



Palo Verde Nuclear  
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10CFR50.55a

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February 8, 2000

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

Dear Sirs:

**Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Unit 1  
Docket No. STN 50-528  
Unit 1 Second 10-Year Interval – Eighth Refueling Outage (U1R8)  
Inservice Inspection (ISI) Summary Report**

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, 1989 Edition, Arizona Public Service Company (APS) hereby submits the PVNGS Unit 1 Inservice Inspection Report for the eighth refueling outage, provided in enclosure 1. In addition, enclosure 2 contains the ISI summary report for the first interval reactor vessel exams and reactor head vent system exams performed during U1R8 pursuant to Relief Request Nos. 10 and 11, respectively. Relief Request No. 10 to defer the reactor vessel exams to the first outage of the second 10-year interval has been previously approved by the NRC Staff. Relief Request No. 11 to defer the reactor head vent system exams has been submitted and is pending NRC Staff approval.

No commitments are being made to the NRC by this letter.

Should you have any questions, please contact Scott A. Bauer at (623) 393-5978.

Sincerely,

CDM/AKK/RKB/mah

Enclosure

cc: E. W. Merschhoff [Region IV Administrator]  
M. B. Fields [NRR Project Manager]  
J. H. Moorman [Senior Resident Inspector]

A047

**ENCLOSURE 1**

**SECOND 10-YEAR ISI INTERVAL**

**SUMMARY REPORT**

**EIGHTH REFUELING OUTAGE**

**PALO VERDE NUCLEAR GENERATING STATION**

**UNIT 1**

**PALO VERDE NUCLEAR GENERATING STATION**

**UNIT 1**

**INSERVICE INSPECTION REPORT**

**EIGHTH REFUELING OUTAGE**

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

PREPARED BY: *Jud Kott* DATE: *1/21/00*  
REVIEWED BY: *[Signature]* DATE: *1-25-00*  
APPROVED BY: *Michael Melby* DATE: *1/27/00*

COMMERCIAL SERVICE DATE: 01/28/86  
REPORT DATE: 01/21/00

## TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 INTRODUCTION .....	3
2.0 EXAMINATION SUMMARY .....	3
3.0 EXAMINATION TECHNIQUES .....	4
4.0 ACCESSIBILITY .....	4
5.0 PERSONNEL .....	4
6.0 EQUIPMENT AND MATERIALS .....	4
7.0 REPAIRS AND REPLACEMENTS .....	5

## APPENDICES

<u>APPENDIX</u>	<u>PAGE</u>
APPENDIX A - Inservice Inspection Summary Report .....	6
APPENDIX B - Inservice Inspection Code Limitations .....	18
APPENDIX C - Form NIS-1 .....	20
APPENDIX D- Forms NIS-2 .....	23

# **UNIT 1 INSERVICE INSPECTION REPORT**

## **1.0 Introduction**

- 1.1 This report is a summary of the examinations performed during the eighth refueling outage at the Palo Verde Nuclear Generating Station (PVNGS) Unit 1. This report also includes all applicable examinations conducted since the last refueling outage. This was the first refueling for Interval 2, Period 1 which was conducted from October 2, 1999 through November 9, 1999. Palo Verde Unit 1 began commercial operation on January 28, 1986.**
- 1.2 This report identifies the components examined, the examination methods used, the examination report numbers, and summarizes the examination results for each of the following categories:**
  - 1. ASME Section XI, Class 1 and 2 pressure retaining components and their supports.**
  - 2. Augmented High Energy Piping systems in accordance with PVNGS UFSAR Section 6.6.8.**
- 1.3 This report is a summary of the Period 1, 2nd Interval exams performed during the eighth refueling outage. All of the examination report numbers listed in Appendix A for the eighth refueling and examinations performed since the last Summary Report are numbered with 99-1XXX.**

## **2.0 Examination Summary**

- 2.1 The evaluation of the results from the ISI examinations indicated the integrity of the systems have been maintained. All discrepancies were corrected or determined "use-as-is" in accordance with PVNGS work control practices and ASME Section XI. Any abnormal conditions detected are listed in Section 7 (Repairs and Replacements).**
- 2.2 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:

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

**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. Any code limitations encountered during the examination 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); MQS Inspection, Inc. (MQS); or WesDyne personnel. 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. The Hartford Steam Boiler Inspection and Insurance Company provided the Authorized Nuclear Inservice Inspector (ANII).

### **6.0 Equipment and Materials**

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

## 7.0 Repairs and Replacements

- 7.1 No repairs or replacements were to be performed as a result of ISI examination during U1R8. The following is a list of items requiring corrective action as a result of the Inservice Examinations:

<u>ZONE</u>	<u>WR/WO</u>	<u>ITEM ID</u>	<u>DISCREPANCY</u>
18	N/A	RCP 2A	6 Nuts/Clamp ring with loss of metal due to boric acid corrosion
28	965913/899879	RCV241	Loose bolting
100	966080/901725	SI241H19	Spring Can settings out of tolerance

- 7.2 6 Nuts and the Clamp ring for Reactor Coolant Pump 2A were replaced and a pre-service examination was performed on each item.
- 7.3 Non pressure retaining bonnet clamp bolts were loose on RCEV241. The bolting was tightened and re-examined. (Report numbers 99-1283 & 99-1665)
- 7.4 The spring can settings on pipe support SI241H19 were not within 5% of the required drawing settings. Each spring can support was adjusted and re-examined. An expanded examination scope was added to the outage that consisted of adjacent supports to the rejected support along with an equal number of similar type supports within the system of the rejected support. There were only 2 supports added for the expansion. (Report numbers 99-1673 & 99-1674)
- 7.5 The applicable records and reports for the specific maintenance repair or replacements performed after the last summary report are maintained on file at Palo Verde. The applicable NIS-2 forms are an attachment to Appendix D and are submitted for review with this report.

**APPENDIX A**

**INSERVICE INSPECTION  
SUMMARY REPORT**



## APPENDIX A

### Definition of Terms

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

ASME Item No -	The ASME Section XI Category/Item Numbers are listed in the Code, Subsections IWB and IWC. The item number prefixes are defined below:
	AHE - Augmented high energy systems piping
	B - ASME Class 1 systems
	BFLYWH - Reactor coolant pump flywheels
	BIWF - ASME Class 1 supports
	C - ASME Class 2 systems
	CIWF - ASME Class 2 supports
	FR - 10 CFR 50 augmented examinations
Zone No -	Area designation per PVNGS design
Comp/Sys -	Component or system description
Insp Per -	Inspection period
Amt Reqd -	Number of items <i>required</i> to be completed in the period
Amt Comp -	Number of <i>required</i> items completed
Item ID -	Item identification per ISI program/zone drawings
Reports (VOL) -	Volumetric exam report number
(SURF) -	Surface exam report number
(VIS) -	Visual exam report number
Remarks -	Re-exam or replacement remarks indicate acceptable examination results

### Definition of terms continued

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

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone Comp/sys	Insp per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks				
AHE5.51 & 5.52	47 MS SG1	One	13	13	47-1	99-1361	99-1280						
					47-2	99-1360	99-1280						
					47-4	99-1305	99-1281						
					47-8	99-1306	99-1281						
					47-12	99-1307	99-1281						
					47-14A	99-1356	99-1280						
					47-16	99-1308	99-1281						
					47-20	99-1309	99-1281						
					47-24	99-1352	99-1280						
					47-25	99-1350	99-1280						
					47-28	99-1348	99-1282						
					47-29	99-1349	99-1282						
					47-30	99-1351	99-1280						
					51 Atmos Dump SG1	One	13	13	51-1	99-1345	99-1287		
									51-2	99-1362	99-1287		
	51-3	99-1363	99-1287										
	51-4	99-1364	99-1287										
	51-5	99-1365	99-1287										
	51-6	99-1366	99-1287										
	51-7	99-1367	99-1288										
	51-8A	99-1368	99-1288										
	51-8B	99-1369	99-1287										
	51-9	99-1370	99-1287										
	51-51	99-1371	99-1287										
	51-84	99-1346	99-1287										
	51-85	99-1347	99-1287										
	53 Steam to Aux FW	One	10	10					53-11	99-1538	99-1506		
									53-12	99-1539	99-1506		
					53-13	99-1540	99-1506		PSE				
					53-14	99-1541	99-1506						
53-15					99-1542	99-1506							
53-21					99-1543	99-1506							
53-22					99-1544	99-1506							
53-23					99-1545	99-1506							
53-24					99-1546	99-1506		PSE					
53-25					99-1547	99-1506							
60 Downcomer SG1					One	9	5	60-7	99-1708	99-1646			
								60-14	99-1625	99-1646			
								60-15	99-1658	99-1646			
								60-16	99-1666	99-1646			
								60-17	99-1667	99-1646			
	66 Blowdown SG1	One	9	9				66-1	99-1469	99-1416			
								66-2	99-1470	99-1416			
66-3					99-1471	99-1416							
66-5					99-1472	99-1416							
66-6					99-1473	99-1416							
66-7					99-1474	99-1416							
66-8					99-1475	99-1416							
66-9					99-1476	99-1416							
66-26					99-1477	99-1416							

