8. Nom. thickness (in.) 3.25" Min. design thickness 3.25" Dia. ID (ft & in.) N/A Length overall (ft & in.) 16.3"

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

Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1.) <u>600144 - S/N 1</u>	<u>N/A</u>
(2.) <u>600144 - S/N 2</u>	<u>N/A</u>
(3.)	
(4.)	
(5.)	
(6.)	
(7.)	
(8.)	
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Part or Appurtenance Serial Number	National Board No. In Numerical Order
(26.)	
(27.)	
(28.)	
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(47.)	
(48.)	
(49.)	
(50.)	

10. Design pressure 1333 psi Temp. 575 Deg. F Hydro test pressure N/A at temp. Deg. f

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

## FORM N-2 (Back - Pg. 2 of 2)

Certificate Holder's Serial No. 600144 - S/N 1 through S/N 2

## CERTIFICATE OF DESIGN

Design Specification certified by ADA I. PRESSMAN P.E. State AZ Reg. no. 10409  
Design Report \* certified by N/A P.E. State N/A Reg. no. N/A  
(when applicable)

## CERTIFICATE OF COMPLIANCE

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

NPT Certificate of Authorization  
No.N-2696Expires AUGUST 14, 2006

Date

12-29-04

Name

Control Components Inc. (CCI)  
(NPT Certificate Holder)

Signed

[Signature]  
(Authorized Representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and  
the State or Province of CALIFORNIA and employed by H S B C T of HARTFORD, CONNECTICUT

have inspected these items described in this Data Report on 12-29-2004, and state that to the  
best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with ASME Section III,  
Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date

12/29/04

Signed

[Signature]  
(Authorized Inspector)

Commissions

CA1494  
(Nat'l Bd. (including endorsement) and state or prov., and no.)

# ASME SECTION XI - REPAIR / REPLACEMENT

Page \_\_\_\_\_ of \_\_\_\_\_

1. Component ID 3JSIAUV0673
2. Item Description: A TRAIN SDC SUCTION VALVE FROM CONTAINMENT RECIRC SUMP
3. N-5 Data Package Number: 3SI01-6
4. W.O. Number: 2767649
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the gasket retainer bolts per EDC 2005-00035

8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:

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

*The bolts are being replaced as a precautionary measure with a more SCC resistant material (410 vs 17-4 PH)*

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

Initial N/A-J.D. Date 5-6-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial N/A-J.D. Date 5-6-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D. Date 5-6-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D. Date 5-6-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Gasket retainer bolts	APN 00090043	N/A	N1412	MR 975495

18. Planner *[Signature]* 5-6-05 Printed Name: James I. Davis  
Signature Date

19. ISI *Alan Monow* 5/6/05 Printed Name: Alan Monow Log Entry am  
Signature Date

20. ANII *Robert G. Houston* 5-6-05 Printed Name: Robert 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: 5-26-05

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 2767649

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Valve	Posi -Seal	14338-3A	N/A	3JSIAUV0673	1979	Repaired	YES
Gasket retainer bolts	N/A	HT# N1412	N/A	3JSIAUV0673	2005	Replacement	NO

7. Description of Work: Replace the gasket retainer bolting as required per EDC 2005-00035

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

N-416-2 ☐ Other Pressure        psi

Test Temperature        °F

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

## FORM NIS-2 (Back)

9. Remarks: Work Order 2767649 replaced the original 410 Stainless steel gasket retainer bolts with more corrosion resistant SA564, Gr 630 bolts per EDC 2005-00035 and DMWO 2760330.

Pre-Pressured Test WO Review - ISI N/A

ANII N/A

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: RP Indap, Consulting Metallurgical Engineer Date: 5/26/2005  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 5-6-05 to 5-26-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature  
Inspectors Signature

Commissions: NB 8098, ANI  
NB 9685, 'N', 'T', AZ264  
National Board, State, Province, and Endorsements

Date: 5-26-05



# ASME SECTION XI - REPAIR / REPLACEMENT

Page \_\_\_\_\_ of \_\_\_\_\_

1. Component ID 3JSIBUV0675
2. Item Description: B TRAIN SDC SUCTION VALVE FROM CONTAINMENT RECIRC SUMP
3. N-5 Data Package Number: 3SI01-6
4. W.O. Number: 2767650
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the gasket retainer bolts per EDC 2005-00036
8. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

*The bolts are being replaced as a precautionary measure with more SCC resistant material (410 vs 17-4PH)*

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

Initial N/A J.D. Date 5-6-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial N/A J.D. Date 5-6-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D. Date 5-6-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D. Date 5-6-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Gasket retainer bolts	APN 00090043	N/A	N1412	MR 975496

18. Planner [Signature] 5-6-05 Date Printed Name: James I. Davis

19. ISI Alan Morrow 5/6/05 Date Printed Name: Alan Morrow Log Entry am

20. ANII [Signature] 5-6-05 Date Printed Name: Robert G. Hueston

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 5-24-85

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 2767650

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Valve	Posi -Seal	14337-3B	N/A	3JSIBUV0675	1979	Repaired	YES
Gasket retainer bolts	N/A	HT# N1412	N/A	3JSIBUV0675	2005	Replacement	NO

7. Description of Work: Replace the gasket retainer bolting as required per EDC 2005-00036

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

N-416-2 ☐ Other Pressure      psi

Test Temperature      °F

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

## FORM NIS-2 (Back)

9. Remarks: Work Order 2767650 replaced the original 410 Stainless steel gasket retainer bolts with more corrosion resistant SA564, Gr 630 bolts per EDC 2005-00036 and DMWO 2760330.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/24/05  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

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

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

William F. Hildebrand

Inspectors Signature

Commissions: NB 3098 ANI WE 5/24/05  
NB 9685 "N" "T" AZ 264  
National Board, State, Province, and Endorsements

Date: 5-24-05

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3MRCEE01A
- 2.. Item Description: Steam Generator #1 Cold Leg
3. N-5 Data Package Number: 3RC01-2
4. W.O. Number: 2778624
5. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Perform SG31 Cold Leg plugging and repair iaw DFWO 2778612
8. ☒ ISI Flaw NDE Method of Flaw Detection: Eddy Current Exam  
Report Number: 3R12 Eddy Current Exam Report
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Evaluation per ENG DFWO 2778612

10. Repair/Replacement Work Organization: Arizona Public Service/Westinghouse,
11. Replacement Items Construction or reconciled Code/Edition: Sec. III CI 1, 1971 Edition 1973 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III CI 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☐ YES ☒ NO

Initial BV Date 4/12/06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial BV Date 4/12/06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial BV Date 4/12/06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial BV Date 4/12/06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Tube plugs	See attached list <sup>NA</sup>	See attached list <sup>NA</sup>	See attached list <sup>NA</sup>	See attached list <sup>NA</sup>
"	NA	NA	NX3171 HK	MR 733382
"	NA	NA	NX4418 HK	MR 1076478

18. Planner B. Vidal 4/12/06 Printed Name: Barbara Vidal  
Signature Date

19. ISI R. P. Indap 4/14/06 Printed Name: R. P. INDAP Log Entry RPZ  
Signature Date

20. ANII R. G. Holstrom 4-18-06 Printed Name: R. G. HOLSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 04/27/06  
Name  
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 3  
Address

2. Plant Palo Verde Nuclear Generating Station Unit 3  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2778624  
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 (SG #1)

5. (a) Applicable Construction Code ASME Section III 19 71 Edition, W73 Addenda, N/A Code Case

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

## 6. Identification of Components Repaired or Replaced and Replacement Components

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

7. Description of Work See remarks on sheet 2

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

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

## FORM NIS-2 (Back)

9. Remarks Plug the replacement steam generator 3MRCEE01A cold leg tubes per Engineering DEWO  
2778612 and DIWO 2778624

Pre-Pressure Test Review: NA

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed DBH - ENR Date 4-27-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NC and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 4-18-06 to 4-27-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

DBH  
Inspector's Signature

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

Date 4-27-06

1. Owner <u>Arizona Public Service Company, et al.</u>	Date <u>04/27/04</u>
<u>P.O. Box 17000 Phoenix, Arizona 85077-3034</u>	Sheet <u>1</u> of <u>3</u>
2. Plant <u>Pala Verde Nuclear Generating Station</u>	Unit <u>3</u>
<u>3801 S. Winslow Rd., Tempe, Arizona 85284-7529</u>	<u>2778612</u>
3. Work Performed by <u>Westinghouse</u>	Type Code Special Stamp <u>None</u>
<u>911 W Main St Chattanooga, TN 37402</u>	Authorization No. <u>N/A</u>
	Expiration Date <u>N/A</u>
4. Manufacturer of System <u>Reactor Coolant (SG #1)</u>	
5. (a) <u>Arizona Construction Corp. 32MR Section III</u> to <u>71</u> Section <u>W71</u> Assembly <u>N/A</u> Core Case	
(b) <u>Arizona State of Supply to Support for Repair or Replacement</u> to <u>71</u> Section <u>71</u> Assembly	
6. Manufacturer of Components Replaced or Replaced and Replacement Components	

DFWO 2778612 and DIWO 2778624

Steam Generator (3MRCEE01A) Cold Leg, had mechanical plugs (part # 0307-1601) obtained via MR -733382 installed in the following locations:

Row	Col
50	89
39	110
8	189

These plugs were from heat NX3171HK.

Steam Generator (3MRCEE01A) Cold Leg, had ribbed plugs (part # 1971E18) obtained via MRs - 1076478 installed in the following locations:

Row	Col
10	165
33	72
37	64
39	160
46	125
48	113
54	115
55	112
55	114
58	57
60	175
62	157
95	134
100	41
101	136
126	49
131	48
131	134
133	118
136	59
139	60
139	128
143	108
144	83
151	106

These plugs were from heat NX4418HK

# ASME SECTION XI - REPAIR / REPLACEMENT

Page \_\_\_\_\_ of \_\_\_\_\_

1. Component ID 3MRCEE01A
2. Item Description: Steam Generator #1 Hot Leg
3. N-5 Data Package Number: 3RC01-2
4. W.O. Number: 2778626
5. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Perform SG31 Hot Leg plugging and repair iaw DFWO 2778612
8. ☒ ISI Flaw  
NDE Method of Flaw Detection: Eddy Current Exam  
Report Number: 3R12 Eddy Current Exam Report
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Evaluation per ENG DFWO 2778612

10. Repair/Replacement Work Organization: Arizona Public Service/Westinghouse
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1971 Edition 1973 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☐ YES ☒ NO

Initial BV Date 4/15/06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial BV Date 4/15/06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial BV Date 4/15/06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial BV Date 4/15/06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Tube plugs	<del>See attached list</del> <u>DSH</u>	<del>See attached list</del> <u>4-27-06</u>	<del>See attached list</del>	<del>See attached list</del>
"	<u>0307-1601</u>	<u>NA</u>	<u>NX3171 HK</u>	<u>733382</u>
"	<u>1971E18</u>	<u>NA</u>	<u>PX4418 HK</u>	<u>1076478 &amp; 1076480</u>

18. Planner B Vidal 4/15/06 Printed Name: Barbara Vidal  
Signature Date

19. ISI R P Indap 4/17/06 Printed Name: R. P. INDAP Log Entry RPP  
Signature Date

20. ANII RG Hogstrom 4-18-06 Printed Name: RG HOGSTROM  
Signature Date



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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 04/27/06  
Name  
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 3  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 3  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2778626  
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 (SG #1)
5. (a) Applicable Construction Code ASME Section III 19 71 Edition, W73 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 92 Addenda

## 6. Identification of Components Repaired or Replaced and Replacement Components

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

## 7. Description of Work See remarks on sheet 2

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

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

## FORM NIS-2 (Back)

9. Remarks Plug the replacement steam generator 3MRCEE01A hot leg tubes per Engineering DEWO  
2778612 and DIWO 2778626

Pre-Pressure Test Review: NA

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed DBH- ENGR Date 4-27-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of AZ and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 4-18-06 to 4-27-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

DBH- ENGR Commissions NB 9685 "A.N.I.C" AZ 264  
Inspector's Signature National Board, State, Province, and Endorsements

Date 4-27-06

1. Owner <u>Adams Public Service Company, et al</u>	Date <u>04/27/04</u>
<u>P.O. Box 11999, Phoenix, Arizona 85072-3714</u>	Sheet <u>1</u> of <u>1</u>
2. Plant <u>Five Verde Nuclear Generating Station</u>	Unit <u>1</u>
<u>3801 S. Wierzbinsky Rd., Tempe, Arizona 85344-7129</u>	<u>2778674</u>
3. Work Performed by <u>Woodward-Clyde</u>	Type Code System Stamp <u>None</u>
<u>911 W Main St, Chattanooga, TN 37402</u>	Authorized Pk. <u>N/A</u>
	Signature Date <u>N/A</u>
4. Identification of System <u>Reactor Coolant (SG 21)</u>	
5. (a) Applicable Code Case <u>ASME Section III</u> , 1971 Edition, <u>WT3</u> , Appendix, <u>N/A</u> , Code Case	
(b) Applicable Section of Section 10 Utilized for Reports or Requirements 10 <u>31</u> , Edition, <u>92</u> , Addendum	
6. Identification of Component Features or Revisions and Replacement Components	

DFWO 2778612 and DIWO 2778626

Steam Generator (3MRCEE01A) Hot Leg, had mechanical plugs (part # 0307-1601) obtained via MR -733382 installed in the following locations:

Row Col

50	89
39	110
8	189

These plugs were from heat NX3171HK.

Steam Generator (3MRCEE01A) Hot Leg, had ribbed plugs (part # 1971E18) obtained via MRs - 1076478 and 1076480 installed in the following locations:

Row	Col
10	165
33	72
37	64
39	160
46	125
48	113
54	115
55	112
55	114
58	57
60	175
62	157
95	134
100	41
101	136
126	49
131	48
131	134
133	118
136	59
139	60
139	128
143	108
144	83
151	106

These plugs were from heat NX4418HK

# ASME SECTION XI - REPAIR / REPLACEMENT

Page \_\_\_\_\_ of \_\_\_\_\_

1. Component ID 3MRCEE01B
- 2.. Item Description: Steam Generator #2 Cold Leg
3. N-5 Data Package Number: 3RC01-2
4. W.O. Number: 2778633
5. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Perform SG32 Cold Leg plugging and repair jaw DFWO 2778629
8. ☒ ISI Flaw  
NDE Method of Flaw Detection: Eddy Current Exam  
Report Number: 3R12 Eddy Current Exam Report
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

Evaluation per ENG DFWO 2778629

10. Repair/Replacement Work Organization: Arizona Public Service/Westinghouse.
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1971 Edition 1973 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial BV Date 4/12/06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial BV Date 4/12/06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial BV Date 4/12/06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial BV Date 4/12/06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Tube plugs	<del>See attached list</del> <u>004</u>	<del>See attached list</del> <u>4-27-02</u>	<del>See attached list</del>	<del>See attached list</del>
"	<u>0307-1601</u>	<u>NA</u>	<u>NX 3171 HK</u>	<u>733382</u>
"	<u>1971E18</u>	<u>NA</u>	<u>NX 3171 HK</u>	<u>1076478 F</u>
				<u>1076480</u>
"	<u>1971E18</u>	<u>NA</u>	<u>NX 4418 HK</u>	<u>1076478 F</u>
				<u>1076480</u>

18. Planner B Vidal 4/12/06 Printed Name: Barbara Vidal  
Signature Date

19. ISI R.P. Indap 4/17/06 Printed Name: R.P. INDAP Log Entry RPI  
Signature Date

20. ANII R.G. Hogstrom 4-18-06 Printed Name: R.G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 04/27/06

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

Sheet 1 of 3

2. Plant Palo Verde Nuclear Generating Station

Unit 3

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

2778633

Work Order Number

3. Work Performed by Westinghouse

Type Code Symbol Stamp None

Authorization No. N/A

911 W Main St Chattanooga, TN 37402

Expiration Date N/A

4. Identification of System Reactor Coolant (SG #2)

5. (a) Applicable Construction Code ASME Section III 19 71 Edition, W73 Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Steam Generator	CE	65273-2	22861	3MRCEE01B	1981	Repaired	Yes
Tube Plugs	Westinghouse	NA	NA	Tube Plugs	NA	Replacement	No

7. Description of Work See remarks on sheet 2

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

Other ☐

Pressure \_\_\_\_\_ psi

Test Temp. \_\_\_\_\_ °F

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

## FORM NIS-2 (Back)

9. Remarks Plug the replacement steam generator 3MRCEE01B cold leg tubes per Engineering DEWO  
2778629 and DIWO 2778633

Pre-Pressure Test Review: NA

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed D. J. L. ENGL Date 4-27-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Az and employed by HSB CT  
of Hartford, Connecticut, have inspected the components described in this Owner's Report during  
the period 4-18-06 to 4-27-06, and state that to the best of my knowledge and  
belief, the Owner has performed examinations and taken corrective measures described in this Owner's  
Report in accordance with the requirements of the ASME Code, Section XI.