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
AHE 5.81 & 5.82	47 MS SG1	One	7	6	47-3	99-1359	99-1280		
					47-7	99-1358	99-1280		
					47-11	99-1357	99-1280		
					47-15	99-1355	99-1280		
					47-19	99-1354	99-1280		
					47-23	99-1353	99-1280		
					47-27	99-1280			
B 1.22	02 Closure Head	One	33%	33%	2-4	99-1466	99-1458		Accessible Areas, RR#14
						99-1479			
						99-1481			
						99-1483			
B 1.30	01 Reactor Vessel	One	50%	50%	1-14	*			Examined 0°-180°
B 1.40	02 Closure Head	One	33%	33%	2-1	99-1465	99-1458		Examined 0°-120°
						99-1478			
						99-1480			
						99-1482			
B 2.11 & 2.12	5 Pressurizer	One	66%	66%	5-2	99-1448			Examined 0°-240°
						99-1450			
						99-1452			
					5-3	99-1454			1' long seam for 5-2
						99-1449			
						99-1451			
						99-1453			
						99-1455			
B 3.90	01 Reactor Vessel	One	2	2	1-15	*			*Separate Report by Wesdyne. Exam completed in 1R8
					1-18	*			
B 3.100	01 Reactor Vessel	One	2	2	1-15	*			
					1-18	*			
B 6.10	02 Closure Head	One	18	18	1 thru 18		99-1510	99-1589	
B 6.30	02 Closure Head	One	18	18	1 thru 18	99-1511	99-1509		
B 6.50	02 Closure Head	One	18	18	1 thru 18			99-1613	
B 6.180	16 RCP 1A	One	5	5	1 thru 5	99-1705		99-1601	
	17 RCP 1B	One	5	5	1 thru 5	99-1706		99-1603	
	18 RCP 2A	One	5	5	1 thru 5	99-1487		99-1500	
						99-1464			PSE - none installed
	19 RCP 2B	One	5	5	1 thru 5	99-1707		99-1602	
B 6.190	18 RCP 2A	When Disassembled			Flange			99-1488	
B 6.200	16 RCP 1A	One	5	5	1 thru 5			99-1601	
	17 RCP 1B	One	5	5	1 thru 5			99-1603	
	18 RCP 2A	One	5	5	1 thru 5			99-1500	Rejected 6 nuts
								99-1197	PSE 16 nuts, clamp ring
	19 RCP 2B	One	5	5	1 thru 5			99-1602	
B 7.20	05 Pressurizer	One	20	20	20 studs			99-1498	
B 7.30	03 SG1	One	40	40	40 studs			99-1492	
	04 SG2	One	40	40	40 studs			99-1493	
B 7.50	31 PZR Safeties	One	1	1	PSV200			99-1499	
					PSV201			99-1499	
					PSV202			99-1499	
					PSV203			99-1499	
	37 Charging	One	1	1	V435			99-1263	

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	
B 7.60	16 RCP 1A	One	5	5	1 thru 5			99-1490		
	17 RCP 1B	One	5	5	1 thru 5			99-1491		
	18 RCP 2A	One	5	5	1 thru 5			99-1489		
	19 RCP 2B	One	5	5	1 thru 5			99-1602		
B 7.70	21 SD Cooling A	One	1	1	UV653			99-1224		
	24 SI 1B	One	1	1	V543			99-1228		
	25 SI 2A	One	1	1	V540			99-1219		
	26 SI 2B	One	1	1	V225			99-1614		
	28 PZR Spray	One	2	2	V241			99-1283	Reject Re-exam	
					V242			99-1283		
		31 PZR Safeties	One	1	1	PSV200			99-1713	
		32 Drain Loop 1A	One	2	2	V234			99-1588	
						V334			99-1587	
						PDV240			99-1263	
B 8.20	37 Charging	One	1	1	5-1					
	5 Pressurizer	One	66%	0%		99-1445 99-1446 99-1447 99-1486			Examined 0°-240°	
B 9.11 & 9.12	06 RCS Piping	One	7	2	1-31				*Separate report by Wesdync. Exams completed in U1R8	
					1-34					
					6-7					
					7-7					
	22 SD Cooling	One	2	1	22-11	99-1600	99-1590			
					22-14	99-1599	99-1590			
	25 SI 2A	One	2	2	25-26	99-1512	99-1503			
					25-27	99-1617	99-1606			
					25-29	99-1618				
	26 SI 2B	One	2	2	26-9	99-1615	99-1586			
				26-11	99-1616	99-1586				
29 PZR Spray	One	2	2	29-10	99-1467	99-1436				
				29-11	99-1468	99-1436				
B 9.21 & 9.22	28 PZR Spray 1A	One	4	4	28-31			99-1459		
					28-32			99-1459		
					28-39			99-1437		
					28-40			99-1437		
	30 Aux PZR Spray	One	2	2	30-7			99-1233		
					30-13			99-1233		
	32 Drain 1A	One	3	3	8-18			99-1504		
					32-1			99-1504		
					32-2			99-1504		
	37 Charging	One	5	2	37-41			99-1301		
				37-42			99-1301			
				37-43			99-1301			
39 HPSI A	One	2	2	39-1			99-1234			
				39-5			99-1234			
B 9.32	06 RCS Piping	One	1	1	8-17			99-1505		
	22 SD Cooling	One	1	1	22-7A			99-1607		
B 9.40	32 Drain 1A	One	1	1	32-6			99-1504		
					32-8			99-1504		

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
B 10.10	36 Letdown	One	1	1	RC91H5		99-1591		
					RC91H6		99-1591		
B 12.20	18 RCP 2A	When Disassembled			Bowl Interior			99-1497	
B 15.10,20,	RCS Piping	One	ALL	ALL	Press Bound			99-1585	RR#11 & 12
30,40,50,								99-1647	SIBPSV169 -
60,70								99-1711	disassembled
F 1.10	20 PZR Surge	One	2	2	RC28H1			99-1284	
					RC28H2			99-1218	
	21 SD Cooling A	One	7	3	SI240H10			99-1227	
					SI240H11			99-1226	
					SI240H13			99-1225	
	24 SI 1B	One	2	2	SI223H3			99-1230	
					SI223H4			99-1229	Snub. Reduction
	25 SI 2A	One	2	2	SI156H7			99-1221	Snub. Reduction
					SI156H9			99-1220	
	26 SI 2B	One	2	2	SI179H9			99-1223	Snub. Reduction
					SI179H11			99-1222	
	27 PZR Spray 1A	One	9	9	RC62H26			99-1209	
					RC62H27			99-1208	
					RC62H28			99-1207	
					RC62H29			99-1206	Snub. Reduction
					RC62H30			99-1205	
					RC62H31			99-1204	Snub. Reduction
					RC62H32			99-1203	
					RC62H33			99-1202	
					RC62H34			99-1262	Snub. Reduction
	28 PZR Spray 1B	One	9	8	RC17H24			99-1217	
					RC17H34			99-1216	
					RC17H36			99-1215	
					RC17H38			99-1214	
					RC17H39			99-1213	Snub. Reduction
					RC17H40			99-1212	
					RC17H41			99-1211	Snub. Reduction
					RC17H42			99-1210	
	29 PZR Spray	One	2	2	RC18H16			99-1439	
					RC18H18			99-1440	
	32 Drain 1A	One	2	2	RC60HA			99-1326	Snub. Reduction
					RC60HB			99-1327	Snub. Reduction
	36 Letdown	One	9	9	RC91H1			99-1592	
					RC91H5			99-1593	
					RC91H6			99-1594	
					RC91HB			99-1325	Snub. Reduction
					RC91HD			99-1323	
					RC91HE			99-1319	Snub. Reduction
					RC91HY			99-1321	
					RC91HZ			99-1324	
					RC91HAA			99-1322	
					RC91HAK			99-1320	

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				
F 1.10	37 Charging	One	14	14	CH5H2			99-1265	Snub. Reduction				
					CH5H3			99-1266					
					CH5H25			99-1267	Snub. Reduction				
					CH5H26			99-1268					
					CH5H27			99-1269					
					CH5H28			99-1270					
					CH5H30			99-1271					
					CH5H34			99-1272					
					CH5H35			99-1273					
					CH5H36			99-1274					
					CH5H42			99-1275					
					CH5H43			99-1276					
					CH5H44			99-1277					
					39 HPSI A	One	4	4	CH5HAA			99-1264	Snub. Reduction
									SI248H26			99-1238	Snub. Reduction
									SI248H27			99-1237	
SI248H28			99-1236										
SI248H30			99-1235	Deleted									
SI248H25			99-1239										
F 1.40	5 Pressurizer	One	0	0	5-40			99-1712					
					16 RCP 1A	One	2	2	16-20		99-1259		
	17 RCP 1B	One	2	2	16-21			99-1259					
					17-20			99-1260					
					17-21			99-1260					
	18 RCP 2A	One	4	4	18-12			99-1663					
					18-13			99-1663					
					18-14			99-1663					
					18-15			99-1663					
	19 RCP 2B	One	4	4	19-12			99-1664					
					19-13			99-1664					
					19-14			99-1664					
					19-15			99-1664					
							99-1664						
C 1.10	69 Letdown HTEXCH	One	50%	50%	69-1	99-1485		Examined 0°-180°					
C 1.30	69 Letdown HTEXCH	One	50%	50%	69-2	99-1484		Examined 0°-180°					
C 3.20	45 MS SG2 270	One	1	1	SG42H14		99-1430						
	71 LPSI Discharge	One	1	1	SI87H11		99-1435						
	76 CS Suction	One	1	1	SI9H4		99-1373						
	88 East Wrap	One	1	1	SI72H13		99-1516						
	89 East Wrap	One	1	1	SI194H14		99-1619						
	91 West Wrap	One	4	4	SI70H9			99-1374					
					SI70H11			99-1256					
					SI70H12			99-1456					
					SI70H16			99-1256					
	92 West Wrap	One	1	1	SI241H21		99-1605						
100 LPSI Suction	One	1	1	SI369H1		99-1457							
C 5.11 & 5.12	70 & 73LPSI Suction A & B	One	1	1	70-58	99-1258	99-1257						
	82 & 85 SD Cooling A & B	One	2	1	72-50	99-1372	99-1316						

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	
C 5.11 & 5.12	83 & 86 SD Cooling A & B	One	4	4	74-19	99-1381	99-1315			
					74-21	99-1383	99-1317			
					74-22	99-1384	99-1317			
					74-105	99-1382	99-1314			
	88 & 91 East & West Wrap	One	6	3	78-16	99-1604	99-1515			
					74-44	99-1311	99-1279			
					76-2	99-1310	99-1279			
	96,97,98,99 LPSI Loop 1A,1B, 2A, 2B	One	3	2	78-45	99-1513	99-1502			
					78-47	99-1514	99-1502			
	C 5.41 & 5.42	82 & 85 SD Cooling A & B	One	1	1	72-49A		99-1316		
88 & 91 East & West Wrap						One	1	1	74-102	
C 5.51 & 5.52	43 MS SG1 90	One	1	1	43-2	99-1443	99-1432			
					44 MS SG1 270	One	1	1	44-1	99-1442
	46 MS SG2 90	One	1	1	46-25	99-1444	99-1433			
					58 Aux & Dwncomr SG1	One	1(5)	1(3)	41-39	99-1495
	59 Aux & Dwncomr SG2	One	0(5)	0(3)	58-1	99-1494	99-1501			
					58-12	99-1286	99-1231			
					58-13	99-1289	99-1231			
					58-16		99-1285			
					58-16A		99-1285			
					59-1	99-1496	99-1507			
59-12					99-1292	99-1232				
59-13					99-1293	99-1232				
59-16						99-1198				
59-16A						99-1198				
F 1.20	43 MS SG 1 90	One	2	2	SG36H17			99-1240		
					SG36H884			99-1242		
	44 MS SG1 270	One	2	2	SG36H885			99-1241		
					SG33H17			99-1278		
	45 MS SG 2 270	One	1	1	SG33H18			99-1243		
					SG42H14			99-1244		
	46 MS SG 2 90	One	2	2	SG45H17			99-1441		
					SG45H18			99-1463		
	47 MS SG1 270	One	1	1	SG206H1			99-1318		
					51 Atm. Dump SG1	One	1	1	SG59H6	
53 Steam to Aux FW	One	4	4	SG81H1			99-1679			
				SG81H2			99-1680			
				SG83H1			99-1681			
				SG83H2			99-1682			
				59 Aux & Dwncomr SG2	One	6	6	AF6H1		99-1261
				SG11H8			99-1201			
				SG11H9			99-1246			
				SG11H10			99-1245			
				SG11H11			99-1200			
				SG11H12			99-1199			
60 Dwncomr FW SG1	One	1	1	SG200H9			99-1332			
				SG200H13			99-1668			
				SG200H14			99-1669			
							99-1670			

(Identifies augment EXAM(IEB 79-13 & SER 83-07)

Snub. Reduction

Snub. Reduction

PSE  
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
F 1.20	61 Dwncmr FW SG2	One	0	0	SG203H13			99-1671	PSE
					SG203H14			99-1672	PSE
	62 Aux FW SG1	One	1	1	AF4H3			99-1461	
	63 Aux FW SG2	One	2	2	AF6H2			99-1462	
					AF16H1			99-1460	
	70 LPSI Suction A	One	1	1	SI67H4			99-1248	
	71 LPSI Discharge A	One	1	1	SI307H16			99-1428	PSE
					SI87H11			99-1247	
	76 CS Suction A	One	1	1	SI9H4			99-1375	
					SI67H1			99-1376	
	77 CS Discharge A	One	4	4	SI67H3			99-1427	PSE
					SI79H1			99-1426	PSE
					SI79H2			99-1377	
					SI79H3			99-1378	
	79 CS Suction B	One	3	3	SI79H4			99-1379	
					SI34H1			99-1380	
					SI34H2			99-1517	
					SI34H3			99-1518	
	80 CS Discharge B	One	3	3	SI119H7			99-1519	
					SI119H8			99-1527	
					SI119H9			99-1528	
					SI78H4			99-1529	
	82 SD Cooling A	One	2	2	SI78H5			99-1296	
					SI79H10			99-1595	
					SI87H9			99-1297	
					SI89H1			99-1312	
	83 SD Cooling A	One	4	4	SI89H2			99-1300	
					SI89H3			99-1299	
					SI89H3			99-1298	
					SI119H10			99-1530	
	85 SD Cooling B	One	3	3	SI123H6			99-1531	
					SI123H7			99-1532	
					SI129H10			99-1406	
					SI129H11			99-1405	
	88 East Wrap	One	8	3	SI129H12			99-1407	
					SI72H11			99-1533	
					SI72H13			99-1534	
	89 East Wrap	One	4	4	SI72H14			99-1535	
					SI194H12			99-1536	
					SI194H13			99-1537	PSE/Snub. Replaced
					SI194H14			99-1640	
	91 West Wrap	One	7	7	SI194H23			99-1641	
					SI70H9			99-1255	
					SI70H10			99-1254	
					SI70H11			99-1253	
					SI70H12			99-1252	
					SI70H13			99-1249	
					SI70H15			99-1251	
	SI70H16			99-1250					

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
F 1.20	92 West Wrap	One	5	5	SI239H1			99-1673	Expansion
					SI239H2			99-1674	Expansion
					SI239H3			99-1598	
					SI241H9			99-1418	PSE
					SI241H12			99-1417	PSE
	94 LPSI A	One	3	3	SI241H14			99-1419	PSE
					SI241H15			99-1597	
					SI241H21			99-1596	
					SI89H7			99-1398	
					SI89H8			99-1399	
					SI89H9			99-1400	
					SI241H5			99-1302	PSE
	95 LPSI B	One	6	6	SI241H7			99-1423	PSE
					SI241H8			99-1421	PSE
					SI72H8			99-1401	
					SI72H10			99-1402	
					SI134H11			99-1403	
	96 LPSI to Loop 1A	One	3	3	SI134H12			99-1404	
					SI194H3			99-1414	Spring Cans Deleted
					SI194H5			99-1415	PSE/Snub. Replace
	97 LPSI to Loop 1B	One	10	9	SI202H7			99-1342	
SI202H8							99-1343	Snub. Reduction	
98 LPSI to Loop 2A	One	2	2	SI202H9			99-1344	Snub. Reduction	
				SI220H9			99-1333		
				SI220H10			99-1334		
				SI220H11			99-1335	Snub. Reduction	
				SI220H12			99-1336	PSE/Snub. Replace	
				SI220H13			99-1337		
				SI220H14			99-1338	Snub. Reduction	
				SI220H15			99-1339		
				SI220H19			99-1340		
				SI220H22			99-1341	Snub. Reduction	
100 LPSI A Suction	One	2	2	SI155H5			99-1329		
				SI155H6			99-1328	PSE/Snub. Replace	
102 SI Suction A	One	6	2	SI241H19			99-1330	Reject	
				SI369H1			99-1642	Re-exam	
				SI8H4			99-1331		
				SI9H1			99-1303	PSE	
				SI307H2			99-1429	PSE	
103 Refuel Suction A	One	6	6	SI307H5			99-1422	PSE	
				SI307H6			99-1304	PSE	
				SI307H7			99-1425	PSE	
				CH142H3			99-1424	PSE	
				CH142H13			99-1420	PSE	
				CH142H14			99-1408		
				CH142H15			99-1409		
CH142H19			99-1410						
CH142H22			99-1412						
CH424H1			99-1411						
CH424H2			99-1413						
							99-1386	PSE	

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

<b>ASME Item no</b>	<b>Zone Comp/sys</b>	<b>Insp per</b>	<b>Amt Req</b>	<b>Amt Comp</b>	<b>Item ID</b>	<b>Vol</b>	<b>Reports Surf</b>	<b>Visual</b>	<b>Remarks</b>
F 1.20	104 SI Suction B	One	7	7	CH424H3			99-1385	PSE Snub. Reduction
					SI33H1			99-1520	
					SI33H2			99-1521	
					SI33H3			99-1522	
					SI308H5			99-1523	
					SI308H8			99-1524	
					SI308H10			99-1525	
	108 HPSI Discharge	One	11	11	SI308H11			99-1526	Snub. Reduction
					SI100H22			99-1388	
					SI100H23			99-1387	
					SI100H24			99-1389	
SI100H25							99-1390		
SI100H26							99-1391		
SI100H27							99-1392		
SI100H28							99-1393		
SI100H29			99-1394						
SI100H31			99-1395						
SI100H32			99-1396						
SI100H35			99-1397						

**APPENDIX B**  
**CODE LIMITATIONS**

**APPENDIX B**

**CODE LIMITATIONS**

**There were no Code Limitations identified  
during the Eighth Refueling Outage.**

**APPENDIX C**

**FORM  
NIS-1**

# APS

## NIS-1 FORM

OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

1. OWNER - **ARIZONA PUBLIC SERVICE COMPANY, et al**  
ADDRESS - **P.O. BOX 52034, PHOENIX, ARIZONA 85072**
2. PLANT - **PALO VERDE NUCLEAR GENERATING STATION**  
ADDRESS - **5801 SOUTH WINTERSBURG ROAD; TONOPAH, ARIZONA 85354-7529**
3. UNIT NUMBER -     **1**
4. OWNERS' CERTIFICATE OF AUTHORIZATION - **NONE**
5. COMMERCIAL SERVICE DATE -     **JANUARY 28, 1986**
6. COMPONENTS INSPECTED:

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

This report is a running summary of all examinations performed to date for Unit 1. The items examined, along with the examination report numbers, are listed in Appendix A. The examinations performed after the last Summary Report was issued are identified with a 99-1XXX report number.

# APS

# NIS-1 BACK

## OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

7. EXAM DATES 7-27-99 TO 11-6-99

8. INSPECTION INTERVAL FROM 7-18-98 TO 7-17-08

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 Numbers with the corresponding examination report numbers. All of the examinations for the eighth refueling are identified with a 99-1XXX report number.

10. ABSTRACT OF CONDITIONS NOTED

There are no outstanding rejectable items in Unit 1. The rejectable items found during this outage consisted of 3 items; 1 was a reactor coolant pump clamp ring and nuts, 1 was valve non-pressure retaining bolting and 1 was hanger settings. A list of the individual rejected components is located in Section 7.0, REPAIRS AND REPLACEMENTS, of this report.

11. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN

The rejectable RCP clamp ring and nuts were replaced. The abnormal conditions found on the support and valve were reworked in accordance with APS Work Control practices.

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. All documents 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 1/21/00 SIGNED: ARIZONA PUBLIC SERVICE COMPANY BY

*[Signature]*  
1/27/00

## CERTIFICATE OF INSERVICE INSPECTION

I, 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 HSBI & I CO. OF HARTFORD, CONNECTICUT HAVE INSPECTED THE COMPONENTS DESCRIBED IN THIS OWNERS REPORT DURING THE PERIOD 7-27-99 TO 1-21-00, AND STATE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE OWNER HAS PERFORMED EXAMINATIONS AND TAKEN CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT IN ACCORDANCE WITH THE REQUIREMENTS OF THE ASME CODE, SECTION XI. BY SIGNING THIS CERTIFICATE NEITHER THE INSPECTOR NOR HIS EMPLOYER MAKES ANY WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE EXAMINATIONS AND CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT. FURTHERMORE, NEITHER THE INSPECTOR NOR HIS EMPLOYER SHALL BE LIABLE IN ANY MANNER FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE OR A LOSS OF ANY KIND ARISING FROM OR CONNECTED WITH THIS INSPECTION.