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

R. J. L.  
Inspector's Signature

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

Date 4-27-06

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS As Required by the Provisions of the ASME Code Section XI			
1. Owner: <u>Arizona Public Service Company, et al</u>		Date: <u>04/27/04</u>	
<u>P.O. Box 11999, Phoenix, Arizona 85072-9114</u>		Sheet <u>1</u> of <u>1</u>	
2. Plant: <u>Pala Verde Nuclear Generating Station</u>		Unit: <u>3</u>	
<u>3801 S. Winslow Rd., Tempe, Arizona 85344-7179</u>		<u>7778633</u>	
3. Work Performed by: <u>Westinghouse</u>		Type Code System Stamp: <u>None</u>	
<u>911 W. Main St. Chandler, AZ 85226</u>		Authorization No.: <u>N/A</u>	
		Exemption Code: <u>N/A</u>	
4. Identification of System: <u>Regulator Channel (RC) 9D</u>			
5. (a) Applicable Code Section: <u>ASME Section III</u> <u>10</u> <u>71</u> <u>8000</u> <u>9771</u> <u>Annex</u> <u>N/A</u> <u>Other Code</u>			
(b) Applicable Section of Section XI Limited to Repair or Replacement: <u>10</u> <u>71</u> <u>8000</u> <u>9771</u> <u>Annex</u>			
6. Identification of Components Repaired or Replaced and Replacement Components			

DFWO 2778629 and DIWO 2778633

Steam Generator (3MRCEE01B) Cold Leg, had mechanical plugs (part # 0307-1601) obtained via MR -733382 installed in the following locations:

Row	Col
12	1
35	80
64	9
65	10
140	51

These plugs were from heat NX3171HK.

Steam Generator (3MRCEE01B) Cold Leg, had ribbed plugs (part # 1971E18) obtained via MRs - 1076478 and 1076480 installed in the following locations:

Row	Col	Row	Col
21	18	117	56
21	20	117	72
96	33	121	74
104	59	122	73
106	61	133	70
114	69	135	52

These plugs were from heat NX3171HK

Row	Col	Row	Col	Row	Col	Row	Col	Row	Col
7	42	58	119	76	151	102	97	119	144
12	141	60	123	81	92	102	135	127	82
14	59	63	98	81	172	103	78		
14	175	64	107	82	139	105	58		
16	15	64	117	83	134	105	90		
16	19	65	12	85	34	106	145		
22	157	65	22	86	135	109	86		
27	120	67	52	92	115	109	98		
40	67	67	94	92	157	109	158		
40	117	69	34	95	46	111	92		
45	160	69	110	95	120	111	94		
48	97	69	142	96	65	112	93		
48	101	70	101	96	157	112	113		
48	159	70	103	97	64	112	131		
55	94	71	100	100	79	117	116		
57	96	74	35	100	161	117	132		
57	110	76	129	102	69				

These plugs were from heat NX4418HK

# ASME SECTION XI - REPAIR / REPLACEMENT

Page \_\_\_\_\_ of \_\_\_\_\_

1. Component ID 3MRCEE01B
- 2.. Item Description: Steam Generator #2 Hot Leg
3. N-5 Data Package Number: 3RC01-2
4. W.O. Number: 2778635
5. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Perform SG32 Hot Leg plugging and repair iaw DFWO 2778629
8. ☒ ISI Flaw  
NDE Method of Flaw Detection: Eddy Current Exam  
Report Number: 3R12 Eddy Current Exam Report
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Evaluation per ENG DFWO 2778629

10. Repair/Replacement Work Organization: Arizona Public Service/Westinghouse
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1971 Edition 1973 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial BV Date 4/15/06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial BV Date 4/15/06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial BV Date 4/15/06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial BV Date 4/15/06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Tube plugs	<del>See attached list</del> <u>0307-1601</u>	<del>See attached list</del> <u>4-27-06</u>	<del>See attached list</del> <u>MX3171HK</u>	<del>See attached list</del> <u>733382</u>
"	<u>1971E18</u>	<u>NA</u>	<u>MX4418HK</u>	<u>1076478 F</u>
				<u>1076480</u>

18. Planner B Vidal 4/15/06 Printed Name: Barbara Vidal  
Signature Date

19. ISI R. P. Indap 4/17/06 Printed Name: R. P. INDAP Log Entry RPI  
Signature Date

20. ANII R. G. Hogstrom 4-18-06 Printed Name: R. G. HOGSTROM  
Signature Date



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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 04/27/06  
Name  
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 3  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 3  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2778635  
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 (SG #2)
5. (a) Applicable Construction Code ASME Section III 19 71 Edition, W73 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 92 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Steam Generator	CE	65273-2	22861	3MRCEE01B	1981	Repaired	Yes
Tube Plugs	Westinghouse	NA	NA	Tube Plugs	NA	Replacement	No

7. Description of Work See remarks on sheet 2
8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐  
 Other ☐ Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

## FORM NIS-2 (Back)

9. Remarks Plug the replacement steam generator 3MRCEE01B hot leg tubes per Engineering DEWO  
2778629 and DIWO 2778635

Pre-Pressure Test Review: NA

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed *DRH- EVGR* Date 4-27-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Az and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 4-18-06 to 4-27-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

*RA [Signature]* Commissions NB 9685 "A.N.I.C" Az 264  
Inspector's Signature National Board, State, Province, and Endorsements

Date 4-27-06

1. Owner Address Public Service Company, et al. P.O. Box 17099, Phoenix, Arizona 85072-3714	Date 04/27/04 Sheet 1 of 1
2. Plant Palo Verde Nuclear Generating Station 3901 S. Wimmerbury Rd., Tempe, Arizona 85284-3729	Line 2 2773435
3. Work Performed by Woodwright 911 W. Main St., Chattanooga, TN 37401	Type Case Symbol Status Name N/A N/A
4. Manufacturer of System Raytheon Co. (SG 07)	
5. (a) Applicable Code ARN 10 71, Section 3773, Address, N/A	Code Case
(b) Applicable Edition of Section 38 Unlabeled for Plugs or Repairs 10 71, Section 3773, Address	
6. Manufacturer of Component Raytheon Co. (SG 07)	

DFWO 2778629 and DIWO 2778635

Steam Generator (3MRCEE01B) Hot Leg, had mechanical plugs (part # 0307-1601) obtained via MR -733382 installed in the following locations:

Row Col

12	1
35	80
64	9
65	10
140	51

These plugs were from heat NX3171HK.

Steam Generator (3MRCEE01B) Hot Leg, had ribbed plugs (part # 1971E18) obtained via MRs - 1076478 and 1076480 installed in the following locations:

Row	Col	Row	Col	Row	Col
7	42	69	110	105	58
12	141	69	142	105	90
14	59	70	101	106	61
14	175	70	103	106	145
16	15	71	100	109	86
16	19	74	35	109	98
21	18	76	129	109	158
21	20	76	151	111	92
22	157	81	92	111	94
27	120	81	172	112	93
40	67	82	139	112	113
40	117	83	134	112	131
45	160	85	34	114	69
48	97	86	135	117	56
48	101	92	115	117	72
48	159	92	157	117	116
55	94	95	46	117	132
57	96	95	120	119	144
57	110	96	33	121	74
58	119	96	65	122	73
60	123	96	157	127	82
63	98	97	64	133	70
64	107	100	79	135	52
64	117	100	161		
65	12	102	69		
65	22	102	97		
67	52	102	135		
67	94	103	78		
69	34	104	59		

These plugs were from heat NX4418HK.

Page 1 of 1

7VDP-92Z17 Rev 9

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/12/2006

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 2783665

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, 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	Crosby	N61169-00-0006	N/A	3JSIBPSV0169	1980	Replaced	YES
Valve	Crosby	N61169-00-0011	N/A	3JSIBPSV0169	1991	Replacement	YES
		<u>210</u> <u>4-16-06</u> <u>to new</u>					

7. Description of Work: Replace the valve to correct seat leakage.

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

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

Remarks: WO 2783665 replaced the pressure relief valve due to leakage during its pressure test. Spare parts for rework were not available at the time.

Pre-Pressured Test WO Review – ISI \_\_\_\_\_

ANII \_\_\_\_\_

### Certificate of Compliance

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

Type Code Symbol Stamp \_\_\_\_\_ N/A

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

Signed: RLB ISI ENG Date: 4-16-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-12-06 to 4-16-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RLB

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264

National Board, State, Province, and Endorsements

Date: 4-16-06

Page 1 of 1

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

# 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: 04/16/2006

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 2783726

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1976 Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Crosby	N-61169-02-0013	N/A	3JSIBPSV0755	1995	Repaired	YES
Disc	Crosby	N-91988-38-0022	N/A	3JSIBPSV0755	2006	Replaced	NO

7. Description of Work: Replaced valve disc.

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

**NOTE:** Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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: WO# 2783726 replaced the valve disc to correct leakage.

Pre-Pressured Test WO Review - ISI \_\_\_\_\_

ANII \_\_\_\_\_

### Certificate of Compliance

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

Type Code Symbol Stamp \_\_\_\_\_ N/A \_\_\_\_\_

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

Signed: [Signature] \_\_\_\_\_ Date: 4-19-06 \_\_\_\_\_  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-18-06 to 4-19-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264

National Board, State, Province, and Endorsements

Date: 4-19-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PSIEV245
2. Item Description: HPSI/LPSI Header Loop Injection Check Valve
3. N-5 Data Package Number: 3RC01-3      4. W.O. Number: 2783999
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Summer 1975 Addenda
7. Work Description: Rework or replace the bonnet and assembly disc to correct seat leakage
8. ☐ ISI Flaw      NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Seat leakage - No ASME boundary failure

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

Initial J.O. Date 11-22-05      If required, include a step in the W.O. to perform Preservice Inspection

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

Initial J.O. Date 11-22-05      If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.O. Date 11-22-05      16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.O. Date 11-22-05      17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	(MR/PO/WO No.)
<u>Bonnet/Disc Assy</u>	<u>45060170</u>	<u>Bonnet SN 5</u> <u>Disc SN 2</u>	<u>2576</u> <u>2569</u>	<u>2860078</u>

18. Planner [Signature] 11-22-05      Printed Name: James I. Davis

19. ISI [Signature] 11-22-05      Printed Name: WILEY AHLSTROM Log Entry WIA

20. ANII [Signature] 11-22-05      Printed Name: REG 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 04/27/06  
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 2783999  
Address Work Order Number

3. Work Performed by Arizona Public Service 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 ASME Section III 19 74 Edition, W75 Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Borg-Warner	32614	1056	3PSIEV245	1978	Repaired	Yes
Disc - removed	Borg-Warner	NA	NA	HT # 2X51	1978	Repaired	Yes
Bonnet - removed	Borg-Warner	NA	NA	HT # 2X58	1978	Repaired	Yes
Disc - installed	Borg-Warner	SN2	NA	HT # 2E69	*	Replacement	No
Bonnet - installed	Borg-Warner	SN5	NA	HT # 2E76	*	Replacement	No

7. Description of Work Replaced the bonnet and disc assembly. (\* note remarks on Page 2)

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

Other ☐ Pressure > 2130 psi Test Temp. NOT °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 2783999 replaced the bonnet and disc assembly with the assembly from 1PSIEV245  
The installed assembly was removed by work order 2732251 and refurbished by work order  
2860078

Pre-Pressure Test Review: ISI DISH 4-27-06 ANII 4-28-06

### 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 Will B. [Signature] Date 5/10/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 11-23-05 to 5-10-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RB [Signature] Commissions NB 9685 "A, N, I, C" Az 264  
Inspector's Signature National Board, State, Province, and Endorsements

Date 5-10-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3SG033H017 & 3SG036H011
- 2.. Item Description: PIPE HANGERS
3. N-5 Data Package Number: 3SG01-2
4. W.O. Number: 2789761
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Repair Pipe Hangers per DFWO 2788864 Disposition
8. ☒ ISI Flaw RPP 3/2/06 NDE Method of Flaw Detection:  
Report Number:

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

*This replacement of the support with a better design is  
in response to identical support that failed in unit 2.  
The DFWO 2788864 contains all the details.*

*RPP 3/2/06*

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☒ YES ☒ NO RPP 3/2/06

Initial ME Date 2/28/06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial ME Date 2/28/06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial ME Date 2/28/06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial ME Date 2/28/06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Red, threaded 2"	000 90366	N/A	CD B-1270	MR 1071147
2" Welded Beam ATT.	000 90383	0005-49 & 50	N/A	MR 01071145-003
FROM U-1, COLLAR & ANTI ROTATION WASHER	PARTS REMOVED FROM G 2502 ASSEMBLY			288460

18. Planner Glenn E. Moore 2/28/06 Printed Name: Glenn E. Moore  
Signature Date

19. ISI RPP Indap 3/2/06 Printed Name: Ramakant Indap Log Entry RPP  
Signature Date

20. ANII Robert G. Hogstrom 3-2-06 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: 01/26/2006 5-3-06

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 2789761

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG - Steam Generating - ASME Section III Class 2

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Pipe Support	Pullman Power	3SG033H017	NA	3SG033H017	1979	Repaired	YES
Pipe Support	ITT Grinnell	3SG036H011	NA	3SG036H011	1982	Repaired	YES
<u>UNIT 1</u> <u>PIPE SUPPORT</u>	<u>ITT GRINNELL</u>	<u>G 2502</u>	<u>NA</u>	<u>COLLAR WASHER FROM UNIT 1 SG-036-H/1</u>	<u>1982</u>	<u>REPAIRED</u>	<u>NO</u>
			NA				

7. Description of Work: Repair Pipe Supports 3-SG-033-H-017 and 3-SG-036-H-011 per DFWO 2788864

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

N-416-2 ☐ Other Pressure NA psi

Test Temperature NA °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 2789761 - Repaired Pipe Supports 3-SG-033-H-017 & 3-SG-036-H-011 per EDC# 2005-00281 - DFWO 2788864 Disposition.

CODE CASES LISTED ON NF-2 DATA REPORT FOR 361 62502 PARTS FROM 16G-036-H011 1644 REV. 7, 1685, 1686, 1728 1729, 1734, 1683, 1710.

Pre-Pressured Test WO Review - ISI

ANII

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. L. [Signature] ISI ENG Date: 5-4-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 3-2-06 to 5-4-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Inspectors Signature

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

Date: 5-4-06

E-PK-RETENTION TIME MRA NO.