INSPECTOR

*[Signature]*

COMMISSIONS

NB 9685 "N" "I" Az. 264

DATE

JANUARY 21, 2000

NAT'L BOARD, STATE, PROVINCE



**APPENDIX D**

**FORMS  
NIS-2**

**APPENDIX D**

**FORMS  
NIS-2**

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JPCAFE0057 2. Code Class ASME Section III, Class 3
3. Item Description Annubar Flow Element
4. N-5 Package Number 1PC02-1 5. W.O. Number 00-802614
6. Original Construction Code Edition 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda
8. Work Description Add annubar flow element, DMWO 00-800082
- 
9.  ISI Flaw NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
Add new annubar flow element at the discharge of the Spent Fuel Pool cooling pumps to support  
system testing as described in DMWO 00-800082, EDC 97-00645
- 
11. Repair/Replacement Work Organization APS
12. Replacement Item Construction Code/Edition Sec III, Cl. 3/'74 Edition, Winter '75
13. Repair/Replacement Activity Construction Code/Edition Sec III, Cl. 3/'74 Edition, Winter '75
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

- N/A N/A 15. Include step in the W.O. to perform Preservice Inspection  
Initial Date
- m 06/12/98 16. Include a step in the W.O. to send completed copy of this form to ISI Group.  
Initial Date
- m 06/12/98 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial Date
- m 06/12/98 18. Include step in the W.O. to record below all applicable numbers.  
Initial Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	ROS/EROS NO.
Annubar	NFF-26	13675.1.5	Not Applicable	MR# 110412

19. Planner R Michael Drake 6/12/98 Print Name R Michael Drake  
Signature Date
20. ISI Engineer Fred Poteet 6/12/98 Print Name FRED POTEET  
Signature Date
21. ANII R G Houston 6-12-98 Print 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 06/12/98  
Name

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

2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 802614  
Address Repair Organization P.O. No., Job No., etc.

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

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

4. Identification of System PC (Pool Cooling) ASME Section III Class 3

5. (a) Applicable Construction Code Section III Class 3 1974 Edition, W '75 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Annubar	Dieterich Standard	13675.1.5	N/A	IJPCAFE0057	1997	Replacement	No

7. Description of Work Added Annubar Flow Element, DMWO 00-800082

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 W.O. 802614

Pressure test per Code Case N-416-1

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

Signed [Signature] \_\_\_\_\_ Expiration Date N/A

R.L. BROOKHUIS 151 ENG Date 6-20-98  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-12-98 to 6-20-98, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

National Board, State, Province, and Endorsements

Date June 20 1998

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID IPC006H015      2. Code Class CLASS 3, NF
3. Item Description MECHANICAL SNUBBER AND EXTENSION ROD
4. N-5 Package Number IPC02-1      5. W.O. Number 00835131
6. Original Construction Code Edition '74 Edition thru W' 75 Addenda
7. Original Installation Code Edition '74 Edition thru W'75 Addenda
8. Work Description Replace snubber and extension rod per DMWO #800082
9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
N/A

11. Repair/Replacement Work Organization A.P.S.
12. Replacement Item Construction or reconciled Code/Edition '74 Edition thru W'75 Addenda
13. Repair/Replacement Activity Construction Code/Edition '74 Edition thru W'75 Addenda
14. ASME Section XI Code/Edition '92 Edition thru '92 Addenda
15. Preservice Inspection Required.       YES       NO  
SE      06/15/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO  
SE      06/15/99      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date
- SE      06/15/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date
- SE      06/15/99      18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
IPC006H015	PSA-1/2	13811		
IPC006H015	FIG 307N	1999-6		00245615
				00245615

19. Planner Steven Eich      6-15-99      Print Name Steven Eich  
Signature      Date
20. ISI Engineer Alan Morrow      6-22-99      Print Name Alan Morrow  
Signature      Date
21. ANII Roger G. Houston      6-22-99      Print Name Roger 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 06/15/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 12 of 2  
Address  
 2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00835131  
Address Work Order Number  
 3. Work Performed by A.P.S. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address

4. Identification of System Pool Cooling "PC"  
 5. (a) Applicable Construction Code Class 3 "NF" 1974 Edition, 75 Addenda Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 92 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
IPC006H015	Pacific Scientific	13811	N/A	PSA- 1/2	1981	Replacement	Yes
IPC006H015	Grinnell	1999-6	N/A	FIG 307N	1992	Replacement	Yes

7. Description of Work Replace snubber and extension rod per DMWO #8000082

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 W.O. 835131

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 \_\_\_\_\_

Certificate of Authorization No. N/A

Signed [Signature]

SENIOR IST ENGINEER  
Owner or Owner's Designee, Title

Expiration Date N/A

Date 6-24-99

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-22-99 to 6-24-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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

Date JUNE 21 1999

Commissions NB 9685 'S' 'I' Az. 264  
National Board, State, Province, and Endorsements



# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JPCBFE0059      2. Code Class ASME Section III, Class 3
3. Item Description Annubar Flow Element
4. N-5 Package Number 1PC02-1      5. W.O. Number 00-802619
6. Original Construction Code Edition 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda
8. Work Description Add annubar flow element, DMWO 00-800082

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
Add new annubar flow element at the discharge of the Spent Fuel Pool cooling pumps to support system testing as described in DMWO 00-800082, EDC 97-00646

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction Code/Edition Sec III, Cl. 3/'74 Edition, Winter '75
13. Repair/Replacement Activity Construction Code/Edition Sec III, Cl. 3/'74 Edition, Winter '75
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

- A      N/A      15. Include step in the W.O. to perform Preservice Inspection  
Initial      Date
- M      06/12/98      16. Include a step in the W.O. to send completed copy of this form to ISI Group.  
Initial      Date
- M      06/12/98      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date
- M      06/12/98      18. Include step in the W.O. to record below all applicable numbers.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	ROS/EROS NO.
Annubar	NFF-26	13675.1.2	Not Applicable	MR# 110413

19. Planner R Michael Drake      6/12/98      Print Name R Michael Drake  
Signature      Date
20. ISI Engineer R P Indap      6/23/98      Print Name R. P. INDAP  
Signature      Date
21. ANII R G Houston      6-23-98      Print 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 06/12/98  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 802619  
Address Repair Organization P.O. No., Job No., etc.
3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System PC (Pool Cooling) ASME Section III Class 3
5. (a) Applicable Construction Code Section III Class 3 1974 Edition, W '75 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Annubar	Dieterich Standard	13675.1.2	N/A	1JPCBFE0059	1997	Replacement	No

7. Description of Work Added Annubar Flow Element, DMWO 00-800082

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 W.O. 802619

Pressure test per Code Case N-416-1

## 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] Date 6-29-98  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-23-98 to 6-24-98, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date June 29 1998

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1PCHNL037      2. Code Class ASME SECTION III, CLASS 2
3. Item Description LETDOWN SPOOL N00A FROM REGENERATIVE HEAT EXCHANGER
4. N-5 Package Number 1CH13-1      5. W.O. Number 841404
6. Original Construction Code Edition ASME SECTION III CL2 1974 ED W75 ADD
7. Original Installation Code Edition ASME SECTION III CL2 1974 ED W75 ADD
8. Work Description REMOVE AND REPLACE DAMAGED PIPING SPOOL IAW ENGINEERING "DFWO" DISPOSITION.

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
REMOVE AND REPLACE DAMAGED PIPING SPOOL IAW ENGINEERING "DFWO" DISPOSITION DUE TO TRANSIENT EVENT IN PIPING SYSTEM.

11. Repair/Replacement Work Organization ARIZONA PUBLIC SERVICE (APS)
12. Replacement Item Construction Code/Edition ASME SECTION III CL2 1974 ED W75 ADD
13. Repair/Replacement Activity Construction Code/Edition ASME SECTION III CL2 1974 ED W75 ADD
14. ASME Section XI Code/Edition 1992 EDITION 1992 ADDENDA

- aw 5-20-98 15. Include step in the W.O. to perform Preservice Inspection *Not Required aw 5-20-98*
- aw 5-20-98 16. Include a step in the W.O. to send completed copy of this form to ISI Group.
- aw 5-20-98 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
- aw 5-20-98 18. Include step in the W.O. to record below all applicable numbers.

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	ROS/EROS NO.
1PCHNL037 PIPE	4351-0092		9E4063	PL0179168
3000# CPLG.	4356-0480		CZU & FPA	PL0179168
PIPE LUGS	4364-0382		HT <sup>2</sup> 79783-3B	

19. Planner *Alex Waicelunas*      5-20-98 Print Name Alex Waicelunas
20. ISI Engineer *Alan Morrow*      5-20-98 Print Name Alan Morrow
21. ANII *Robert G. Houstrom*      5-20-98 Print Name ROBERT G. HOUSTROM

# FORM NIS-2 OWNER'S 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 05/22/98  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address  
 2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 W.O.# 841404  
Address Repair Organization P.O. No., Job No., etc.  
 3. Work Performed by Arizona Public Service Company Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 8534-7529 Expiration Date N/A  
Address

4. Identification of System CH (Charging System), ASME Section III, Class 2  
 5. (a) Applicable Construction Code Section III, Class 2 1974 Edition, '75 W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
PIPE	N/A	N/A	N/A	HT# 9E4063	N/A	Replacement	No
COUPLING	N/A	N/A	N/A	HT# CZU & FPA	N/A	Replacement	No
RESTRAINT LUGS (From Plate)	N/A	N/A	N/A	HT# 79783-3B	N/A	Replacement	No

7. Description of Work Removed and Replaced Damaged Pipe Spool and Pipe Support

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

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

FORM NIS-2 (Back)

9. Remarks Pressure test per N-416-1, DFWO# 841404

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] ISI ENG Date 5-22-98  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 5-20-98 to 5-22-98, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 MAY 22 1998

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JCHNPSV0345      2. Code Class ASME III, CLASS 2
3. Item Description 2" CROSBY RELIEF VALVE
4. N-5 Package Number 1CH13-1      5. W.O. Number 841405
6. Original Construction Code Edition 1974 EDITION, SUMMER 1976 ADDENDA
7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA
8. Work Description REPLACEMENT OF RELIEF VALVE. REMOVE VALVE WILL BE TESTED AND REWORKED IF NECESSARY.

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
USING VENDOR SUPPLIED "LIKE-FOR-LIKE" REPLACEMENT. However this replacement is not because of a structural failure.

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction Code/Edition ASME III, Cl.2 1974 ED. S'1976 ADD.
13. Repair/Replacement Activity Construction Code/Edition ASME III, Cl.2, 1974 ED. W'1975 ADD.
14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

- N.A. RPP 05/20/98      15. Include step in the W.O. to perform Preservice Inspection  
Initial      Date
- Dmg 05/20/98      16. Include a step in the W.O. to send completed copy of this form to ISI Group.  
Initial      Date
- Dmg 05/20/98      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date
- Dmg 05/20/98      18. Include step in the W.O. to record below all applicable numbers.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	ROS/EROS NO.
1JCHNPSV0345		N61180-00-0008		

19. Planner *David Goodlet* 5-20-98      Print Name DAVID GOODLET  
Signature      Date
20. ISI Engineer *Ramakant Indap* 5-20-98      Print Name RAMAKANT INDAP  
Signature      Date
21. ANII *Bob Hogstrom* 5-20-98      Print Name BOB HOGSTROM  
Signature      Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 05/20/98  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address  
 2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO# 841405  
Address Repair Organization P.O. No., Job No., etc.  
 3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address

4. Identification of System "CH"  
 5. (a) Applicable Construction Code ASME III, C1.2 1974 Edition, S'76 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Safety Valve	CROSBY	N6 1180-00-0008	N/A	IJCHPSV0345	1986	Replacement	Yes

7. Description of Work Replacement of valve to expedite time system is out of service.

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 N/A WO # 841405

## 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] ISI ENG Date 5-22-98  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 5-20-98 to 5-22-98, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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  
Date May 22 1998

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

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID IPCHNV155      2. Code Class ASME SEC III CL 3
3. Item Description CHECK VALVE
4. N-5 Package Number ICH02-6      5. W.O. Number 847094
6. Original Construction Code Edition 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda
8. Work Description During the check valve inspection it was found that the body to bonnet studs and nuts were in need of replacement.
9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
N/A

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition SECT. III CL.3./74 ED. '75 SUMMER ADD.
13. Repair/Replacement Activity Construction Code/Edition SECT. III CL 3/74 ED. '75 WINTER ADD.
14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required.       YES       NO  
JSB      02/23/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date
16. ASME Section XI Pressure Test Required       YES       NO  
JSB      02/23/99      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date
- JSB      02/23/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date
- JSB      02/23/99      18. Include a step in the W.O. to record below all applicable numbers.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
IPCHNV155 (STUDS)	77203-16	N/A	P2453H HX3	MR# 222106
IPCHNV155(NUTS)	NT0.500-13S	N/A	41039	MR# 222106

19. Planner James G. Boulanger      Signature      2-23-99      Date      Print Name JAMES G. BOULANGER

20. ISI Engineer Alan Morrow      Signature      2-23-99      Date      Print Name Alan Morrow

21. ANII Robert Hogstrom      Signature      2-23-99      Date      Print Name ROBERT HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 02/23/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 847094  
Address Work Order Number
3. Work Performed by Arizona Public Service Company, et. al. Type Code Symbol Stamp None  
Name Authorization No. N/A  
P.O. Box 53999, Phoenix, Arizona 85072-2034 Expiration Date N/A  
Address

4. Identification of System CH, ASME Section III, Cl 3
5. (a) Applicable Construction Code Section III, Cl 3 1974 Edition, W'75 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Body to Bonnet Studs & Nuts	Borg Warner	N/A	N/A	1PCHNV155	1999	Replacement	No

7. Description of Work Replace Body to Bonnet studs and nuts after doing check valve inspection

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 Repalced body to bonnet studs and nuts on valve 1PCHNV155 (Borg Warner Check Valve) S/N 26295 Built 1977 WO# 847094

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]

Owner or Owner's Designee, Title

Date 2/23/99

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 2-23-99 to 2-23-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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" - 1" A2.264  
National Board, State, Province, and Endorsements

Date FEBRUARY 23 1999

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1SI241H008      2. Code Class ASME III, NF / CLASS 2  
 3. Item Description SNUBBER  
 4. N-5 Package Number 1SI07-3B      5. W.O. Number WO#00684227  
 6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda  
 7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda  
 8. Work Description Replace Snubber with Rigid Strut IAW. EDC #94-00465

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
Engineering Design Change, (EDC) #94-00465, Snubber being replaced with Rigid Strut.

11. Repair/Replacement Work Organization APS  
 12. Replacement Item Construction or reconciled Code/Edition Subsect. NF/CL2, '74 Ed. '75 Winter Addenda  
 13. Repair/Replacement Activity Construction Code/Edition Subsect. NF/CL2, '74 Ed. '75 Winter Addenda  
 14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required.       YES       NO

Rig. MSM 9/16/99 If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO

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

MSM 9/16/99 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date

MSM 9/16/99 18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1SI241H008	STRUT/ 395059	N/A	R527D/G54HF/G54CB	90413693
1SI241H008	Rear Bracket /355959	N/A	<b>AS529S/265</b>	<b>90413693</b>
1SI241H008	Pipe Clamp /364661	N/A	B387D/M701D/Z47/65	90413693

19. Planner Glenn E. Moore 9/16/99      Print Name Glenn E. Moore  
Signature      Date

20. ISI Engineer Alan Morrow 9-17-99      Print Name Alan Morrow  
Signature      Date

21. ANII Robert G. Houston 9-21-99      Print Name Robert G. Houston  
Signature      Date

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1CH424H002      2. Code Class ASME III, NF / CLASS 2  
 3. Item Description SNUBBER  
 4. N-5 Package Number 1SI01-1A      5. W.O. Number WO#00684227  
 6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda  
 7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda  
 8. Work Description Replace Snubber with Rigid Strut IAW. EDC #94-00465

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
Engineering Design Change, (EDC) #94-00465, Snubber being replaced with Rigid Strut.

11. Repair/Replacement Work Organization APS  
 12. Replacement Item Construction or reconciled Code/Edition Subsect. NF/CL2, '74 Ed, '75 Winter Addenda  
 13. Repair/Replacement Activity Construction Code/Edition Subsect. NF/CL2, '74 Ed, '75 Winter Addenda  
 14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required.       YES       NO  
AS 9/16/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO  
JA 2/1A      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date

AS 9/16/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date

AS 9/16/99      18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1CH424H002	395049 / Strut	N/A	R5H9B10D	PL0318137
1CH424H002	355959 / Rear Bracket	N/A	AS529S / Z65	90413681
1CH424H002	355959 / Rear Bracket	N/A	AS529S / Z65	90413681
<u>RMB 10/05/99</u>				

19. Planner Glenn E Moore      9/16/99      Print Name Glenn E. Moore  
Signature      Date

20. ISI Engineer Alan Morrow      9-17-99      Print Name Alan Morrow  
Signature      Date

21. ANII Robert G. Houston      9-17-99      Print 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 09/08/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number
3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System SI
5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	1CH424H002	1999	Replacement	No
Rear Bracket	Lisega	N/A	N/A	1CH424H002	1999	Replacement	No
Rear Bracket	Lisega	N/A	N/A	1CH424H002	1999	Replacement	No

7. Description of Work \_\_\_\_\_
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

# FORM NIS-2 (Back)

9. Remarks WO#00684227 1CH424H002

## 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] ISE ENGINEER Date 10/15/99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-17-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date OCTOBER 15 19 99



# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1CH424H003      2. Code Class ASME III, NF / CLASS 2  
 3. Item Description SNUBBER  
 4. N-5 Package Number 1SI01-1A      5. W.O. Number WO#00684227  
 6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda  
 7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda  
 8. Work Description Replace Snubber with Rigid Strut IAW. EDC #94-00465

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
Engineering Design Change, (EDC) #94-00465, Snubber being replaced with Rigid Strut.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition Subsect. NF/CL2, '74 Ed, '75 Winter Addenda

13. Repair/Replacement Activity Construction Code/Edition Subsect. NF/CL2, '74 Ed, '75 Winter Addenda

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

15. Preservice Inspection Required.       YES       NO

MEH      9/16/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO

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

MEH      9/16/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date

MEH      9/16/99      18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1CH424H003	396079 / Strut	N/A	R6H9711D	PL0318137
1CH424H003	356959 / Rear Bracket	N/A	AS674 / Z530	90413682
1CH424H003	375161 / Pipe Clamp	N/A	B368D / Z539 / Z530	90413682

19. Planner Glenn E. Moore      9/16/99      Print Name Glenn E. Moore  
Signature      Date
20. ISI Engineer Alan Morrow      9-17-99      Print Name Alan Morrow  
Signature      Date
21. ANII Robert G. Hostron      9-17-99      Print Name Robert G. Hostron  
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 09/08/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number
3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System SI
5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	1CH424H003	1999	Replacement	No
Rear Bracket	Lisega	N/A	N/A	1CH424H003	1999	Replacement	No
Pipe Clamp	Lisega	N/A	N/A	1CH424H003	1999	Replacement	No

7. Description of Work \_\_\_\_\_
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

# FORM NIS-2 (Back)

9. Remarks WO#00684227 1CH424H003

## 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] ISI ENGINEER Date 10/15/99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-17-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 9685 "N" "I" h2.264  
Inspector's Signature National Board, State, Province, and Endorsements  
Date OCTOBER 15 1999

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1SI241H012 2. Code Class ASME III, NF / CLASS 2  
 3. Item Description SNUBBER  
 4. N-5 Package Number 1SI07-3B 5. W.O. Number WO#00684227  
 6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda  
 7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda  
 8. Work Description Replace Snubber with Rigid Strut IAW. EDC #94-00465

9.  ISI Flaw NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_  
 10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
Engineering Design Change, (EDC) #94-00465, Snubber being replaced with Rigid Strut.