FORM NF-2 MANUFACTURERS' PARTIAL DATA REPORT FOR PARTS FOR COMPONENT SUPPORT  
As Required by the Provisions of the ASME Code Rules, Section III, Division 1

1. Manufactured by ITT Grinnell Corporation, 521 Dana Ave., NE., Warren, Ohio 44481  
(Name and address of manufacturer)
2. Manufactured for Bechtel Power Corp., P.O. Box 60860, Terminal Annex, Los Angeles, CA 90060  
(Name and address of purchaser or owner)
3. Location of installation Palo Verde Nuc. Gen. Sta., 3 Miles S. of Wintersburg, Arizona

4. (a) Part Serial No.	(b) Canadian Registration No.	(c) Part Drawing No.	(d) Description of Part	(e) Class	(f) National Board No.	(g) Year Built
(1) G2501 ✓	N/A	E-1394 Rev I	#58 "B" Fig 81-H	2	N/A	1982
(2) G2502 ✓	N/A	E-1394 Rev I	#56 "B" Fig 81-H	2	N/A	1982
(3) G2503 ✓	N/A	E-1394 Rev I	#56 "B" Fig 81-H	2	N/A	1982
(4) G2504 ✓	N/A	E-1394 Rev I	#56 "B" Fig 81-H	2	N/A	1982
(5) G2505 ✓	N/A	E-866 Rev L	#1 "B" Fig 81-H	2	N/A	1982
(6)						
(7)						
(8)						
(9)						
(10)						

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component support parts conform to the rules of construction of the ASME Code for Nuclear Power Plant Components, Section III, Division 1, Edition 1974, Addenda Winter 1975, Code Case no. 1644 Rev 7, 1685, 1686, 1728, 1729, 1734, 1683, N-180 (Date)

Date January 14, 1982 Signed ITT Grinnell Corp. by Indep. Parikh  
(Manufacturer)

Our ASME Certificate of Authorization No. N-24444-4 to use the NPT Symbol expires Sept. 8, 1984  
(NPT) (Date)

Data report covers welded items only.

DCN 18.0  
PAGE 1 OF 2

BECHTEL  
408



FORM NF-2 (Back)

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Ohio and employed by H.S.B.T. & T. Co. of Hartford, Conn.

1-15- have inspected the parts for the component supports described in this Manufacturers' Data Report on 1982 and state that to the best of my knowledge and belief the Manufacturer has constructed these component support parts in accordance with the ASME Code for Nuclear Power Plant Components.

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

Date 1-15-82

Signed Roy P. Hollister

Commission "Ohio Commission"

(Nat'l Board, State, Province, and No.)

00407 0492

DCN 1815  
PAGE 2 OF 2

BECHTEL  
408

As Required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of 2

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

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

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

4. Type: C.S.S. DRS 66 REV.9 2005  
(describe) (Design Report or Load Capacity Data Sheet) (year built)

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

	(a) Component Support I.D. No.	(b) Material Specification No.	(c) Canadian Registration No.	(d) Applicable Drawings With Last Rev. & Date	(e) National Board No.
(1)	2005- 45	SA36	N/A	066-10025/F 3/20/00	N/A
(2)	2005- 46	SA36	N/A	066-10025/F 3/20/00	N/A
(3)	2005- 47	SA36	N/A	066-10025/F 3/20/00	N/A
(4)	2005- 48	SA36	N/A	066-10025/F 3/20/00	N/A
(5)	2005- 49	SA36	N/A	066-10025/F 3/20/00	N/A
(6)	2005- 50	SA36	N/A	066-10025/F 3/20/00	N/A
(7)					
(8)					
(9)					
(10)					

**7. Remarks:**

PO#: 500289081 Rev.01

**SO#: 41-70575**

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

(12/88)

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

FORM NF-1 (Back - Pg. 2 of 2 )Component Support I.D. Nos. 2005-45 through 2005-50

## CERTIFICATE OF DESIGN

Design Specification certified by H. R. Sonderegger P.E. State R.I. Reg. no. 3537  
Design Report certified by Frank J. Birch P.E. State R.I. Reg. no. 4149

## CERTIFICATE OF COMPLIANCE

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

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

Date 8-15-05 Name Anvil International, Inc. Signed [Signature]  
(NPT Certificate Holder)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Rhode Island and employed by H.S.B. C.T. of Hartford, C.T. have inspected the component supports described in this Data Report on 8/15/05, and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports in accordance with the ASME Code, Section III, Division 1.

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

Date 8/15/05 Signed [Signature] Commissions RI 862 ANVI  
(Authorized Inspection) (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

## 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: 01/26/2006

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

Sheet: 1 of 1

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2790468

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG - Steam Generating - ASME Section III Class 2

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Pipe Support	Pullman Power	3SG045H017	NA	3SG045H017	1979	Repaired	YES
Pipe Support	ITT Grinnell	3SG042H011	NA	3SG042H011	1982	Repaired	YES

7. Description of Work: Repair Pipe Support 3-SG-045-H-017 and 3-SG-042-H-011 per DFWO 2788864

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

N-416-2 ☐ Other Pressure        psi

Test Temperature        °F

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

## FORM NIS-2 (Back)

9. Remarks: Work Order 2790468 - Repaired Pipe Supports 3-SG-042-H-011 and 3-SG-045-H-017 per EDC# 2005-00282 - DFWO 2788864 Disposition.

Pre-Pressured Test WO Review - ISI

ANII

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: RLB BIENG Date: 5-2-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 3-10-06 to 5-3-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RLB  
Inspectors Signature

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

Date: 5-3-06



Component Support I.D. Nos. 2005-51 through 2005-52

## CERTIFICATE OF DESIGN

Design Specification certified by H. R. Sonderegger P.E. State R.I. Reg. no 3537  
Design Report certified by Frank J. Birch P.E. State R.I. Reg. no 4149

## CERTIFICATE OF COMPLIANCE

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

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

Date 8-24-05 Name Anvil International, Inc. Signed [Signature]  
(NPT Certificate Holder)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Rhode Island and employed by H.S.B. C.T. of Hartford, C.T. have inspected the component supports described in this Data Report on 8/24/05, and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports in accordance with the ASME Code, Section III, Division 1.

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

Date 8/24/05 Signed [Signature] Commissions RI 862 AONE  
(Authorized Inspection) (Natl. Bd. (incl. endorsements) and state or prov. and no.)



## Page 1 of 1

Printed Name: R. L. Hogstrom

## Page 2 of

71DA-92217 NY?

# 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: 05/12/2005

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

Sheet: 1 of       

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2797822

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1971 Edition, Winter 1973 Addenda,        Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Pressurizer Heater	Framatome	023	N/A	3MRCEA09	2004	Replaced	YES
Pressurizer Heater	GE	1603	N/A	3MRCEA09	1977	Replacement	YES
Pressurizer Heater	Framatome	002	N/A	3MRCEA11	2004	Replaced	YES
Pressurizer Heater	GE	1608	N/A	3MRCEA11	1977	Replacement	YES
Pressurizer Heater	Framatome	004	N/A	3MRCEB02	2004	Replaced	YES
Pressurizer Heater	GE	1639	N/A	3MRCEB02	1977	Replacement	YES
Pressurizer Heater	Framatome	010	N/A	3MRCEB05	2004	Replaced	YES
Pressurizer Heater	GE	1605 or 1607	N/A	3MRCEB05	1977	Replacement	YES
Pressurizer Heater	Framatome	030	N/A	3MRCEB08	2004	Replaced	YES

7. Description of Work: Replace 9 Failed/Failing Pressurizer Heaters

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

N-416-2 ☐ Other Pressure        psi

Test Temperature        °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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 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: 05/12/2005

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

Sheet: 1 of       

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2797822

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1971 Edition, Winter 1973 Addenda,        Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Pressurizer Heater	GE	1601	N/A	3MRCEB08	1977	Replacement	YES
Pressurizer Heater	Framatome	032	N/A	3MRCEB11	2004	Replaced	YES
Pressurizer Heater	GE	1628	N/A	3MRCEB11	1977	Replacement	YES
Pressurizer Heater	Framatome	015	N/A	3MRCEB13	2004	Replaced	YES
Pressurizer Heater	GE	1604	N/A	3MRCEB13	1977	Replacement	YES
Pressurizer Heater	Framatome	017	N/A	3MRCEB14	2004	Replaced	YES
Pressurizer Heater	GE	1629	N/A	3MRCEB14	1977	Replacement	YES
Pressurizer Heater	Framatome	020	N/A	3MRCEB17	2004	Replaced	YES
Pressurizer Heater	GE	1605 or 1607	N/A	3MRCEB17	1977	Replacement	YES

7. Description of Work: Replace 9 Failed/Failing Pressurizer Heaters

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

N-416-2 ☐ Other Pressure        psi

Test Temperature        °F

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

## FORM NIS-2 (Back)

9. Remarks: Work Order 2797822. Replaced 9 Failed/Failing Pressurizer Heaters.

Pre-Pressured Test WO Review - ISI

N/A

ANII

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date: N/A

Signed: WILEY ANDERSON 151 ENGINEER  
Owner or Owner's Designee, Title

Date: 6-1-05

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 5-11-05 to 6-1-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RD  
Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264

National Board, State, Province, and Endorsements

Date: 6-1-05

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PCHNV363
2. Item Description: Borg Warner 3" Gate Valve, model 77650-3&4
3. N-5 Data Package Number: 3SI07-1
4. W.O. Number: 2797958
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace valve bonnet gasket and replace the SA540 Gr B-23 studs with SA564 Gr 630 material

8. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

Not a failure in the ASME III pressure boundary. The bonnet studs are being replaced to enhance boric acid corrosion resistance. The nuts are also being replaced to reduce contamination & radiological dose.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III C1 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III C1 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial DWG Date 5-20-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DWG Date 5-20-05

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

Initial DWG Date 5-20-05

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

Initial DWG Date 5-20-05

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

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
bonnet studs	APN 43115009	n/a	H 2	MR 980239
bonnet nuts 14 EA.	APN 43126009	n/a	HL# BDY	MR 979836
BONNET NUTS 6 EA.	APN 43126009	N/A	A 4	MR 979836

18. Planner David Goodlet 5-20-05 Printed Name: David Goodlet

19. ISI Ramakant P Indap 5/27/05 Printed Name: Ramakant Indap Log Entry

20. ANII R.G. Hogstrom 5-31-05 Printed Name: R.G. Hogstrom

\* PER TELCON U/R. INDAP W.O. WAS RELEASED W/O ANII AS ALLOWED BY  
72DP-92217 APPENDIX A 5/28/05

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/20/2005

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 2797958

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 Volum Control System

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
bonnet studs	n/a	n/a	n/a	3PCHNV363	2005	Replacement	NO
bonnet nuts	n/a	n/a	n/a	3PCHNV363	2005	Replacement	NO

7. Description of Work: Disassemble valve for leaking bonnet gasket. Replace bonnet studs & nuts.

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

N-416-2 ☐ Other Pressure        psi

Test Temperature        °F

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

## FORM NIS-2 (Back)

9. Remarks: WO# 2797958 for valve 3PCHNV363. Replaced the SA540 Gr B-23 studs with SA564 Gr. 630 material to enhance corrosion ability. Also replaced bonnet nuts with like for like to contain contamination.

Pre-Pressured Test WO Review - ISI

N/A

ANII

N/A

### Certificate of Compliance

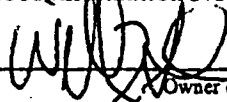
We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A

Expiration Date: N/A

Signed:



Owner or Owner's Designee, Title

ISI INC

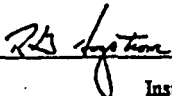
Date:

5/28/05

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 5-31-05 to 5-31-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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



Inspector's Signature

Commissions: NB 9685 "N" "I" AZ264

National Board, State, Province, and Endorsements

Date:

5-31-05



# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PCHNV818
- 2.. Item Description: 1-1/2" Borg Warner 1586# Y Type Manual Globe Valve
3. N-5 Data Package Number: 3CH14-3
4. W.O. Number: 2799480
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Disassemble valve to correct seat leakage. Body to bonnet seal weld will need to be removed and later replaced.
8. ☐ ISI Flaw      NDE Method of Flaw Detection:       
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Not a failure of the ASME pressure boundary. Seal weld is required to be removed to allow for valve disassembly.

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

Initial Dmg Date 11-27-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Dmg Date 11-27-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Dmg Date 11-27-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Dmg Date 11-27-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
1-1/2" Borg Warner Valve	N/A	67166	N/A	N/A
Body/Bonnet Seal Weld	N/A	N/A	N/A	N/A

18. Planner David Goodlet 11-27-05 Printed Name: David Goodlet  
Signature Date

19. ISI Alan Morrow 11/28/05 Printed Name: Alan Morrow Log Entry an  
Signature Date

20. ANII R.G. HASTROM 11-27-05 Printed Name: R.G. HASTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 11/27/2005

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 2799480

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 & Volumn Control System

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Borg Warner	67166	N/A	3PCHNV818	1981	Repaired	YES
Seal Weld	N/A	N/A	N/A	3PCHNV818	2006	Replacement	NO

7. Description of Work: Disassembled valve to rework to correct seat leakage. Removed & replaced seal weld.

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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: Per wo# 2799480 on valve 3PCHNV818 the body to bonnet seal weld will need to be removed to disassemble the valve to correct seat leakage. Following rework the seal weld will be replaced.

Pre-Pressured Test WO Review - ISI

ANII

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: [Signature] SR. ISI ENGINEER Date: 4/17/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 11-29-05 to 4-17-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspectors Signature

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

Date: 4-17-06

Page 1 of 1Page 1 of 1

- No failure of ASME III pressure boundry. Valve is being rotated to support vendor testing.  
Replacement valve is SN BS-08614.

- Initial BV Date 3/23/06 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☒ YES ☐ NO  
Initial BW Date 3/23/06 If required, include a step in the W.O. for ISI & ANII Inspection.