11. Repair/Replacement Work Organization APS  
 12. Replacement Item Construction or reconciled Code/Edition Subsect. NF/CL2, '74 Ed. '75 Winter Addenda  
 13. Repair/Replacement Activity Construction Code/Edition Subsect. NF/CL2, '74 Ed. '75 Winter Addenda  
 14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required.  YES  NO  
ASD 9/16/99 If required, include a step in the W.O. to perform Preservice Inspection.  
Initial Date

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

- ASD 9/16/99 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial Date

- ASD 9/16/99 18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial Date

COMP I.D.	PART NO. <small>Rev. #/Date</small>	SERIAL NO.	HEAT NO.	MR/ROS NO.
1SI241H012	Strut / 396129 <i>RR1</i>	N/A	R636D / G6S-1	PL0312395

19. Planner *Glenn E. Moore* 9/16/99 Print Name Glenn E. Moore  
Signature Date  
 20. ISI Engineer *Alan Morrow* 9-17-99 Print Name Alan Morrow  
Signature Date  
 21. ANII *Robert G. Hogstrom* 9-21-99 Print Name ROBERT G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 09/08/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number
3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address

4. Identification of System SI
5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	1SI241H012	1999	Replacement	No

7. Description of Work \_\_\_\_\_
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

# FORM NIS-2 (Back)

9. Remarks WO#00684227 1SI241H012

## 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] ISE ENGINEER Date 10/15/99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-21-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 9685 "2" "1" A2 264  
Inspector's Signature National Board, State, Province, and Endorsements

Date OCTOBER 15 1999

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1SI307H005 2. Code Class ASME III, NF / CLASS 2  
 3. Item Description SNUBBER  
 4. N-5 Package Number 1SI01-1B 5. W.O. Number WO#00684227  
 6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda  
 7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda  
 8. Work Description Replace Snubber with Rigid Strut. IAW. EDC# 94-00465

9.  ISI Flaw NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_  
 10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
Engineering Design Change, (EDC)#94-00465. Snubber being replaced with Rigid Strut.

11. Repair/Replacement Work Organization APS  
 12. Replacement Item Construction or reconciled Code/Edition Subsect.NF.CI.2/'74 Edit.'75 Winter Addenda  
 13. Repair/Replacement Activity Construction Code/Edition 1974 Edition & 1975 Winter Addenda  
 14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required.  YES  NO  
REH 9/16/99 If required, include a step in the W.O. to perform Preservice Inspection.  
Initial Date

16. ASME Section XI Pressure Test Required  YES  NO  
REH 9/16/99 If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial Date

17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
REH 9/16/99  
Initial Date  
 18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
REH 9/16/99  
Initial Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1SI307H005	Strut / 397109	N/A	R728D / G71A / G721	PL0007422
1SI307H005	Rear Bracket / 357959	N/A	AS7A4 / Z527 / *Z58	90413688
1SI307H005	Pipe Clamp / 363264	N/A	B340D	90413688

19. Planner Glenn E. Moore 9/16/99 Print Name Glenn E. Moore  
Signature Date  
 20. ISI Engineer Alan Morrow 9-17-99 Print Name Alan Morrow  
Signature Date  
 21. ANII Robert G. Holstrom 9-21-99 Print 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 08/31/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number
3. Work Performed by Palo Verde Nuclear Generating Station Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd. Tononpah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System Safety Injection System (SI)
5. (a) Applicable Construction Code ASME III NF / CL.2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
STRUT	LISEGA	N/A	N/A	1SI307H005	1999	Replacement	No
REAR BRACKET	LISEGA	N/A	N/A	1SI307H005	1999	Replacement	No
PIPE CLAMP	LISEGA	N/A	N/A	1SI307H005	1999	Replacement	No

7. Description of Work \_\_\_\_\_
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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



# FORM NIS-2 (Back)

9. Remarks WO#00684227 ISI307H005  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## 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] ISI ENGINEER Date 10/15/99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 4-21-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 N.B. 9685 "N" "I" Az. 264  
Inspector's Signature National Board, State, Province, and Endorsements  
Date OCTOBER 15 19 99



# FORM NIS-2 OWNER'S 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 09/08/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address

2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number

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

4. Identification of System SI

5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	ISI241H005	1999	Replacement	No

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

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

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

# FORM NIS-2 (Back)

9. Remarks WO#00684227 1SI241H005  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## 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] ISI ENGINEER Date 10-15-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-21-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date OCTOBER 15 1999



# FORM NIS-2 OWNER'S 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 09/08/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number
3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address

4. Identification of System SI
5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	ISI067H001	1999	Replacement	No

7. Description of Work \_\_\_\_\_
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

FORM NIS-2 (Back)

9. Remarks WO#00684227 1SI067H001

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] ISI ENGINEER Date 10-15-99  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-21-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date October 15 1999

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID ISI067H003      2. Code Class ASME III, NF / CL-2
3. Item Description SNUBBER
4. N-5 Package Number ISI01-3B      5. W.O. Number 00684227
6. Original Construction Code Edition 1974 Edition & 1975 Winter Addenda
7. Original Installation Code Edition 1974 Edition & 1975 Winter Addenda
8. Work Description Replace Snubber w/Sway Strut IAW. EDC # 94-00465

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
Permanent Removal of Snubber IAW. EDC#94-00465

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition Subsect..NF.C12/ 74 Edit.'75 Winter Addenda
13. Repair/Replacement Activity Construction Code/Edition 1974 Edition & 1975 Winter Addenda
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required.       YES       NO
- ASD      9/16/99      If required, include a step in the W.O. to perform Preservice Inspection.

16. ASME Section XI Pressure Test Required       YES       NO
- N/A      N/A      If required, include a step in the W.O. for ISI & ANII Inspection.

- ASD      9/16/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
- ASD      9/16/99      18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
ISI067H003	Strut / 396129	4537-0124	R631D / G6-26	90413686
ISI067H003	Rear Bracket / 356959	4530-1888	<del>AS67H-AS678</del> / Z530 <sup>AS6</sup> <sub>10-14-99</sub>	90413686
ISI067H003	Pipe Clamp / 364163	4359-0937	B368D	90413686

19. Planner Glenn E. Moore      9/16/99      Signature      Date      Print Name Glenn E. Moore
20. ISI Engineer Alan Morrow      9-17-99      Signature      Date      Print Name Alan Morrow
21. ANII Robert C. Houston      9-21-99      Signature      Date      Print Name Robert C. 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 08/31/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO #00684227  
Address Work Order Number
3. Work Performed by Palo Verde Nuclear Generating Station Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System Safety Injection System / SI
5. (a) Applicable Construction Code ASME III NF / CL.2 1974 Edition, 75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
RIGID STRUT	LISEGA	N/A	N/A	ISI-067-H003	1999	Replacement	No
REAR BRACKET	LISEGA	N/A	N/A	ISI-067-H003	1999	Replacement	No
PIPE CLAMP	LISEGA	N/A	N/A	ISI-067-H003	1999	Replacement	No

7. Description of Work Deletion of Snubber Per DCP IPC-SI-209,EDC #94-00465
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

# FORM NIS-2 (Back)

9. Remarks

WO #00684227 1SI067H003

## 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] ISE ENGINEER Date 10-15-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-21-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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" A2 264  
National Board, State, Province, and Endorsements

Date OCTOBER 15 1999

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID ISI307H006 2. Code Class ASME III. NF / CLASS 2  
 3. Item Description SNUBBER  
 4. N-5 Package Number ISI01-1B 5. W.O. Number WO#00684227  
 6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda  
 7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda  
 8. Work Description Replace Snubber with Rigid Strut IAW. EDC #94-00465

9.  ISI Flaw NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_  
 10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
Engineering Design Change, (EDC) #94-00465, Snubber being replaced with Rigid Strut.

11. Repair/Replacement Work Organization APS  
 12. Replacement Item Construction or reconciled Code/Edition Subsect. NF/CL2. '74 Ed. '75 Winter Addenda  
 13. Repair/Replacement Activity Construction Code/Edition Subsect. NF/CL2. '74 Ed. '75 Winter Addenda  
 14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required.  YES  NO  
NSM 9/16/99 If required, include a step in the W.O. to perform Preservice Inspection.  
Initial Date  
 16. ASME Section XI Pressure Test Required  YES  NO  
NSA N/A If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial Date  
NSM 9/16/99 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial Date  
NSM 9/16/99 18. Include a step in the W.O. to record below all applicable numbers for repaired or  
Initial Date replaced items.

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
ISI307H006	396079 / Strut	N/A	R634D / G641	PL0007422
ISI307H006	396959 / Rear Bracket	N/A	AS674 / Z530	90413691
ISI307H006	376161 / Pipe Clamp	N/A	B368D / A505D	PL0007422

19. Planner Alan Moore 9/16/99 Print Name Glenn E. Moore  
Signature Date  
 20. ISI Engineer Alan Morrow 9-17-99 Print Name Alan Morrow  
Signature Date  
 21. ANII Robert G. Houston 9-21-99 Print 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 09/08/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number
3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address

4. Identification of System SI
5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	1SI307H006	1999	Replacement	No
Rear Bracket	Lisega	N/A	N/A	1SI307H006	1999	Replacement	No
Pipe Clamp	Lisega	N/A	N/A	1SI307H006	1999	Replacement	No

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

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

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

# FORM NIS-2 (Back)

9. Remarks WO#00684227 1S1307H006

## 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] ISE ENGINEER Date 10-15-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-21-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 9685 "N" "I" Az. 264  
Inspector's Signature National Board, State, Province, and Endorsements  
Date OCTOBER 15 1999

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1SI307H007 2. Code Class ASME III, NF / CLASS 2  
 3. Item Description SNUBBER  
 4. N-5 Package Number 1SI01-1B 5. W.O. Number WO#00684227  
 6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda  
 7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda  
 8. Work Description Replace Snubber with Rigid Strut IAW. EDC #94-00465

9.  ISI Flaw NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
Engineering Design Change, (EDC) #94-00465, Snubber being replaced with Rigid Strut.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition Subsect. NF/CL2, '74 Ed. '75 Winter Addenda

13. Repair/Replacement Activity Construction Code/Edition Subsect. NF/CL2, '74 Ed. '75 Winter Addenda

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

15. Preservice Inspection Required.  YES  NO

AM 9/16/99 If required, include a step in the W.O. to perform Preservice Inspection.  
Initial Date

16. ASME Section XI Pressure Test Required  YES  NO

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

AM 9/16/99 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial Date

AM 9/16/99 18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1SI307H007	397059S / Strut	N/A	AR184D	PL00 318157
1SI307H007	357959 / Rear Bracket	N/A	AS7A6 / Z555	PL00108441
1SI307H007	376162 / Pipe Clamp	N/A	B381D/A318D/Z535*	90413690
			Z58/ Z539	

19. Planner Alan Moore 9/16/99 Print Name Alan E. Moore  
Signature Date

20. ISI Engineer Alan Morrow 9-17-99 Print Name Alan Morrow  
Signature Date

21. ANII Rose G. Holstrom 9-21-99 Print Name Rose 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 09/08/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number
3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address

4. Identification of System SI
5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	1SI307H007	1999	Replacement	No
Rear Bracket	Lisega	N/A	N/A	1SI307H007	1999	Replacement	No
Pipe Clamp	Lisega	N/A	N/A	1SI307H007	1999	Replacement	No

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

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

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

# FORM NIS-2 (Back)

9. Remarks WO#00684227 1SI307H007

## 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] ISI ENGINEER Date 10-15-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-21-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions NS 9685 "N" 7" A2.264  
National Board, State, Province, and Endorsements

Date OCTOBER 15 1999



# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1SI002H002 2. Code Class ASME III. NF / CLASS 2  
 3. Item Description SNUBBER  
 4. N-5 Package Number 1SI07-3B 5. W.O. Number WO#00684227  
 6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda  
 7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda  
 8. Work Description Replace Snubber with Rigid Strut IAW. EDC #94-00465

9.  ISI Flaw NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_  
 10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
Engineering Design Change, (EDC) #94-00465, Snubber being replaced with Rigid Strut.

11. Repair/Replacement Work Organization APS  
 12. Replacement Item Construction or reconciled Code/Edition Subsect. NF/CL2. '74 Ed. '75 Winter Addenda  
 13. Repair/Replacement Activity Construction Code/Edition Subsect. NF/CL2. '74 Ed. '75 Winter Addenda  
 14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required.  YES  NO  
nm 9/16/99 If required, include a step in the W.O. to perform Preservice Inspection.  
Initial Date

16. ASME Section XI Pressure Test Required  YES  NO  
slr slr If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial Date

nm 9/16/99 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial Date

nm 9/16/99 18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1SI002H002	Strut / 3952RR2	N/A	R519D /G6S-1	90413697

19. Planner Alan E Moore 9/16/99 Print Name Alan E. Moore  
Signature Date  
 20. ISI Engineer Alan Morrow 9/17/99 Print Name Alan Morrow  
Signature Date  
 21. ANII Robert G. Houston 9-17-99 Print 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 09/08/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address

2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number

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

4. Identification of System SI

5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '74W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	1SI002H002	1999	Replacement	No

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

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

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

# FORM NIS-2 (Back)

9. Remarks WO#00684227 1SI002H002

## 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] ISI ENGINEER Date 10-15-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-17-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date OCTOBER 15 1999

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID ISI241H007      2. Code Class ASME III, NF / CLASS 2  
 3. Item Description SNUBBER  
 4. N-5 Package Number ISI07-3B      5. W.O. Number WO#00684227  
 6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda  
 7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda  
 8. Work Description Replace Snubber with Rigid Strut IAW. EDC #94-00465

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
Engineering Design Change, (EDC) #94-00465, Snubber being replaced with Rigid Strut.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition Subject. NF/CL2, '74 Ed. '75 Winter Addenda

13. Repair/Replacement Activity Construction Code/Edition Subject. NF/CL2, '74 Ed. '75 Winter Addenda

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

15. Preservice Inspection Required.       YES       NO

MEW      9/16/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO

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

MEW      9/16/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date

MEW      9/16/99      18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
ISI241H007	395049S / Strut	N/A	AR170D	90413692
ISI241H007	<del>395049S</del> 395959 / Rear Bracket	N/A	AS531	0039445
ISI241H007	364661 / Pipe Clamp	N/A	B387D	90397636

19. Planner Glenn E. Moore      9/16/99      Print Name Glenn E. Moore  
Signature      Date

20. ISI Engineer Alan Morrow      9-17-99      Print Name Alan Morrow  
Signature      Date

21. ANII Robert G. Holstrom      9-21-99      Print 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 09/08/99  
Name

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

2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number

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

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

4. Identification of System SI

5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	1SI241H007	1999	Replacement	No
Rear Bracket	Lisega	N/A	N/A	1SI241H007	1999	Replacement	No
Pipe Clamp	Lisega	N/A	N/A	1SI241H007	1999	Replacement	No

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

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

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

# FORM NIS-2 (Back)

9. Remarks WO#00684227 1SI241H007

## 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] ISE ENGINEER Date 10-15-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-21-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 9685 "N" "I" Az. 264  
Inspector's Signature National Board, State, Province, and Endorsements  
Date OCTOBER 15 1999

# FORM NIS-2 (Back)

9. Remarks WO#00684227 1SI307H002

## 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] ISI ENGINEER Date 10-15-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-21-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 9685 "N" "I" Az. 26A  
Inspector's Signature National Board, State, Province, and Endorsements  
Date OCTOBER 15 1999

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1CH142H003      2. Code Class ASME III, NF / CLASS 2  
 3. Item Description SNUBBER  
 4. N-5 Package Number 1SI01-1A      5. W.O. Number WO#00684227  
 6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda  
 7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda  
 8. Work Description Replace Snubber with Rigid Strut IAW. EDC #94-00465

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
Engineering Design Change, (EDC) #94-00465, Snubber being replaced with Rigid Strut.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition Subject. NF/CL2, '74 Ed. '75 Winter Addenda

13. Repair/Replacement Activity Construction Code/Edition Subject, NF/CL2, '74 Ed. '75 Winter Addenda

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

15. Preservice Inspection Required.       YES       NO

MSK      9/16/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO

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

MSK      9/16/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date

MSK      9/16/99      18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1CH142H003	396109/ <sup>MSK</sup> Strut <del>11-14-99</del>	N/A	R630D / G6S1	PL0007422

19. Planner Alan Morrow      9/16/99      Print Name Allen E. Moore  
Signature      Date

20. ISI Engineer Alan Morrow      9-17-99      Print Name Alan Morrow  
Signature      Date

21. ANII Robert G. Hogstrom      9-17-99      Print Name ROBERT G. HOGSTROM  
Signature      Date



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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 09/08/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number
3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address

4. Identification of System SI
5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	1CH142H003	1999	Replacement	No

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

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

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

# FORM NIS-2 (Back)

9. Remarks WO#00684227 1CH142H003

## 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] ISE ENGINEER Date 10-15-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-17-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 9685 "N" 1" Az. 269  
Inspector's Signature National Board, State, Province, and Endorsements

Date OCTOBER 15 1999



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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 08/31/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 W0#00684227  
Address Work Order Number
3. Work Performed by Palo Verde Nuclear Generating Station Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System Safety Injection System / SI
5. (a) Applicable Construction Code ASME III NF / CL.2 1974 Edition, 75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
STRUT	LISEGA	N/A	N/A	1SI241H014	1999	Replacement	No

7. Description of Work Deletion of Snubber Per DCP IPC-SI-209,EDC #94-00465 replaced with rigid strut.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

# FORM NIS-2 (Back)

9. Remarks WO#00684227 ISI241H014

## 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] ISI ENGINEER Date 10-15-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-21-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 9685 - N - 1" Az 264  
Inspector's Signature National Board, State, Province, and Endorsements  
Date OCTOBER 15 1999



# FORM NIS-2 OWNER'S 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 09/08/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number
3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System SI
5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	1SI002H004	1999	Replacement	No
Rear Bracket	Lisega	N/A	N/A	1SI002H004	1999	Replacement	No
Pipe Clamp	Lisega	N/A	N/A	1SI002H004	1999	Replacement	No

7. Description of Work \_\_\_\_\_
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

# FORM NIS-2 (Back)

9. Remarks WO#00684227 1SI002H004  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## 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] FSE ENGINEER Date 10/15/99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-22-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 N.B. 9685 "N" "I" Az. 264  
Inspector's Signature National Board, State, Province, and Endorsements  
Date OCTOBER 15 1999





# FORM NIS-2 OWNER'S 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 09/08/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address

2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number

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

4. Identification of System SI

5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	1SI241H009	1999	Replacement	No
Rear Bracket	Lisega	N/A	N/A	1SI241H009	1999	Replacement	No
Rear Bracket	Lisega	N/A	N/A	1SI241H009	1999	Replacement	No

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

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

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

# FORM NIS-2 (Back)

9. Remarks WO#00684227 ISI241H009

## 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] ISI ENGINEER Date 10-15-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-21-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NS 9685 "N" "I" Az 269  
Inspector's Signature National Board, State, Province, and Endorsements  
Date OCTOBER 15 1999



# FORM NIS-2 OWNER'S 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 09/08/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address

2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number

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

4. Identification of System SI

5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	1SI008H004	1999	Replacement	No
Rear Bracket	Lisega	N/A	N/A	1SI008H004	1999	Replacement	No
Pipe Clamp	Lisega	N/A	N/A	1SI008H004	1999	Replacement	No

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

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

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

# FORM NIS-2 (Back)

9. Remarks WO#00684227 1SI008H004

## 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] ISE ENGINEER Date 10/15/99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-21-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date OCTOBER 15 1999

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1SI009H001      2. Code Class ASME III, NF / CLASS 2  
 3. Item Description SNUBBER  
 4. N-5 Package Number 1SI01-1B      5. W.O. Number WO#00684227  
 6. Original Construction Code Edition 1974 Edition, Winter 1975 Addenda  
 7. Original Installation Code Edition 1974 Edition, Winter 1975 Addenda  
 8. Work Description Replace Snubber with Rigid Strut IAW. EDC #94-00465

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
Engineering Design Change, (EDC) #94-00465, Snubber being replaced with Rigid Strut.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition Subsect. NF/CL2, '74 Ed, '75 Winter Addenda

13. Repair/Replacement Activity Construction Code/Edition Subsect. NF/CL2, '74 Ed, '75 Winter Addenda

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

15. Preservice Inspection Required.       YES       NO

MEW      9/16/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO

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

MEW      9/16/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date

MEW      9/16/99      18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1SI009H001	396079 / Strut	N/A	R634D / G641	MR6035
1SI009H001	356959 / Rear Bracket	N/A	AS674 / Z530	90413685
1SI009H001	363263 / Pipe Clamp	N/A	B368D / Z49 / Z533	MR6035 <i>R26</i>
1SI009H001	356959 REAR BRKT	N/A	AS691	PL 0039445

19. Planner Glenn E. Moore      9/16/99      Print Name Glenn E. Moore  
Signature      Date

20. ISI Engineer Alan Morrow      9/17/99      Print Name Alan Morrow  
Signature      Date

21. ANII Robert G. Holstrom      9-21-99      Print 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 09/08/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WO#00684227  
Address Work Order Number
3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System SI
5. (a) Applicable Construction Code ASME III NF/CL-2 1974 Edition, '75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Rigid Strut	Lisega	N/A	N/A	1SI009H001	1999	Replacement	No
Rear Bracket	Lisega	N/A	N/A	1SI009H001	1999	Replacement	No
Pipe Clamp	Lisega	N/A	N/A	1SI009H001	1999	Replacement	No

7. Description of Work \_\_\_\_\_
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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



# FORM NIS-2 (Back)

9. Remarks WO#00684227 1SI009H001

## 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] ISE ENGINEER Date 10-16-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-21-99 to 10-16-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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" A2-264  
National Board, State, Province, and Endorsements

Date OCTOBER 16 1999



# FORM NIS-2 OWNER'S 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 05/11/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 768262  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. 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 SG - Main Steam

5. (a) Applicable Construction Code ASME III Class 2 1974 Edition, S'75 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Valve Disc	BW/IP	Y386	NA	IJSGAUV0134	1997	Replacement	Yes

7. Description of Work Disassemble valve and install stronger Disc..
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

FORM NIS-2 (Back)

9. Remarks WO# 768262, Valve 1JSGAUV0134.

THIS DESIGN CHANGE IS INSTALLING A NEW LARGER MOTOR OPERATOR ON THE GATE VALVE . THE VALVE WILL BE DISASSEMBLE AND A STRONGER "DISC" WILL BE INSTALLED.