- Initial BR Date 3/23/06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

- Initial Per Date 3/23/06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

[illegible]

18. Planner B Vidal 3/23/06  
Signature Date Printed Name: Barbara Vidal
19. ISI R.P. Indap 3/24/06  
Signature Date Printed Name: R.P. INDAP Log Entry RPI
20. ANII RS [signature] 3-24-06  
Signature Date Printed Name: R-G. HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 03/16/2006

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 2805436

3. Work Performed By: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1975 Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
PSV	Dresser	BS-08614	N/A	3JRCEPSV0200	1981	Replacement	YES
PSV	Dresser	BY-14537	N/A	3JRCEPSV0200	1991	Replaced	YES

7. Description of Work: Valve being replaced as part of routine maintenance.

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

N-416-2 ☐ Other Pressure 22130 psi

Test Temperature 201 °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: WO# 2805436. Valve being replaced as part of routine maintenance. SN BS-08614

NOT ~ 565°F

Pre-Pressured Test WO Review - ISI

ANII

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: [Signature] Date: 5/10/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 3-24-06 to 5-10-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264

National Board, State, Province, and Endorsements

Date: 5-10-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3JRCEPSV0201
- 2.. Item Description: Pressurizer Safety Relief Valve
3. N-5 Data Package Number: 3RC03-3
4. W.O. Number: 2805437
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the Pressurizer safety relief valve with a reconditioned spare.
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

No failure of ASME III pressure boundary. Valve is being rotated to support vendor testing.  
Replacement valve is SN BS-08565.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☐ YES ☒ NO

Initial BV Date 3/23/06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial BV Date 3/23/06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial BV Date 3/23/06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial BV Date 3/23/06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
3JRCEPSV0201	N/A	BS-08565	N/A	N/A

18. Planner B Vidal 3/23/06 Printed Name: Barbara Vidal  
Signature Date

19. ISI R.P. Endap 3/24/06 Printed Name: R. P. ENDAP Log Entry RPP  
Signature Date

20. ANII R.G. Hogstrom 3-24-06 Printed Name: R.G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 03/16/2006

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 2805437

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1975 Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
PSV	Dresser	BS-08565	N/A	3JRCEPSV0201	1978	Replacement	YES
PSV	Dresser	BQ-07679	N/A	3JRCEPSV0201	1978	Replaced	YES

7. Description of Work: Valve being replaced as part of routine maintenance.

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

N-416-2 ☐ Other Pressure 2130 psi

Test Temperature NOT °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# 2805437. Valve being replaced as part of routine maintenance. SN BS-08565

not ~ 565°F

Pre-Pressured Test WO Review - ISI

ANII

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Will [Signature] Date: 5/10/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 3-24-06 to 5-10-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264

National Board, State, Province, and Endorsements

Date: 5-10-06

## Page 1 of 1

14. Preservice Inspection Required: ☐ YES ☒ NO  
Initial BV Date 3/23/06 If required, include a step in the W.O. to perform Preservice Inspection
15. ASME Section XI Pressure Test Required: ☒ YES ☐ NO  
Initial BV Date 3/23/06 If required, include a step in the W.O. for ISI & ANII Inspection.
- Initial BV Date 3/23/06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
- Initial BV Date 3/23/06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

[illegible]

18. Planner B. Vidal 3/23/06 Printed Name: Barbara Vidal  
Signature Date
19. ISI R. P. Indap 3/24/06 Printed Name: R. P. INDAP Log Entry RPI  
Signature Date
20. ANII R. G. Holstrom 3-24-06 Printed Name: R. G. HOLSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 03/16/2006

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 2805438

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1975 Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
PSV	Dresser	BS-08616	N/A	3JRCEPSV0202	1981	Replacement	YES
PSV	Dresser	BQ-07678	N/A	3JRCEPSV0202	1978	Replaced	YES

7. Description of Work: Valve being replaced as part of routine maintenance.

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

N-416-2 ☐ Other Pressure > 2150 psi

Test Temperature 205 °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: WO# 2805438. Valve being replaced as part of routine maintenance. SN BS-08616

NOT ~ 565°F

Pre-Pressured Test WO Review – ISI

ANII

### Certificate of Compliance

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

Type Code Symbol Stamp \_\_\_\_\_ N/A \_\_\_\_\_

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

Signed: Will Zill \_\_\_\_\_ Date: 5/10/06 \_\_\_\_\_  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 3-24-06 to 5-10-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RA [Signature]

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264

National Board, State, Province, and Endorsements

Date: 5-10-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3JRCEPSV0203
- 2.. Item Description: Pressurizer Safety Relief Valve
3. N-5 Data Package Number: 3RC03-3 4. W.O. Number: 2805439
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the Pressurizer safety relief valve with a reconditioned spare.

8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:

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

No failure of ASME III pressure boundry. Valve is being rotated to support vendor testing.

Replacement valve is SN BS-08567.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☐ YES ☒ NO

Initial BV Date 3/23/06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial BV Date 3/23/06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial BV Date 3/23/06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial BV Date 3/23/06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
3JRCEPSV0203	N/A	BS-08567	N/A	N/A

18. Planner B Vidal 3/23/06 Printed Name: Barbara Vidal  
Signature Date

19. ISI R P Indap 3/24/06 Printed Name: R. P. INDAP Log Entry RPI  
Signature Date

20. ANII R. G. Hogstrom 3-21-06 Printed Name: R. G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 03/16/2006

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 2805439

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1975 Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
PSV	Dresser	BS-08567	N/A	3JRCEPSV0203	1978	Replacement	YES
PSV	Dresser	BY-14538	N/A	3JRCEPSV0203	1991	Replaced	YES

7. Description of Work: Valve being replaced as part of routine maintenance.

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

N-416-2 ☐ Other Pressure > 2130 psi

Test Temperature 207 °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: WO# 2805439. Valve being replaced as part of routine maintenance. SN BS-08567

NOT  $\approx 565^{\circ}\text{F}$

Pre-Pressured Test WO Review - ISI

ANII

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: [Signature] Date: 5/10/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 3-24-06 to 5-10-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspectors Signature

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

Date: 5-10-06

## 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: 04/07/2006

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 2805530

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 3MDGBE04

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
DG "B" Lube oil cooler	American Standard	9-20016-02-6	35424	3MDGBE04	1980	Repaired	YES

7. Description of Work: Weld build up of base metal on the reversing channel spool..

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

N-416-2 ☒ Other Pressure 43 psi

Test Temperature 66 °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: Weld build up of base metal on the reversing channel spool.. W.O. 2805530

Pre-Pressured Test WO Review – ISI N/A


ANII N/A

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

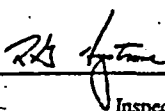
Certificate of Authorization No. N/A Expiration Date: N/A

Signed:  ISI ENGINEER Date: 4-17-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-7-06 to 4-17-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

  
Inspectors Signature

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

Date: 4-17-06

Page 1 of 3

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 2 of 3

1. Component ID 3JSGEPSV0576
- 2.. Item Description: Main Steam Safety Valve; Dresser 6" 3707RAX-RT-25; 1315 psig
3. N-5 Data Package Number: 3SG01-2 4. W.O. Number: 2805544
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replacement of main steam safety valve with a reconditioned and tested spare.
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Not a failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon treviteesting.

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

Initial DMS Date 3-14-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMS Date 3-14-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMS Date 3-14-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMS Date 3-14-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
3JSGEPSV0576	APN 45003638	BS-08581	N/A	MR 1075681

18. Planner David Goodlet 3-14-2006 Printed Name: David Goodlet  
Signature Date

19. ISI R.P. Indap 3/14/06 Printed Name: R.P. INDAP Log Entry RPI  
Signature Date

20. ANII R.G. Houston 3-15-06 Printed Name: R.G. Houston  
Signature Date

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 3 of 3

1. Component ID 3JSGEPSV0692
2. Item Description: Main Steam Safety Valve; Dresser 6" 3707RAX-RT-25; 1315 psig
3. N-5 Data Package Number: 3SG01-2 4. W.O. Number: 2805544
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replacement of main steam safety valve with a reconditioned and tested spare.
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Not a failure in the ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced based upon retesting.

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

Initial Dmg Date 3-14-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Dmg Date 3-14-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Dmg Date 3-14-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Dmg Date 3-14-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
3JSGEPSV0692	APN 45003638	BS-08587	N/A	MR 1075678

18. Planner David Goodlet 3-14-2006 Printed Name: David Goodlet  
Signature Date

19. ISI R.P. Indap 3/14/06 Printed Name: R.P. INDAP Log Entry RP2  
Signature Date

20. ANII R.G. HOGSTON 3-15-06 Printed Name: R.G. HOGSTON  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 3/13/2006

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 2805544

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	BS-08635	N/A	3JSGEPSV0557	1981	Replacement	YES
Safety Valve	Dresser	BS-08581	N/A	3JSGEPSV0576	1978	Replacement	YES
Safety Valve	Dresser	BS-08587	N/A	3JSGEPSV0692	1978	Replacement	YES

7. Description of Work: Replace three main steam safety valves with a reconditioned & tested spare.

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

N-416-2 ☐ Other Pressure 1080 psi

Test Temperature NOT °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: WO# 2805544 will be used to replace Main Steam Safety Valve 3JSGEPSV0557, 576 & 692 during 3R12.

Pre-Pressured Test WO Review - ISI RP IN DAYT P2R W.D. 5/6/06 4/24/06

ANII RS from 1-78-06

### 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: RS from SR. ISI ENGINEER Date: 5/10/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 3-15-06 to 5-10-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RS from  
Inspectors Signature

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

Date: 5-10-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 2

1. Component ID 3MRCEX02
- 2.. Item Description: Reactor Coolant System Pressurizer
3. N-5 Data Package Number: 3RC01-21
4. W.O. Number: 2806586
5. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove the remaining Framatome Pressurizer Heaters (27) and install the original heaters removed by 2614246 during U3R11 if inspected and verified acceptable or use replacement heaters from Korea. Perform fillet weld between the Heater and pressurizer sleeve.

8. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

Electrical portion of the heaters have failed or are suspect. Not a failure at the ASME code pressure boundary

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III CI 1, 1971 Edition 1973 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec III CI 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial Dmg Date 6-5-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Dmg Date 6-5-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Dmg Date 6-5-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Dmg Date 6-5-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Pzz Htr 3MRCEA01		14B	N/A	
Pzz Htr 3MRCEA02	91387	NO3028-17	N/A	986735-1
Pzz Htr 3MRCEA03	91387	NO3028-11	N/A	986735-1
Pzz Htr 3MRCEA04		11B	N/A	
Pzz Htr 3MRCEA05	762.77	7625	N/A	985954-1
Pzz Htr 3MRCEA06	91387	NO3028-12	N/A	986735-1
Pzz Htr 3MRCEA07	91387	NO3028-14	N/A	986735-1
Pzz Htr 3MRCEA08		7A	N/A	

18. Planner David Goodlet 6-5-05 Printed Name: David Goodlet  
Signature Date

19. ISI R. INDAP per table Dmg 6-5-05 Printed Name: Ramakant Indap Log Entry  
Signature Date

20. ANII R. HOGSTROM per table Dmg 6-5-05 Printed Name: Robert Hogstrom  
Signature Date



# ASME SECTION XI - REPAIR / REPLACEMENT

Page 2 of 2

Component Continuation:

Work Order Number: 2806586

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
PZR HTR 3MRCEA10	91378	N03028-13	N/A	986735-1
PZR HTR 3MRCEA12	91378	N03028-16	N/A	986735-1
PZR HTR 3MRCEA13	91378	N03028-15	N/A	986735-1
PZR HTR 3MRCEA14		23B	N/A	
PZR HTR 3MRCEA15		26B	N/A	
PZR HTR 3MRCEA16	91378	N03028-09	N/A	986735-1
PZR HTR 3MRCEA17	91378	N03028-04	N/A	986735-1
PZR HTR 3MRCEA18		37B	N/A	
PZR HTR 3MRCEB01	91378	N03028-05	N/A	986735-1
PZR HTR 3MRCEB03		25A	N/A	
PZR HTR 3MRCEB04	91378	N03028-10	N/A	986735-1
PZR HTR 3MRCEB06		8B	N/A	
PZR HTR 3MRCEB07		30B	N/A	
PZR HTR 3MRCEB09		18B	N/A	
PZR HTR 3MRCEB10	91378	N03028-06	N/A	986735-1
PZR HTR 3MRCEB12		31B	N/A	
PZR HTR 3MRCEB15	91378	N03028-08	N/A	986735-1
PZR HTR 3MRCEB16		60J	N/A	
PZR HTR 3MRCEB18	91378	N03028-07	N/A	986735-1
			N/A	
Note: All serial numbers listed contain M01 designation				
after six alphanumeric characters e.g. N03028 M01-04				
It is also shown Code Data Report attached to				
the NIS-2 form. RPhidap 6/14/05				

18. Planner David Goodlet 6-5-05  
Signature Date

Printed Name: David Goodlet

19. ISI R. Indap 6-5-05  
Signature Date

Printed Name: Ramakant Indap Log Entry

20. ANII R. Hogstrom 6-5-05  
Signature Date

Printed Name: Robert Hogstrom

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 06/05/2005

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

Sheet: 1 of 4

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2806586

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 (RC), ASME Section III, Class 1

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1971 Edition, Winter 1973 Addenda, \_\_\_\_\_ Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Pressurizer Heater	Watlow	14B	N/A	3MRCEA01	1981	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-17	N/A	3MRCEA02	2004	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-11	N/A	3MRCEA03	2004	Replacement	YES
Pressurizer Heater	Watlow	11B	N/A	3MRCEA04	1981	Replacement	YES
Pressurizer Heater	General Electric	1625	N/A	3MRCEA05	1977	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-12	N/A	3MRCEA06	2004	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-14	N/A	3MRCEA07	2004	Replacement	YES
Pressurizer Heater	Watlow	7B	N/A	3MRCEA08	1981	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-13	N/A	3MRCEA10	2004	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-16	N/A	3MRCEA12	2004	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-15	N/A	3MRCEA13	2004	Replacement	YES
Pressurizer Heater	Watlow	23B	N/A	3MRCEA14	1981	Replacement	YES
Pressurizer Heater	Watlow	26B	N/A	3MRCEA15	1981	Replacement	YES

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 06/05/2005

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

Sheet: 2 of 4

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2806586

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 (RC), ASME Section III, Class 1

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1971 Edition, Winter 1973 Addenda,      Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Pressurizer Heater	Doosan	N03028M01-09	N/A	3MRCEA16	2004	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-04	N/A	3MRCEA17	2004	Replacement	YES
Pressurizer Heater	Watlow	37B	N/A	3MRCEA18	1981	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-05	N/A	3MRCEB01	2004	Replacement	YES
Pressurizer Heater	Watlow	25A	N/A	3MRCEB03	1981	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-10	N/A	3MRCEB04	2004	Replacement	YES
Pressurizer Heater	Watlow	8B	N/A	3MRCEB06	1981	Replacement	YES
Pressurizer Heater	Watlow	30B	N/A	3MRCEB07	1981	Replacement	YES
Pressurizer Heater	Watlow	18B	N/A	3MRCEB09	1981	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-06	N/A	3MRCEB10	2004	Replacement	YES
Pressurizer Heater	Watlow	31B	N/A	3MRCEB12	1981	Replacement	YES
Pressurizer Heater	Doosan	N03028M01-08	N/A	3MRCEB15	2004	Replacement	YES
Pressurizer Heater	Watlow	60J	N/A	3MRCEB16	1981	Replacement	YES

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 06/05/2005

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

Sheet: 3 of 4

2. Plant: Palo Verde Nuclear Generating Station

Unit: 3

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

Work Order Number 2806586

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 (RC), ASME Section III, Class 1

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1971 Edition, Winter 1973 Addenda, 1 Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Pressurizer Heater	Doosan	N03028M01-07	N/A	3MRCEB18	2004	Replacement	YES
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

7. Description of Work: Replace Framatone Pressurizer heaters installed during U3R11.

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

N-416-2 ☐

Other Pressure \_\_\_\_\_ psi

Test Temperature \_\_\_\_\_ °F

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

Sheet 4 of 4

9. Remarks: W.O. 2806586 replaced 27 Framatone Pressurizer heaters (installed during 3R11 under W.O. 2614246) due to poor life expectancy. The 27 Framatone heaters were replaced with a combination of 12 original Watlow heaters (which were removed during 3R11 under W.O. 2614246), 1 spare heater mfg. by General Electric, and 14 new replacement heaters mfg. by Doosan Heavy Industries.

Pre-Pressured Test WO Review - ISI N/A

ANII N/A

## Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. P. Ford, Consulting Metallurgical Engineer Date: 6/14/2005  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 6-5-05 to 6-14-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. P. Ford  
Inspectors Signature

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

Date: 6-14-05

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

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

Pg. 1 of 2

1. Manufactured by DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. 555, GUYGOK-DONG, CHANGWON, KYUNGNAM, KOREA.  
(name and address of NPT Certificate Holder)

2. Manufactured for KOREA HYDRO & NUCLEAR POWER CO., LTD. 187, SAMSUNG-DONG, KANGNAM-KU, SEOUL, KOREA.  
(name and address of purchaser)

3. Location of installation ULCHIN NUCLEAR POWER PLANT UNIT 5, 6 / 84-4 BUGU-RU BUK-MYUN ULCHIN-GUN KYUNGSANGBUK-DO  
(name and address)

4. Type: D-N03028-22185-M01 Rev.0 SA213-TP316/SA479-TP316 75 ksi N/A 2004  
(drawing no.) (mat'l. spec. no.) (parallel strength) (CRN) (year built)

5. ASME Code, Section III, Division 1: 1992 A84(DEC.31.'94) 1 N/A  
(edition) (addenda date) (class) (Code Case no.)

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

7. Remarks: 1. ITEM NAME : PRESSURIZER HEATER

2. ( ) : DOOSAN No.

8. Nom. thickness (in.) 0.190" Min. design thickness (in.) 0.180" Dia. ID (ft & in.) 0.862" Length overall (ft & in.) 88.74"

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

Part or Appurtenance Serial Number	National Board No. In Numerical Order	Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1) N03028M01-01	N/A (DN-122)*	(26)	
(2) N03028M01-02	N/A (DN-123)*	(27)	
(3) N03028M01-03	N/A (DN-124)*	(28)	
(4) N03028M01-04	N/A (DN-125)*	(29)	
(5) N03028M01-05	N/A (DN-126)*	(30)	
(6) N03028M01-06	N/A (DN-127)*	(31)	
(7) N03028M01-07	N/A (DN-128)*	(32)	
(8) N03028M01-08	N/A (DN-129)*	(33)	
(9) N03028M01-09	N/A (DN-130)*	(34)	
(10) N03028M01-10	N/A (DN-131)*	(35)	
(11) N03028M01-11	N/A (DN-132)*	(36)	
(12) N03028M01-12	N/A (DN-133)*	(37)	
(13) N03028M01-13	N/A (DN-134)*	(38)	
(14) N03028M01-14	N/A (DN-135)*	(39)	
(15) N03028M01-15	N/A (DN-136)*	(40)	
(16) N03028M01-16	N/A (DN-137)*	(41)	
(17) N03028M01-17	N/A (DN-138)*	(42)	
(18)		(43)	
(19)		(44)	
(20)		(45)	
(21)		(46)	
(22)		(47)	
(23)		(48)	
(24)		(49)	
(25)		(50)	

10. Design pressure 2500 psi. Temp. 800 °F. Hydro. test pressure 3125 psi at temp. 70 °F

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

## FORM N-2 (Back - Pg. 2 of 2)

Certificate Holder's Serial Nos. N03028M01-01 through N03028M01-17

## CERTIFICATION OF DESIGN

Design specifications certified by J.Y. LEE P.E. State OREGON Reg. no. 18235  
(when applicable)Design report\* certified by J.Y. PARK P.E. State GEORGIA Reg. no. 20667  
(when applicable)

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this (these) PART  
conforms to the rules of construction of the ASME Code, Section III, Division 1.NPT Certificate of Authorization No. N-2767 Expires JANUARY 8, 2006Date May 10/04 Name DOOSAN HEAVY INDUSTRIES & CONT. CO. LTD. Signed J. K. SEO  
(NPT Certificate Holder) (authorized representative)

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and  
the State or Province of ILLINOIS and employed by The Hartford Steam Boiler Inspection And Insurance Co., Ltd.of CONN. have inspected these items described in this Data Report on 5/7/04, and state that to the  
best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with  
ASME Code, Section III, Division 1. Each part listed has been authorized for stamping on the date shown above.By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning  
the equipment described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any  
manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.Date 5/10/04 Signed [Signature] Commissions IL1546  
(Authorized Inspector) (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

## 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: 04/17/2006

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 2815022

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection System

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Valve	Flowserve/ Kerotest	96SN0421	N/A	3PSIBVA06	1996	Repaired	YES
Seal Weld	N/A	N/A	N/A	3PSIBVA06	2006	Replacement	NO

7. Description of Work: Rework the valve to correct seat leakage and replace the seal weld.

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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 2815022 reworked the valve seat leakage, which required removal and replacement of the body to bonnet seal weld.

Pre-Pressured Test WO Review - ISI

N/A

ANII

N/A

### Certificate of Compliance

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

Type Code Symbol Stamp

N/A

Certificate of Authorization No.

N/A

Expiration Date:

N/A

Signed:

[Signature]

ISI ENGINEER

Date:

4-18-06

Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 11-23-05 to 4-18-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Inspectors Signature

Commissions: NB 9685 'N' 'T' AZ264

National Board, State, Province, and Endorsements

Date:

4-18-06

## Page 1 of 2

R.G. HOGSTROM

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 2 of 2

1. Component ID 3JRCEPSV0200
- 2.. Item Description: Pressurizer Safety Relief Valve
3. N-5 Data Package Number: 3RC03-3
4. W.O. Number: 2817230
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Valve reworked as a part of routine maintenance during vendor testing.
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
No failure of ASME III pressure boundry. Valve reworked as a part of routine maintenance during vendor testing.  
Replacement valve is SN BS-08614.
10. Repair/Replacement Work Organization: NWS Technologies
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1971 Edition 1973 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☐ YES ☒ NO  
Initial BV Date 4/15/06 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☒ YES ☒ NO  
Initial BV Date 4/15/06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial BV Date 4/15/06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial BV Date 4/15/06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
3JRCEPSV0200	N/A	BS-08614	N/A	N/A
Bellows	APN 45490005	01060102	N/A	MR 820816

18. Planner B Vidal 4/15/06 Printed Name: Barbara Vidal  
Signature Date

19. ISI R P Indap 4/17/06 Printed Name: R. P. INDAP Log Entry RPI  
Signature Date

20. ANII R G Hogstrom 4-18-06 Printed Name: R. G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 4-17-2006

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 2817230

3. Work Performed by: NWS Technologies

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC: Reactor Coolant System

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
PSV	Dresser	BS-08614	N/A	3JRCEPSV0200	1981	Repaired	YES
Bellows	Dresser	01060102	N/A	3JRCEPSV0200	2006	Replacement	NO
PSV	Dresser	BS-08567	N/A	3JRCEPSV0203	1978	Repaired	YES
Disc	Dresser	ADP14	N/A	3JRCEPSV0203	2003	Replacement	NO

7. Description of Work: Valve overhaul and testing of spare pressurizer safety valves at off-site test facility.

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

N-416-2 ☐ Other Pressure n/a psi

Test Temperature n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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: WO# 2817230 used on spare pressurizer safety valves to overhaul and test at a off-site repair facility.  
S/N BS-08567 & BS-08614 had code parts replaced.

Pre-Pressured Test WO Review - ISI N/A  
ANII N/A

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. R. Bridgman, Sr. Consulting Engineer Date: 4/17/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-18-06 to 4-18-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. R. Bridgman  
Inspectors Signature

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

Date: 4-18-06

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

Pg. 1 of 2

1. Manufactured and certified by Dresser Flow Control, Dresser Inc. La. Hwy 3225 @ US Hwy 167 N  
P. O. Box 1430 Alexandria, Louisiana 71303-1430  
(name and address of NPT Certificate Holder)

2. Manufactured for Arizona Public Service Company P.O. Box 63640 Phoenix, Arizona 85072-3640  
(name and address of purchaser)

3. Location of installation Arizona Public Service Co Palo Verde Nucl Generation 5301 S Wintersburg Rd. Tempe, Arizona 85354  
(name and address)

4. Type OS-13 ASME SE637 INCONEL X750 170 KSI N/A 2003  
(drawing no.) (mat' spec. no.) (tensile strength) (CRN) (year built)

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

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

7. Remarks: Serial Numbers Are Used In Lieu Of NPT Stamping.

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

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

Part or Appurtenance Serial Number *		National Board No. In Numerical Order	
(1)	ADP13		
(2)	ADP14 356897		
(3)			
(4)			
(5)			
(6)			
(7)			
(8)			
(9)			
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(47)			
(48)			
(49)			
(50)			

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

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

Certificate Holder's Serial Nos. ADP13 AND ADP

## CERTIFICATION OF DESIGN

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

## CERTIFICATE OF COMPLIANCE

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

DISC

NPT Certificate of Authorization No. N-2434 Expires 5/20/2004  
 Date 9-22-03 Name SEE LINE 1 Signed [Signature]  
 (NPT Certificate Holder) (authorized representative)

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province  
 of LOUISIANA and employed by HSB CT  
 of HARTFORD, CT. have inspected these items described in this Data Report on 9/22/03, and state that to the  
 best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section  
 Division 1. Each part listed has been authorized for stamping on the date shown above.  
 by signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described  
 in this Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage  
 or loss of any kind arising from or connected with this inspection.

Date 9/22/03 Signed [Signature] Commissions [Signature]  
 (Authorized Nuclear Inspector) (Nat'l Bd. (incl. endorsements) and state or prov. and no.)



# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3MEWAE01
- 2.. Item Description: Essential Cooling Water Heat Exchanger "A"
3. N-5 Data Package Number: 3EW01-1
4. W.O. Number: 2823753
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Perform Weld Repair to Heat Exchanger Channel Area
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Weld repair required after inspection of the metal surfaces prior to periodic coating, there was no failure of the Code Pressure Boundary.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III CI 3, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III CI 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda <sup>3rd ed 7/21/06</sup> <sub>7/21/06</sub>

14. Preservice Inspection Required: ☐ YES ☒ NO

Initial HL Date 4/21/06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial HL Date 4/21/06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial HL Date 4/21/06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial HL Date 4/21/06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
3MEWAE01	N/A	N/A	N/A	N/A

18. Planner Herbert L. Green 4/21/06  
Signature Date

Printed Name: HERBERT L. GREEN

19. ISI R.P. Indap 4/21/06  
Signature Date

Printed Name: R.P. Indap Log Entry R.P.

20. ANII R.C. Hogstrom 4-21-06  
Signature Date

Printed Name: R.C. 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: 04/21/2006

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 2823753

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Essential Cooling Water System, ASME Section III, Class 3

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)
A EW Ht Ex.	Struthers Wells Corp.	1-76-06-32915-1	N/A	3MEWAE01	1980	Repaired	YES

7. Description of Work: Material Repair

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

N-416-2 ☒ Other Pressure        psi

Test Temperature        °F

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

## FORM NIS-2 (Back)

9. Remarks: Perform weld repair to corroded areas of the Ht Ex. Channel area IAW W.O. 2823753 after Engineering Inspections.

Pre-Pressured Test WO Review – ISI

RP Andap 4/24/06

ANII

RS Iyengar 4-28-06

### 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: Will [Signature] Date: 4/29/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-21-06 to 4-29-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RS Iyengar  
Inspectors Signature

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

Date: 4-29-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3MEWBEO1
- 2.. Item Description: Essential Cooling Water Heat Exchanger "B"
3. N-5 Data Package Number: 3EW02-2 4. W.O. Number: 2823757
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Perform Weld Repair to Heat Exchanger Channel and Flange Area
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Weld repair required after inspection of the metal surfaces prior to periodic coating, there was no failure of the Code Pressure Boundary.

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

Initial HL Date 4/2/06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial HL Date 4/2/06 If required, include a step in the W.O. for ISI & ANII Inspection.

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

Initial HL Date 4/2/06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
3MEWBEO1	N/A	N/A	N/A	N/A

18. Planner Herbert L. Green 4/2/06 Printed Name: HERBERT L. GREEN  
Signature Date

19. ISI R.L. Brown 4/2/06 Printed Name: R.L. BROWN Log Entry RLB  
Signature Date

20. ANII R.G. Hogstrom 4-7-06 Printed Name: R.G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/07/2006

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 2823757

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Essential Cooling Water System, ASME Section III, Class 3

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)
B EW Ht Ex.	Struthers Wells Corp.	1-76-06-32915-2	14611	3MEWBE01	1980	Repaired	YES

7. Description of Work: Material Repair

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

N-416-2 ☒ Other Pressure 47 psi

Test Temperature 62 °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: Perform weld repair to corroded areas of the Ht Ex. Channel Head, Channel Flange and Channel Door on the West end IAW W.O. 2823757 after Engineering Inspections.


Pre-Pressured Test WO Review – ISI N/A  
ANII N/A

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed:  ISI ENGINEER Date: 4-17-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-7-06 to 4-17-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

  
Inspectors Signature

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

Date: 4-17-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PCHBV331
- 2.. Item Description: 2" Borg Warner Lift Check valve
3. N-5 Data Package Number: 3CH04-1
4. W.O. Number: 2824134
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove seal weld to allow for rework of seats to correct leakage.
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Not a failure of the ASME III pressure boundary. Need to remove and restore bonnet seal weld for inspection and rework of check valve internals.

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

Initial Dmg Date 12-9-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Dmg Date 12-9-05 If required, include a step in the W.O. for ISI & ANII Inspection.

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

Initial Dmg Date 12-9-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Valve	N/A	69642	N/A	N/A
Seal Weld	N/A	N/A	N/A	N/A
DISC	APN # 45020317	33	C 5701-A	MR # 1008165

18. Planner David M. Goodlet 12-9-05 Printed Name: David Goodlet  
Signature Date

19. ISI Alan Morrow 12/9/05 Printed Name: Alan Morrow Log Entry am  
Signature Date

20. ANII Robert G. Houston 12-9-05 Printed Name: ROBERT 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: 12/09/2005

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 2824134

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Borg Warner	69642	N/A	3PCHBV331	1981	Repaired	YES
Seal Weld	N/A	N/A	N/A	3PCHBV331	2006	Replacement	NO
<i>DISC</i>	<i>Borg Warner</i>	<i>33</i>	<i>N/A</i>	<i>3PCHBV331</i>	<i>2006</i>	<i>REPLACEMENT</i>	<i>NO</i>

7. Description of Work: Removal of seal weld for valve internal inspection & rework for seat leakage.

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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# 2824134 on valve 3PCHB7331 for rework due to seat leakage. The bonnet seal weld needs to be removed and replaced to support this work.

Pre-Pressured Test WO Review - ISI N/A

ANII N/A

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: [Signature] ISI ENGINEER Date: 4-20-06  
Owner or Owner's Designer, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 12-9-05 to 4-21-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Inspectors Signature

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

Date: 4-21-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PSIEV541
- 2.. Item Description: HPSI/LPSI Header Loop Injection Check Valve
3. N-5 Data Package Number: 3RC01-3
4. W.O. Number: 2824821
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Summer 1975 Addenda
7. Work Description: Rework or replace the bonnet and assembly disc to correct seat leakage
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Seat leakage - No ASME boundary failure

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

Initial J.D Date 11-22-05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial J.D Date 11-22-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 11-22-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D Date 11-22-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
BONNET/DISC ASSEMBLY	45060195	14 / 8	3C62/2G70	2860075

18. Planner [Signature] 11-22-05 Printed Name: JAMES I. DAVIS  
Signature Date

19. ISI [Signature] 11-22-05 Printed Name: WILEY ANLSTROM Log Entry WNA  
Signature Date

20. ANII [Signature] 11-23-05 Printed Name: ROBERT G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 04/28/06  
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 2824821  
Address Work Order Number
3. Work Performed by Arizona Public Service 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 ASME Section III 19 74 Edition, W75 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 92 Addenda

## 6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Borg-Warner	51031	1608	3PSIEV541	1979	Repaired	Yes
Disc - removed	Borg-Warner	SN8	NA	HT # 3L96	1979	Repaired	Yes
Bonnet - removed	Borg-Warner	SN18	NA	HT # 3C67	1979	Repaired	Yes
Disc - installed	Borg-Warner	SN8	NA	HT # 2G70	*	Replacement	No
Bonnet - installed	Borg-Warner	SN14	NA	HT # 3C62	*	Replacement	No

7. Description of Work Replaced the bonnet and disc assembly. (\* note remarks on Page 2)

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

Other ☐ Pressure > 2130 psi Test Temp. NOT °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 2824821 4-23-06  
Work Order 2861512 replaced the bonnet and disc assembly with the assembly from 1PSIEV542  
The installed assembly was removed by work order 2785706 and refurbished by work order  
2860075

Pre-Pressure Test Review: ISI 01/14/28-06 ANII 1/2 4-23-06

### 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 Willie Date 5/10/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 11-23-05 to 5-10-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RS [Signature] Commissions Az 264 NB 9685 "A.N.I.C."  
Inspector's Signature National Board, State, Province, and Endorsements

Date 5-10-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PSIEV542
- 2.. Item Description: HPSI/LPSI Header Loop Injection Check Valve
3. N-5 Data Package Number: 3RC01-3      4. W.O. Number: 2824825
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Summer 1975 Addenda
7. Work Description: Rework or replace the bonnet and assembly disc to correct seat leakage
8. ☐ ISI Flaw      NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Seat leakage - No ASME boundary failure

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

Initial J.D. Date 11-22-05      If required, include a step in the W.O. to perform Preservice Inspection

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

Initial J.D. Date 11-22-05      If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D. Date 11-22-05      16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D. Date 11-22-05      17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet + Arm + Disc Assy	45060195	212828-8 ASSEMBLY S/N	NA	1079227
New Bonnet	76856	RS212708-8	N/A	RP2g Page 27 of Procedure
New Disc	76865	RS213340-7	N/A 4/24/02	— 11 —

18. Planner [Signature] Date 11-22-05      Printed Name: James I. Davis

19. ISI [Signature] Date 11-22-05      Printed Name: WILEY AHLSTROM      Log Entry N/A

20. ANII [Signature] Date 11-23-05      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: 04/28/2006

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 2824825

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
12" Check Valve	Borg Warner	63870	2286	3PSIEV542	1980	Repaired	Yes
Disc - removed	Borg Warner	S/N 12	N/A	Ht # 3L96	1980	Repaired	Yes
Bonnet - removed	Borg Warner	S/N 20	N/A	Ht # 3L97	1980	Repaired	Yes
Disc - installed	Borg Warner	S/N 212828-8	N/A	RS213340-7	1991	Replacement	Yes
Bonnet - installed	Borg Warner	S/N 212828-8	N/A	RS212708-8	1991	Replacement	Yes

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

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

Other ☐ Pressure >2130 psi

Test Temperature NOT °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 2824825 replaced the bonnet and disc assembly with a new assembly

Pre-Pressure Test Review: ISI DEH 4-28-06 ANII 4-29-06

### 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. ISI ENGINEER Date 5/10/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 11-23-05 to 5-10-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

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

Date 5-10-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3JSIAUV0674
2. Item Description: A TRAIN CONTAINMENT RECIRC SUMP TO SI TRAIN 'A' CONTAINMENT ISOLATION VALVE
3. N-5 Data Package Number: 3SI01-6
4. W.O. Number: 2830289
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the gasket retainer bolts per EDC 2005-00665
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

ORIGINAL 410 SS BOLTS BEING REPLACED WITH MORE CORROSION RESISTANT SA 564, GR. 630 BOLTS PER EDC 2005-00665.

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

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

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

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

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

Initial J.D. Date 11-16-05

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

Initial J.D. Date 11-16-05

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Gasket retainer bolts	APN 00090043	N/A		MR 1039838

18. Planner [Signature] 11-16-05 Printed Name: JAMES I. DAVIS  
Signature Date

19. ISI [Signature] 11/17/05 Printed Name: FRED POTRET Log Entry [Signature]  
Signature Date

20. ANII [Signature] 11-17-05 Printed Name: ROBERT 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: 4-21-06

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 2830289

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Valve	Posi-Seal	14338-4A	N/A	3JSIAUV0674	1979	Repaired	YES
Gasket retainer bolts	N/A	N/A	N/A	3JSIAUV0674	2006	Replacement	NO

7. Description of Work: Replace the gasket retainer bolting as required per EDC 2005-00665

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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 2830289 replaced the original 410 Stainless steel gasket retainer bolts with more corrosion resistant SA564, Gr 630 bolts per EDC 2005-00665 and DMWO 2760330.

Pre-Pressured Test WO Review - ISI

N/A

ANII

N/A

### Certificate of Compliance

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

Type Code Symbol Stamp

N/A

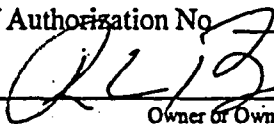
Certificate of Authorization No.

N/A

Expiration Date:

N/A

Signed:



ENL

Owner or Owner's Designee, Title

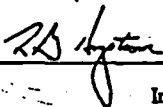
Date:

4-21-06

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-17-05 to 4-21-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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



Inspector's Signature

Commissions: NB 9685 "N" "T" AZ264

National Board, State, Province, and Endorsements

Date:

4-21-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3JSIBUV0676
- 2.. Item Description: B TRAIN CONTAINMENT RECIRC SUMP TO SI TRAIN 'B' CONTAINMENT ISOLATION VALVE
3. N-5 Data Package Number: 3SI01-6
4. W.O. Number: 2830290
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the gasket retainer bolts per EDC 2005-00666
8. ☐ ISI Flaw NDE Method of Flaw Detection: \_\_\_\_\_  
Report Number: \_\_\_\_\_
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

ORIGINAL 410 SS BOLTS BEING REPLACED BY MORE CORROSION RESISTANT SA 564, Gv. 630 BOLTS PER EDC 2005-00666.

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

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

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

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

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

Initial J.O. Date 11-16-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Gasket retainer bolts	APN 00090043	N/A		MR 1039837

18. Planner [Signature] 11-16-05 Printed Name: James I. Davis  
Signature Date

19. ISI [Signature] 11/17/05 Printed Name: FRED POTEET Log Entry FR  
Signature Date

20. ANII [Signature] 11-17-05 Printed Name: ROBERT HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 9-14-06

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 2830290

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Winter 1975 Addenda, 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	Posi-Seal	14338-4-B	N/A	3JSIBUV0676	1979	Repaired	YES
Gasket retainer bolts	N/A	N/A	N/A	3JSIBUV0676	2006	Replacement	NO

7. Description of Work: Replace the gasket retainer bolting as required per EDC 2005-00666

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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 2830290 replaced the original 410 Stainless steel gasket retainer bolts with more corrosion resistant SA564, Gr 630 bolts per EDC 2005-00666 and DMWO 2760330.

Pre-Pressured Test WO Review – ISI \_\_\_\_\_

ANII \_\_\_\_\_

### Certificate of Compliance

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

Type Code Symbol Stamp \_\_\_\_\_ N/A \_\_\_\_\_

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

Signed: [Signature] ISI ENL Date: 4-14-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-17-05 to 4-14-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspectors Signature

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

Date: 4-14-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PSIAV459
2. Item Description: SIT Fill and Drain Header Isolation Valve
3. N-5 Data Package Number: 3CH02-8
4. W.O. Number: 2834252
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework the valve to correct seat leakage, remove and replace the bonnet to body seal weld
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Seat leakage only, no failure of the ASME boundary

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

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

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

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

Initial J.O Date 10-4-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.O Date 10-4-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
<u>VALVE</u>		<u>67185</u>		

18. Planner [Signature] 10-4-05 Date Printed Name: James I. Davis

19. ISI [Signature] 10-12-05 Date Printed Name: R.L. Bracey Log Entry [Signature]

20. ANII [Signature] 10-12-05 Date Printed Name: R.G. HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 4-16-06

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 2834252

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Winter 1975 Addenda, 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	67185	N/A	3PSIAV459	1981	Repaired	YES

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

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

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

Remarks: WM 2834252 removed and replaced the bonnet to body seal weld and reworked / replaced the stem and disc assembly to correct seat leakage. *4-16-06*

Pre-Pressured Test WO Review - ISI *N*

ANII *A*

### Certificate of Compliance

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

Type Code Symbol Stamp *N/A*

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

Signed: *RLB* *ISI ENL* Date: *4-16-06*  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of *10-12-05* to *4-16-06*, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

*RLB*  
Inspectors Signature

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

Date: *4-16-06*



# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PSGEV952
2. Item Description: 12" Anchor Darling Gate valve
3. N-5 Data Package Number: \_\_\_\_\_ 4. W.O. Number: 2835375
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework pressure seal gasket sealing surface on the bonnet by weld base metal repair and then remachining surface to restore surface at steam cut area.

8. ☐ ISI Flaw -

NDE Method of Flaw Detection:

Report Number:

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

No failure of the ASME Section III boundary. Need to rework sealing area (base metal weld repair) on the bonnet to correct leakage.

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

Initial DMG Date 4-17-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DMG Date 4-17-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 4-17-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMG Date 4-17-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Valve	N/A	E6162-49-10	N/A	N/A
Bonnet	N/A	3	N/A	N/A

18. Planner David Goodlet Printed Name: David Goodlet  
Signature Date

19. ISI R.P. Indap 4/18/06 Printed Name: R.P. INDAP Log Entry R.P.  
Signature Date

20. ANII R.G. Hoogstrom 4-18-06 Printed Name: R.G. Hoogstrom  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 4/17/2006

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 2835375

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG: Main Steam

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Summer 1975 Addenda, 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	Anchor Darling	E6162-49-10	N/A	3PSGEV952	1981	Repaired	YES
Bonnet	Anchor Darling	3	N/A	3PSGEV952	N/A	Repaired	YES

7. Description of Work: Base metal repair to bonnet due to steam cut in gasket sealing area.

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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# 2835375 for valve 3PSGEV952. Valve was disassembled and inspected. Bonnet has steam cut in gasket sealing area. Will base metal repair and remachine. This valve was installed in the 1988 time frame.

Pre-Pressured Test WO Review - ISI \_\_\_\_\_

ANII \_\_\_\_\_

### Certificate of Compliance

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

Type Code Symbol Stamp \_\_\_\_\_ N/A \_\_\_\_\_

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

Signed: RLB ISI ENR Date: 4-28-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-13-06 to 4-28-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RLB Signature

Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264

National Board, State, Province, and Endorsements

Date: 4-28-06

# ASME SECTION XI – REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PSPAL079
- 2.. Item Description: FLOW INDICATOR S.P.
3. N-5 Data Package Number: 3SP01-2
4. W.O. Number: 2852135
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: To remove the annubar for engineering inspection, during this evolution the flange fasteners will be removed and replaced due to corrosion of the fasteners for ease of re-installation.
8. ☐ ISI Flaw — NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
This annubar is being removed for an engineering inspection. Fastener replacement is NOT due to failure.

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

Initial MS Date 4-17-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MS Date 4-17-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MS Date 4-17-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial MS Date 4-17-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
STUDS	APN 43110014	N/A	731500 010727	MR 1088535
NUTS	APN 43122013	N/A	5-458 3-4VH	MR 1088535

18. Planner MS 4-17-06 Printed Name: Martin J Sullivan  
Signature Date

19. ISI R.P. INDAP 4/17/06 Printed Name: R.P. INDAP Log Entry MS  
Signature Date

20. ANII R.G. HOGSTROM 4-18-06 Printed Name: R.G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/17/2006

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 2852135

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SP

5. (a) Applicable Construction Code ASME Section III ND, Class 3 1974 Edition, Summer 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)
Flange studs	N/A	Ht. # 731500	N/A	3JSPAFE0007	2006	Replacement	NO
5 Flange nuts	N/A	Ht. # LSP	N/A	3JSPAFE0007	2006	Replacement	NO
3 Flange nuts	N/A	Ht. # LVH	N/A	3JSPAFE0007	2006	Replacement	NO

7. Description of Work: To remove for engineering inspection, and to replace flange fasteners.

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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 2852135, to remove Annubar for engineering inspection, and to replace flange fasteners for Annubar Flow Element 3JSPA0007 on line 3PSPAL079.

Pre-Pressured Test WO Review – ISI N/A

ANII \_\_\_\_\_

### Certificate of Compliance

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

Type Code Symbol Stamp \_\_\_\_\_ N/A

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

Signed: [Signature] ISI ENGINEER Date: 4-27-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-18-06 to 4-27-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspectors Signature

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

Date: 4-27-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PSPBL025
2. Item Description: DISCHARGE FLOW INDICATOR S.P.
3. N-5 Data Package Number: 3SP02-2
4. W.O. Number: 2852436 ~~2882436~~ <sup>4-17-06</sup>
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: To remove the annubar for engineering inspection, during this evolution the flange fasteners will be removed and replaced due to corrosion of the fasteners for ease of re-installation.
8. ☐ ISI Flaw ☐ NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

This annubar is being removed for an engineering inspection. The fasteners have cosmetic corrosion, but no failure. RPP 4/12/06

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

Initial MJS Date 4-12-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MJS Date 4-12-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MJS Date 4-12-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial MJS Date 4-12-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
STUDS	APN 43110014	N/A		1087184-03
NUTS	APN 43122013	N/A		1087184-04

18. Planner MJS 4-12-06 Printed Name: Martin J Sullivan  
Signature Date

19. ISI RPP 4/12/06 Printed Name: R. P. INAP Log Entry RPP  
Signature Date

20. ANII R.G. 4-12-06 Printed Name: R.G. HOASTROM  
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: 04/12/2006

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 2852436 ~~2882436~~

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SP

5. (a) Applicable Construction Code ASME Section III ND, Class 3 1974 Edition, Summer 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)
S.P. flow meter fasteners	Pullman power products	N/A	N/A	3PSPBL025	2006	Replacement	NO

7. Description of Work: To remove for engineering inspection, and to replace flange fasteners.

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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: To remove for engineering inspection, and to replace flange fasteners. w.o. 2882436, 2852436

Pre-Pressured Test WO Review – ISI N/A  
ANII N/A

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. P. Indap, Sr. Consulting Engineer Date: 4-17-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-12-06 to 4-17-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. P. Indap Commissions: NB 9685 "N" "T" AZ264  
Inspectors Signature National Board, State, Province, and Endorsements

Date: 4-17-06

## 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: 4-17-06

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 2861195

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or NO)
Valve	Posi-Seal	14337-1-B	N/A	3JSIBUV0679	1980	Repaired	YES
Gasket retainer bolts	N/A	N/A	N/A	3JSIBUV0679	2006	Replacement	NO

7. Description of Work: Replace the gasket retainer bolting as required per N001-1104-00279

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

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

Remarks: Work Order 2861195 replaced the original gasket retainer bolts with identifiable 410 Stainless steel bolts per N001-1104-00279.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. P. Brady Sr. Consulting Engineer Date: 4/17/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 3-9-06 to 4-17-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. P. Brady

Inspectors Signature

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

Date: 4-17-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID: 3PSIEV247
2. Item Description: SIT 1B Discharge Check Valve
3. N-5 Data Package Number: 3RC01-3
4. W.O. Number: 2861512
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Summer 1975 Addenda
7. Work Description: Rework or replace the bonnet and disc assembly to correct seat leakage
8. ☐ ISI Flaw      NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Seat leakage - No ASME boundary failure

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

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

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

Initial J.D. Date 3-9-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D. Date 3-9-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D. Date 3-9-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO(WO No)
<u>Bonnet 45060171</u>	<u>75907</u>	<u>SN 8</u>	<u>2E76</u>	<u>2860077</u>
<u>Disc 45020875</u>	<u>75913</u>	<u>SN 1</u>	<u>2E69</u>	<u>2860077</u>
<u>Bonnet/Disc Assy</u>	<u>45060170</u>	<u>SN 8 / SN 1</u>	<u>2E76/2E69</u>	<u>2860077</u>

18. Planner [Signature] Date 3-5-06 Printed Name: James I. Davis

19. ISI [Signature] Date 3/10/06 Printed Name: F. POTEET Log Entry HA

20. ANII [Signature] Date 3-10-06 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 04/27/06  
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 2861512  
Address Work Order Number

3. Work Performed by Arizona Public Service 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 ASME Section III 19 74 Edition, W75 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 92 Addenda

## 6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Borg-Warner	32613	1055	3PSIEV247	1978	Repaired	Yes
Disc - removed	Borg-Warner	NA	NA	HT # 2K45	1978	Repaired	Yes
Bonnet - removed	Borg-Warner	NA	NA	HT # 2X61	1978	Repaired	Yes
Disc - installed	Borg-Warner	SN1	NA	HT # 2E69	*	Replacement	No
Bonnet - installed	Borg-Warner	SN8	NA	HT # 2E76	*	Replacement	No

7. Description of Work Replaced the bonnet and disc assembly. (\* note remarks on Page 2)

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-1 ☐  
 Other ☐ Pressure > 2130 psi Test Temp. NOT °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 2861512 replaced the bonnet and disc assembly with the assembly from 1PSIEV237  
The installed assembly was removed by work order 2732245 and refurbished by work order  
2860077

Pre-Pressure Test Review: ISI 08/10/06 ANII 4-28-06

### 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] S.R. ISI ENGINEER Date 5/10/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 3-10-06 to 5-10-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

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

Date 5-10-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 2

1. Component ID S/N: BS-08581
- 2.. Item Description: Main Steam Safety Valve; Dresser - 6" 3707RAX-RT-25 1315 psig
3. N-5 Data Package Number: n/a
4. W.O. Number: 2874095
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Maintenance overhaul and testing of spare valve. Code part replacement from other spare valves or from approved purchased spare parts based upon inspection results.

8. ☐ ISI Flaw --

NDE Method of Flaw Detection:

Report Number:

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

No failure of the ASME III boundary. The disc will be replaced with preoxidized ASME SB637 or ASTM B637 INCONEL X-750 material to enhance performance. Other parts will be replaced on a as needed basis.

10. Repair/Replacement Work Organization: NWS Technologies
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☐ YES ☒ NO

Initial Dmg Date 3-8-2006 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Dmg Date 3-8-2006 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Dmg Date 3-8-2006 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Dmg Date 3-8-2006 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/POAWO No.
Disc	APN 00064290	ADG62	N/A	943938
SPINDLE	APN 45560003	HT# 75903 <sup>65</sup> 3/21/06	75903	1013750

18. Planner David Goodlet 3-8-2006  
Signature Date

Printed Name: David Goodlet

19. ISI R.P. Indrup 3/9/06  
Signature Date

Printed Name: R.P. Indrup Log Entry RPI

20. ANII R.G. Hogstrom 3-9-06  
Signature Date

Printed Name: R.G. Hogstrom



# ASME SECTION XI - REPAIR / REPLACEMENT

Page 2 of 2

1. Component ID S/N: BS-08635
2. Item Description: Main Steam Safety Valve; Dresser - 6" 3707RAX-RT-25 1315 psig
3. N-5 Data Package Number: n/a 4. W.O. Number: 2874095
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Maintenance overhaul and testing of spare valve. Code part replacement from other spare valves or from approved purchased spare parts based upon inspection results.
8. ☐ ISI Flaw -- NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
No failure of the ASME III boundary. The disc will be replaced with preoxidized ASME SB637 or ASTM B637 INCONEL X-750 material to enhance performance. Other parts will be replaced on a as needed basis.

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

Initial Dmg Date 3-8-2006 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Dmg Date 3-8-2006 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Dmg Date 3-8-2006 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Dmg Date 3-8-2006 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/POAWO No.
Disc	APN 00064290	ADG64	N/A	943938

18. Planner David Goodlet 3-8-2006 Printed Name: David Goodlet  
Signature Date

19. ISI R.P. Indap 3-9-06 Printed Name: R.P. INDAP Log Entry RPP  
Signature Date

20. ANII R.G. Hogstrom 3-9-06 Printed Name: R.G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/10/2006

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 2874095

3. Work Performed by: NWS Technologies

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG: Main Steam

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Disc	Dresser	ADG64	n/a	BS-08635	2001	Replacement	NO
Disc	Dresser	ADG62	n/a	BS-08581	2001	Replacement	NO
Spindle	Dresser	n/a	n/a	BS-08581	2006	Replacement	NO

7. Description of Work: Overhaul and testing of three spare Main Steam Safety Valve.

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

N-416-2 ☐ Other Pressure \_\_\_\_\_ psi

Test Temperature \_\_\_\_\_ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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 #2874095 for off-site disassembly, reconditioning and testing of three spare Main Steam Safety Valves, s/n BS 08635, BS-08581 and BS-08587. The first two need the new material for the valve disc. The third has new type disc already. On valve BS-08581 a new spindle was installed, the existing spindle had excessive runout.

Pre-Pressured Test WO Review - ISI N/A

ANII N/A

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. P. Ordean, Consulting Engineer Date: 4/17/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 3-9-06 to 4-17-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. P. Ordean  
Inspectors Signature

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

Date: 4-17-06

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

Pg. 1 of 2

1. Manufactured and certified by Dresser Valve Division; Dresser Equipment Group, Inc.  
Intersection Hwy. 167 @ 3225 North, Alexandria, Louisiana 71306  
(name and address of NPT Certificate holder)

2. Manufactured for Arizona Public Service Company P.O. Box 60940 Phoenix, Arizona 85062-6040  
(name and address of purchaser)

3. Location of installation Arizona Public Service Co Palo Verde Nuc. Generation, 5305B Wintersburg Rd. Tonopah, Arizona 85354  
(name and address)

4. Type OS412 SB637 (Inconel X-750) N/A N/A 2501  
(drawing no.) (matl spec. no.) (material strength) (CRN) (year built)

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

6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A

7. Remarks: Serial Numbers Are Used In Lieu Of NPT Stampings.

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

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

Part or Appurtenance Serial Number	National Board No. In Numerical Order
(1) ADG60	
(2) ADG61	
(3) ADG62 <u>3507581</u>	
(4) ADG64 <u>13508635</u>	
(5) ADG65	
(6)	
(7)	
(8)	
(9)	
(10)	
(11)	
(12)	
(13)	
(14)	
(15)	
(16)	
(17)	
(18)	
(19)	
(20)	
(21)	
(22)	
(23)	
(24)	
(25)	

Part or Appurtenance Serial Number	National Board No. In Numerical Order
(26)	
(27)	
(28)	
(29)	
(30)	
(31)	
(32)	
(33)	
(34)	
(35)	
(36)	
(37)	
(38)	
(39)	
(40)	
(41)	
(42)	
(43)	
(44)	
(45)	
(46)	
(47)	
(48)	
(49)	
(50)	

10. Design pressure N/A psi Temp. N/A °F. Hydro. Test pressure 2250 PSIG at temp. °F  
(when applicable)

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

12-3.9

11080711000

Certificate Holder's Serial Nos. ADG60,61,62,64 through ADG66

## CERTIFICATION OF DESIGN

Design specifications certified by ASME N-2 N/A P.E. State N/A Reg. No. N/A  
 Design report certified by N/A P.E. State N/A Reg. No. N/A  
 (After applicable, )

## CERTIFICATE OF COMPLIANCE

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

Disc

NPT Certificate of Authorization No. N-2434 Expires 5/20/2004

Date 8-6-01 Name SEE LINE 1 Signed W J Beavers  
 ( NPT Certificate Holder ) ( authorized representative )

## CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province  
 of LOUISIANA and employed by H. S. B. I. & I. Co.  
 of HARTFORD, CT. have inspected these items described in this Data Report on 8/6/01, and state that to the  
 best of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code; Section  
 Division 1. Each part listed has been authorized for stamping on the date shown above.

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

Date 8/6/01 Signed [Signature] Commissions LAB64  
 ( Authorized Nuclear Inspector ) ( Nat'l Bd. (incl. endorsements ) and state or prov. and no. )

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# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PSIAL248
- 2.. Item Description: Spool piece Downstream of 3PSIAV056
3. N-5 Data Package Number: 3RC01-3 4. W.O. Number: 2881980
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Install T-Mod 2881770
8. ☐ ISI Flaw NDE Method of Flaw Detection: \_\_\_\_\_  
Report Number: \_\_\_\_\_
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Installation of Temporary Modification, no ASME Code failure

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

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

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

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

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

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

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
✓ Flange	APN 43580760	<u>N5542-3-4</u>	<u>HT-965 RNE</u>	MR 1084907
✓ Orifice (fabricated from Stock)	APN 43640489	<u>N/A</u>	<u>HT-47052</u>	<del>MR 890355</del> <u>MR 893055</u>
✓ Studs	APN 43115015	<u>N/A</u>	<u>726516</u>	MR 1084908
✓ Nuts	APN 43126003	<u>N/A</u>	<u>Code: D.5</u>	MR 1084908
✓ Formed Restraint	<del>APN 45240217</del>	<del>NA DNH</del>	<del>8074</del>	<del>MR 1002054</del>

18. Planner [Signature] 4-25-06 Date Printed Name: James I. Davis

19. ISI [Signature] 4-26-06 Date Printed Name: RLB [Signature] Log Entry RLB

20. ANII [Signature] 4-26-06 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 05/06/06  
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 2881980  
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 85354-7529 Expiration Date N/A  
Address

4. Identification of System Safety Injection

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Pipe Spool	Pullman Power	3SI248N001	NA	3PSIAL248	1983	Repaired	Yes
Flange	NA	N5542-3-4	NA	HT # 965RNE	2006	Replacement	No
Orifice	NA	NA	NA	HT # U7052	2006	Replacement	No
Studs	NA	NA	NA	HT # 726516	2006	Replacement	No
Nuts	NA	NA	NA	HT # D5	2006	Replacement	No

7. Description of Work Implement TMod 2881770

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

Other ☐

Pressure n/a psi

Test Temp. n/a °F

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

## FORM NIS-2 (Back)

9. Remarks Work Order 2881980 implemented T Modification 2881770 on 3PSIAI 248, downstream of  
3PSIAV056 by installing an orficed flange and valve assembly. This WO also installed new flange  
studs and nuts

Pre-Pressure Test Review: ISI NA ANJI NA

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed DAH ENGK Date 5-6-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Az and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 4-26-06 to 5-6-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

DAH  
Inspector's Signature

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

Date 5-6-06



# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PSIBL199
- 2.. Item Description: Spool piece Downstream of 3PSIBV057
3. N-5 Data Package Number: 3RC01-3
4. W.O. Number: 2881982
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Install T-Mod 2881770

8. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

Installation of Temporary Modification, no ASME Code failure

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

Initial NA J.O. Date 4-13-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial NA J.O. Date 4-13-06 If required, include a step in the W.O. for ISI & ANII Inspection.

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

Initial J.O. Date 4-13-06

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

Initial J.O. Date 4-13-06

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Flange	APN 43580760	<u>N5542-3-1</u>	<u>965 RNE</u>	MR 1084905
Orifice (fabricated from Stock)	APN 43640489	<u>N/A</u>	<u>U7052</u>	MR <del>890335</del> <u>873055</u> <i>9/8/06</i>
Studs	APN 43115015	<u>NA</u>	<u>726516</u>	MR 1084906
Nuts	APN 43126003	<u>NA</u>	<u>Code=DS</u>	MR 1084906
<u>REDUCER</u>	<u>APN 00095172</u>	<u>NA</u>	<u>GK 50/1</u>	<u>MR 01084905</u>
<u>VALVE</u>	<u>APN 45000248</u>	<u>18AYT</u>	<u>NA</u>	<u>MR 1084905</u>
<u>PIPE</u>	<u>APN 43510413</u>	<u>NA</u>	<u>445811</u>	<u>MR 1084905</u>

18. Planner J. Davis 4-13-06 Printed Name: James I. Davis

Signature

Date

19. ISI RLB 4-26-06 Printed Name: RLBROOKING Log Entry RLB

Signature

Date

20. ANII RLH 4-26-06 Printed Name: R.L. HAGSTROM

Signature

Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 05/06/06  
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 2881982  
Address Work Order Number  
3. Work Performed by Arizona Public Service 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 ASME Section III 19 74 Edition, W75 Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Pipe Spool	Pullman Power	3SI199N001	NA	3PSIBL199	1983	Repaired	Yes
Flange	NA	N5542-3-1	NA	HT # 965RNE	2006	Replacement	No
Orifice	NA	NA	NA	HT # U7052	2006	Replacement	No
Studs	NA	NA	NA	HT # 726516	2006	Replacement	No
Nuts	NA	NA	NA	HT # D5	2006	Replacement	No

7. Description of Work Implement TMod 2881770

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

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

## FORM NIS-2 (Back)

9. Remarks Work Order 2881982 implemented T Modification 2881770 on 3PSIBL199, downstream of  
3PSIRV057 by installing an orficed flange and valve assembly. This WO also installed new flange  
studs and nuts.

Pre-Pressure Test Review: ISI NA ANII NA

### CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this replacement 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] ENR Date 5-6-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Az and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 4-26-06 to 5-6-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions NB 1685 "A.N.I.C" Az 264  
Inspector's Signature National Board, State, Province, and Endorsements  
Date 5-6-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PSPBL030

2. Item Description: FLOW INDICATOR S.P.

3. N-5 Data Package Number: 3SP02-2

4. W.O. Number: 2882966

5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda

6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda

7. Work Description: To remove the annubar for engineering inspection, during this evolution the flange fasteners will be removed and replaced due to corrosion of the fasteners for ease of re-installation.

8. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

This annubar is being removed for an engineering inspection. the fasteners have cosmetic corrosion but no failure RPP 4/12/06

10. Repair/Replacement Work Organization: Arizona Public Service

11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 3, 1974 Edition 1975 Summer Addenda

12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 3, 1974 Edition 1975 Winter Addenda

13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required:

☐ YES

☒ NO

Initial MJK Date 4-12-06

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

5. ASME Section XI Pressure Test Required:

☐ YES

☒ NO

Initial MJK Date 4-12-06

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

Initial MJK Date 4-12-06

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

Initial MJK Date 4-12-06

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

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
STUDS	APN 43110014	N/A		1087204-03
NUTS	APN 43122013	N/A		1087204-04

18. Planner

Signature

Date

Printed Name: Martin J Sullivan

19. ISI

Signature

Date

Printed Name: R.P. INDAP

Log Entry RPP

20. ANII

Signature

Date

Printed Name: R.G. HOLSTROM

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/12/2006

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 2882966

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SP

5. (a) Applicable Construction Code ASME Section III ND, Class 3 1974 Edition, Summer 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)
S.P. flow meter fasteners	Pullman power products	N/A	N/A	3PSPBL030	2006	Replacement	NO

7. Description of Work: To remove for engineering inspection, and to replace flange fasteners.

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

N-416-2 ☐

Other Pressure 25 psi

Test Temperature 25 °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)

Remarks: To remove for engineering inspection, and to replace flange fasteners. w.o. 2882966.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. P. Indap, Sr. Consulting Engineer Date: 4/17/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-12-06 to 4-17-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. P. Indap

Inspectors Signature

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

Date: 4-17-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page \_\_\_\_\_ of \_\_\_\_\_

1. Component ID 3PSPAL068
- 2.. Item Description: FLOW INDICATOR S.P.
3. N-5 Data Package Number: 3SP01-2
4. W.O. Number: 2882968
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: To remove the annubar for engineering inspection, during this evolution the flange fasteners will be removed and replaced due to corrosion of the fasteners for ease of re-installation.

8. ☐ ISI Flaw — NDE Method of Flaw Detection:  
Report Number:

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

This annubar is being removed for an engineering inspection. The fasteners <sup>were</sup> not replaced due to failure.  
*Q&P 4/17/06*

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III C1 3, 1974 Edition 1975 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III C1 3, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☐ YES ☒ NO

Initial MJS Date 4-17-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MJS Date 4-17-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MJS Date 4-17-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial MJS Date 4-17-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
STUDS	APN 43110014	N/A	<u>731500</u> <u>010307</u>	MR 1088684
NUTS	APN 43122013	N/A	<u>LYH</u>	MR 1088684

18. Planner Martin J Sullivan 4-17-06 Printed Name: Martin J Sullivan  
Signature Date

19. ISI R.P. Indap 4-17-06 Printed Name: R.P. INDAP Log Entry RPI  
Signature Date

20. ANII R.G. Hogstrom 4-18-06 Printed Name: R.G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/17/2006

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 2882968

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SP

5. (a) Applicable Construction Code ASME Section III ND, Class 3 1974 Edition, Summer 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)
Flange studs	N/A	Ht. # 731500	N/A	3JSPAFE0005	2006	Replacement	NO
Flange nuts	N/A	Ht. # LVH	N/A	3JSPAFE0005	2006	Replacement	NO

7. Description of Work: To remove for engineering inspection, and to replace flange fasteners.

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

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



## FORM NIS-2 (Back)

9. Remarks: Work Order 2882968, to remove Annubar for engineering inspection, and to replace flange fasteners for Annubar Flow Element 3JSPAFE0005 on line 3PSPAL068.

Pre-Pressured Test WO Review -- ISI

N/A

ANII

N/A

### Certificate of Compliance

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

Type Code Symbol Stamp

N/A

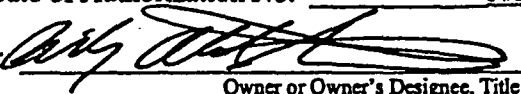
Certificate of Authorization No.

N/A

Expiration Date:

N/A

Signed:



ISI ENGINEER

Date: 4-27-06

Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-18-06 to 4-27-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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



Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264

National Board, State, Province, and Endorsements

Date:

4-27-06

Page 1 of 2

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

20. ANTI 25 1/2 4-21-06 Printed Name: R.G. HAGSTROM  
Signature Date

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 2 of 2

1. Component ID 3PSPAL079
2. Item Description: S.P. Return line
3. N-5 Data Package Number: 3SP01-2
4. W.O. Number: 2882969
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove the corrosion damaged area and protect the area with coatings
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
Remove the corrosion damaged area and protect the area with coatings. Did not exceed the min wall thickness.  
Corroded area was not coated previously

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

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

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

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

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

Initial MJS Date 4-27-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Code data name plate	N/A	N/A	N/A	N/A

18. Planner Martin J Sullivan 4-27-06 Printed Name: Martin J Sullivan  
Signature Date

19. ISI R.P. INDIAP 4/27/06 Printed Name: R.P. INDIAP Log Entry R.P.  
Signature Date

20. ANII R.G. HOGSTROM 4-28-06 Printed Name: R.G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/20/2006

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 2882969

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SP

5. (a) Applicable Construction Code ASME Section III ND, Class 3 1974 Edition, Summer 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)
Code data name plate	Pullman power products	3SP079S061	N/A	3PSPAL079 S-61	2006	Repaired	YES

7. Description of Work: Remove the name plate to inspect the corrosion on the piping that is behind the name plate.

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

N-416-2 ☐

Other Pressure \_\_\_\_\_ psi

Test Temperature \_\_\_\_\_ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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: This name plate is being removed for an engineering inspection of the section of pipe directly behind the name plate. The name plate will be moved to a location that will not hamper the inspections and will be reattached in a fashion that will not effect the structural integrity of the piping system.. W.O. 2882969  
YEAR BUILT REFLECTS YEAR NAMEPLATE WAS RELOCATED - YEAR BUILT FOR SPOOL STAMPED ON NAMEPLATE IS 1981.

Pre-Pressured Test WO Review - ISI \_\_\_\_\_

ANII \_\_\_\_\_

### Certificate of Compliance

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

Type Code Symbol Stamp \_\_\_\_\_ N/A

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

Signed: [Signature] ISI ENGINEER Date: 5-2-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-21-06 to 5-2-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspectors Signature

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

Date: 5-2-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3JSIDUV0654
- 2.. Item Description: Shutdown Cooling from Loop 1 Isolation Valve
3. N-5 Data Package Number: 3SI07-9
4. W.O. Number: 2884382
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the bonnet and install a cap in the leakoff port
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

*LIKE FOR LIKE Replacement, NO FAILURE OF ASME PRESSURE BOUNDARY*

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

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

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

Initial J.O Date 4-14-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.O Date 4-14-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.O Date 4-14-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Bonnet	APN 45060309	212371-B	1492NA <sup>DW</sup> 4-206	MR 1087798
Cap	APN 43550612		1492NA	MR 1087798

18. Planner [Signature] Date 4-14-06 Printed Name: James I. Davis

19. ISI [Signature] Date 4-15-06 Printed Name: R.L. Browning Log Entry RB

20. ANII [Signature] Date 4-15-06 Printed Name: RG Hogstrom

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/04/2006

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 1 <sup>4</sup> 5-1-06

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

Work Order Number 2884382

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, 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	31458	1022	3JSIDUV0654	1978	Repaired	YES
Bonnet	Borg-Warner	212371-B	N/A	3JSIDUV0654	2006	Replaced	YES
Cap	N/A	Ht# 149ZNA	N/A	3JSIDUV0654	2006	Replaced	NO

7. Description of Work: Replace the bonnet assembly

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

N-416-2 ☐ Other Pressure 350 psi

Test Temperature 120 °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: WO 2884382 replaced the valve bonnet because of damage in the stuffing box and welded a pipe cap in the leakoff port per the requirements of 13-PN-0220 and 13-PN-204.

YEAR BUILT DATES FOR BONNET & CAP ARE FOR THE YEAR INSTALLED

Pre-Pressured Test WO Review - ISI

ANII

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: [Signature] ISI ENGINEER Date: 5-8-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-15-06 to 5-8-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspectors Signature

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

Date: 5-8-06



# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3JCHBHV0255
2. Item Description: 1-1/2", 1500 lb. "Y" type Borg Warner Globe Valve, Motor Operated
3. N-5 Data Package Number: 3CH14-3      4. W.O. Number: 2886052
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Disassemble valve to replace stem due to damaged threads where stem extension connects. Will also need to remove and replace the bonnet seal weld.
8. ☐ ISI Flaw      NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
No failure of the ASME Section III boundary. Seal weld is required to be removed to replace valve stem. The stem is part of a stem/disc assembly.
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required:      ☐ YES      ☒ NO  
Initial Dmg Date 4-20-06      If required, include a step in the W.O. to perform Preservice Inspection
15. ASME Section XI Pressure Test Required:      ☒ YES      ☒ NO  
Initial Dmg Date 4-20-06      If required, include a step in the W.O. for ISI & ANII Inspection.
- Initial Dmg Date 4-20-06      16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
- Initial Dmg Date 4-20-06      17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Valve	N/A	51718	N/A	N/A
Plug/stem ass'y	APN 45020247	5481	5J86	MR 1090010
Seal weld	N/A	N/A	N/A	N/A
BONNET	45060213	218257-2	N/A	1092363

18. Planner David Goodlet 4-20-2006      Printed Name: David Goodlet  
Signature      Date
19. ISI R.P. Indep 4/20/06      Printed Name: R.P. Indep Log Entry RP  
Signature      Date
20. ANII R.G. Hestrom 4-21-06      Printed Name: R.G. Hestrom  
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: 4/20/2006

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 2886052

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 & Volumn Control System

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Borg Warner	51718	N/A	3JCHBHV0255	1979	Repaired	YES
Seal Weld	N/A	N/A	N/A	3JCHBHV0255	2006	Replacement	NO
Plug/Stem Ass'y	Borg Warner	5481	N/A	3JCHBHV0255	2006	Replacement	NO
Bonnet	Borg Warner	218257-2	N/A	3JCHBHV0255	2006	Replacement	YES

7. Description of Work: Disassembled valve to rework to replace stem/disc ass'y. Removed & replaced seal weld, and also replaced bonnet due to galling during assembly.

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

N-416-2 ☐ Other Pressure 2418 psi

Test Temperature 103 °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: Per wo# 2886052 on valve 3JCHBHV0255 the body to bonnet seal weld will need to be removed to disassemble the valve for stem/disc ass'y replacement.. Following rework the seal weld will be replaced. The plug/stem assembly was replaced due to damaged threads on end of stem.

Pre-Pressured Test WO Review - ISI

ANII

### Certificate of Compliance

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

Type Code Symbol Stamp \_\_\_\_\_ N/A \_\_\_\_\_

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

Signed: [Signature] SR. ISI ENGINEER Date: 5/10/06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 5-10-06 to 5-10-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspectors Signature

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

Date: 5-10-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page \_\_\_\_\_ of \_\_\_\_\_

1. Component ID 3PRCEV236
2. Item Description: RCPV100E By-pass Valve
3. N-5 Data Package Number: 3RC01-2
4. W.O. Number: 2886121
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the valve plug / seat ring assembly
8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

NO FAILURE OF ASME PRESSURE BOUNDARY

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition 1976 Summer Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

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

Initial J.N. Date 4-21-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D. Date 4-21-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Plug / Seat Ring Assembly	APN 45540048	<u>N/A</u>	<u>4G10A-1A</u>	MR 1090333

18. Planner [Signature] 4-21-06 Printed Name: James I. Davis  
Signature Date

19. ISI [Signature] 4-21-06 Printed Name: R.L. Brooking Log Entry [Signature]  
Signature Date

20. ANII [Signature] 4-21-06 Printed Name: RG HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

Owner: Arizona Public Service Company, et. al.

Date: 04/21/2006

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 2886121

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, 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	ITT Hammer Dahl	77-0636-001	N/A	3PRCEV236	1979	Repaired	YES
Valve Plug	ITT Hammer Dahl	Ht. # 4G10A-1A	N/A	3PRCEV236	2006	Replacement	YES

7. Description of Work: Replace the plug /seat ring assembly

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

N-416-2 ☐ Other Pressure      psi

Test Temperature      °F

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

Remarks: WO 2886121 replaced the plug and seat ring assembly in 3PRCEV236.

Pre-Pressured Test WO Review – ISI

N/A

ANII

N/A

### Certificate of Compliance

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

Type Code Symbol Stamp

N/A

Certificate of Authorization No.

N/A

Expiration Date:

N/A

Signed:



ISI ENGINEER

Date:

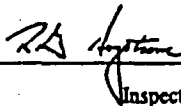
4-30-06

Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-21-06 to 4-30-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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



Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264

National Board, State, Province, and Endorsements

Date:

4-30-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3SG036H011
2. Item Description: Steam Generator 1 Main Steam Line 2 Constant Spring Hanger
3. N-5 Data Package Number: 3SG01-2 4. W.O. Number: 2888460
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the load coupling and anti-friction collar removed from 1SG036H011 (Serial Number G2502) by WO 2888427

8. ☐ ISI Flaw NDE Method of Flaw Detection:  
Report Number:

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

NO PRESSURE BOUNDARY FAILURE.  
AN SUPPORT MEMBER FAILED REPLACED  
WITH LIKE FOR LIKE COMPONENT.

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

Initial J.D. Date 4-29-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial J.D. Date 4-29-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D. Date 4-29-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D. Date 4-29-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Load coupling	CSLCWS5063BN	N/A	N/A	WO 2888427
Anti Friction Collar	A5676	N/A	N/A	WO 2888427

18. Planner [Signature] Date 4-29-06 Printed Name: James I. Davis

19. ISI [Signature] Date 4-29-06 Printed Name: R.L. Brown Log Entry RUB

20. ANII [Signature] Date 4-29-06 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: 5-1-06

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 2888460

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Spring Support	ITT Grinnell	G3756	N/A	3SG036H011	1982	Repaired	YES
Load Coupling	ITT Grinnell	G2502	N/A	1SG036H011	1983	Replacement	NO
Anti-friction Collar	ITT Grinnell	G2502	N/A	1SG036H011	1983	Replacement	NO

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

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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 2888460 installed the load coupling and anti-friction collar in 3SG033H011 that was removed from 1SG036H011 by WO 2888427.

\* CODE CASES FOR ORIGINAL NF-2 FROM HANGERS 1644 REV 7, 1685, 1686, 1728, 1729, 1734, 1683, N-180, N-225

Pre-Pressured Test WO Review - ISI

N/A

ANII

N/A

### Certificate of Compliance

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

Type Code Symbol Stamp

N/A

Certificate of Authorization No.

N/A

Expiration Date:

N/A

Signed:

RSI ISI ENT

Owner or Owner's Designee, Title

Date:

5-1-06

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-24-06 to 5-1-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RSI

Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264

National Board, State, Province, and Endorsements

Date:

5-1-06

# ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 3PCHAV190
2. Item Description: 3" Borg Warner Check Valve
3. N-5 Data Package Number: 3CH03-8
4. W.O. Number: 2889081
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Disassemble valve for inspection of cause of leakage past the seat. May replace code parts such as bonnet disc assembly to expedite work completion.
8. ☐ ISI Flaw \_\_\_\_\_ NDE Method of Flaw Detection: \_\_\_\_\_  
Report Number: \_\_\_\_\_
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:  
No failure of the ASME Section III boundary. Code parts are being replace to limit the time the valve is out of service.

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

Initial Dmg Date 5-1-06 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Dmg Date 5-1-06 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial Dmg Date 5-1-06 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Dmg Date 5-1-06 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

Item ID	Part No.	Serial No.	Heat No.	MR/PO/WO No.
Valve	N/A	63868	N/A	N/A
Bonnet & arm & disc Assembly	APN 45060209	see below	n/a	MR 1094093
Bonnet from assembly	80724	3	n/a	same
Disc from assembly	76327	2	n/a	same

18. Planner David M. Goodlet 5-1-2006 Printed Name: David Goodlet  
Signature \_\_\_\_\_ Date \_\_\_\_\_

19. ISI RL Brown 5-1-06 Printed Name: RL Brown Log Entry RB  
Signature \_\_\_\_\_ Date \_\_\_\_\_

20. ANII R.G. Hoekstrom 5-1-06 Printed Name: R.G. Hoekstrom  
Signature \_\_\_\_\_ Date \_\_\_\_\_

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 5/1/2006

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 2889081

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 & Volumn Control System

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Item	Name of Manufacture	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired or Replacement	ASME Code Stamped (Yes or No)
Valve	Borg Warner	63868	N/A	3PCHAV190	1980	Repaired	YES
Bonnet & arm & disc Assembly	Borg Warner	213336-B3	N/A	3PCHAV190	1991	Replacement	YES
Bont from above	Borg Warner	3	N/A	3PCHAV190	1991	Replacement	YES
Disc from above	Borg Warner	2	N/A	3PCHAV190	1991	Replacement	NO

7. Description of Work: Disassembled valve to rework to correct seal leakage.

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

N-416-2 ☐ Other Pressure 21 psi

Test Temperature 75 °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: Per wo# 2889081 on valve 3PCHAV190. Disassemble the valve for inspection and rework to correct seat leakage. A complete bonnet & arm & disc assembly will be replaced to minimize the time the valve is out of service..

Pre-Pressured Test WO Review - ISI

ANII

ALB 5-2-06  
5-2-06

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: [Signature] ISI ENGINEER Date: 5-5-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 5-1-06 to 5-5-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Inspectors Signature

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

Date: 5-5-06

## Page 7 of 9

Printed Name: Bob Hagstrom

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/02/2006

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 2889226

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, 2 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)
Nut	KSB Inc	N/A	N/A	APN 43120487	2006	Replacement	No

7. Description of Work: No failure of Section XI pressure boundry. Mssing nut being replaced.

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

N-416-2 ☐ Other Pressure N/A psi

Test Temperature N/A °F

**NOTE:** Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 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: WO# 2889226. Missing nut being replaced.

Pre-Pressured Test WO Review - ISI

ANII

### Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: [Signature] ISI ENGINEER Date: 5-5-06  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 5-2-06 to 5-5-06, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

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

Date: 5-5-06