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 Alan Morrow Sr ISI Engineer Date 11-4-99  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-22-99 to 11-4-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 2685 "N" "1" Az-264  
National Board, State, Province, and Endorsements

Date NOVEMBER 4 1999

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JSGAUV0138      2. Code Class ASME III, CLASS 2
3. Item Description 6"- 900# FLEX WEDGE PRESSURE SEAL GATE VALVE
4. N-5 Package Number 1SG02-1      5. W.O. Number 768264
6. Original Construction Code Edition ASME III CLASS 2, 1974 ED., WINTER 1974 ADD.
7. Original Installation Code Edition ASME III CLASS 2, 1974 ED., WINTER 1975 ADD.
8. Work Description Design change (over-pressurization mod.) iaw DMWO# 767747 to install a larger motor operator. Also replace the "DISC" with higher strength to be compatible with a larger motor operator.
9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
not required, not a failure.

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., W'1974
13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED, W'1975 ADD.
14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required.       YES       NO  
DMG      05/11/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date
16. ASME Section XI Pressure Test Required       YES       NO  
DMG      05/11/99      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date
- DMG      05/11/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date
- DMG      05/11/99      18. Include a step in the W.O. to record below all applicable numbers.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	ROS/EROS NO.
DISC	D13910	SA Y385	C6490	PICK LIST 310899 MR# 281389-0002 CR0943534

19. Planner David M Goodlet      5-11-99      Print Name DAVID GOODLET  
Signature      Date
20. ISI Engineer Alan Mowow      5-18-99      Print Name RAMAKANT INDAP  
Signature      Date
21. ANII Robert Hogstrom      6-22-99      Print Name ROBERT HOGSTROM  
Signature      Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 05/11/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 768264  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. 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 SG - Main Steam
5. (a) Applicable Construction Code ASME III Class 2 1974 Edition, W'74 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Valve Disc	BW/IP	Y385	NA	IJSGAUV0138	1997	Replacement	Yes

7. Description of Work Disassemble valve and install stronger Disc..
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

# FORM NIS-2 (Back)

9. Remarks WO# 768264, Valve 1JSGAUV0138.

THIS DESIGN CHANGE IS INSTALLING A NEW LARGER MOTOR OPERATOR ON THE GATE VALVE. THE VALVE WILL BE DISASSEMBLE AND A STRONGER "DISC" WILL BE INSTALLED.

## 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 Alan Monow Sr ISI Engineer Date 11-4-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-22-99 to 11-4-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

National Board, State, Province, and Endorsements

Date NOVEMBER 4 1999

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JSIAUV0617      2. Code Class ASME SECTION III CL2
- Item Description 2 INCH GLOBE VALVE (BORG WARNER)
4. N-5 Package Number 1RC01-5      5. W.O. Number 00-775382
6. Original Construction Code Edition 1974 EDITION & 1975 WINTER ADDENDA
7. Original Installation Code Edition 1974 EDITION & 1975 WINTER ADDENDA
8. Work Description INSTALL RISING NON-ROTATING STEM IAW DMWO 00-705815. REMOVE ORIGINAL VALVE INTERNALS AND INSTALL STEM-MOD-KIT. BORG-WARNER VALVE BODY S/N 26962 BLT 1979, IS RE-USED.
9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
NO FAILURE IN ASME CODE BOUNDARY. NEW OPERATOR AND NON-ROTATING STEM ARE BEING INSTALLED TO INCREASE MARGIN AND MINIMIZE MAINTENANCE COSTS. (THE SMC-04 OPERATOR IS OBSOLETE) REFER TO DMWO 00-705815 FOR MORE INFO.
11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition 1974 EDITION & 1975 WINTER ADD.
13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION & 1975 WINTER ADDENDA
14. ASME Section XI Code/Edition 1992 EDITION & 1992 ADDENDA

15. Preservice Inspection Required.       YES       NO
- CIL      07/22/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date
16. ASME Section XI Pressure Test Required       YES       NO
- CIL      07/22/99      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date
- CIL      07/22/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date
- CIL      07/22/99      18. Include a step in the W.O. to record below all applicable numbers.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
BONNET	2000372	322813A S/N 19 ✓	8656124	00206717-0002
DISC	2000368	321976B S/N 201 ✓	M872C	00206717-0002

19. Planner *Charles J. Larson*      8-18-99      Print Name CHARLES LARSON  
Signature      Date
20. ISI Engineer *R.P. Indap*      8-18-99      Print Name R.P. INDAP  
Signature      Date
21. ANII *R.G. Holstrom*      8-18-99      Print Name R.G. HOLSTROM  
Signature      Date



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

As Required by the Provisions of the ASME Code Section XI

Owner Arizona Public Service Company, et. al. Date 07/22/99  
Name

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

2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00-775382  
Address Work Order Number

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

SAME AS ABOVE ( ITEM #2 ) Authorization No. N/A  
Address Expiration Date N/A

4. Identification of System SI

5. (a) Applicable Construction Code SECTION III CL 2 1974 Edition, 75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
BONNET	BORG-WARNER	322813A S/N 19	N/A	1JSIAUV0617	1997	Replacement	Yes
DISC	BORG-WARNER	321976B S/N 201	N/A	1JSIAUV0617	1997	Replacement	No

7. Description of Work REPLACED BONNET AND DISC

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 UNDER PCWO 00-775382, INSTALL STEM-MOD-KIT AND SMB-00 OPERATOR .  
WORK IAW DMWO 00-705815. THIS REMOVES THE ORIGINAL VALVE INTERNALS AND  
INSTALLS A NEW STEM & DISC ASSEMBLY, BONNET AND YOKE.. BODY TO BONNET IS  
SEAL WELDED, BONNET TO YOKE IS TACK WELDED. BORG-WARNER VALVE BODY  
S/N 26962 , BLT 1979 ,IS REUSED.

## 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 Alan Monow Sr ISI Engineer Date 10-25-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-16-99 to 10-25-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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" A2 264  
National Board, State, Province, and Endorsements

Date OCTOBER 25 19 99



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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 07/22/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00-775383  
Address Work Order Number
3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A  
SAME AS ABOVE ( ITEM #2 ) Expiration Date N/A  
Address
4. Identification of System SI
5. (a) Applicable Construction Code SECTION III CL 2 1974 Edition, 75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
BONNET	BORG-WARNER	322813A S/N 22	N/A	IJSIAUV0666	1997	Replacement	Yes
DISC	BORG-WARNER	321976E S/N 155	N/A	IJSIAUV0666	1997	Replacement	No

7. Description of Work REPLACED BONNET AND DISC
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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



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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 10/15/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 4  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 803424  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System CH Boration and Dilution System
5. (a) Applicable Construction Code ASME III CLASS 3 1974 Edition, 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
MASS FLOW SENSOR	MICRO MOTION	361372	N/A	1JCHNFE210Y	1999	Replacement	No
CONTROL VALVE	CCI	705831-1-2	N/A	1JCHNFV210Y	1999	Replacement	Yes
3"x3"x2" REDUCING TEE	N/A	N/A	N/A	1PCHNL152	1999	Replacement	No
2"X 2" X 1" REDUCING TEE	N/A	N/A	N/A	1PCHNL152	1999	Replacement	No
2" 90 DEGREE ELBOW	N/A	N/A	N/A	1PCHNL152	1999	Replacement	No
2" 45 DEGREE ELBOW	N/A	N/A	N/A	1PCHNL152	1999	Replacement	No
2" WNRF FLANGES	N/A	N/A	N/A	1PCHNL152	1999	Replacement	No

7. Description of Work Design Modification to line 1PCHNL152 I.A.W. DMWO 803423. EDC 97-00636
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 10/15/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 2 of 4  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 803424  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address

4. Identification of System CH Boration and Dilution System
5. (a) Applicable Construction Code ASME III CLASS 3 1974 Edition, 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
2" SCH. 40 PIPE	N/A	N/A	N/A	1PCHNL152	1999	Replacement	No
5/8" STUDS	N/A	N/A	N/A	1PCHNL152	1999	Replacement	No
5/8" NUTS	N/A	N/A	N/A	1PCHNL152	1999	Replacement	No
PIPE SUPPORT	N/A	N/A	N/A	1CH-152-H00C	1999	Replacement	No
PIPE SUPPORT	N/A	N/A	N/A	1CH-152-H00D	1999	Replacement	No
PIPE SUPPORT	N/A	N/A	N/A	1CH-152-H00E	1999	Replacement	No
PIPE SUPPORT	N/A	N/A	N/A	1CH-152-H00G	1999	Replacement	No

7. Description of Work Design Modification to line 1PCHNL152 I.A.W. DMWO 803423, EDC 97-00636

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

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

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

As Required by the Provisions of the ASME Code Section XI

Owner Arizona Public Service Company, et. al.

Date 10/15/99

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

Sheet 3 of 4

2. Plant Palo Verde Nuclear Generating Station

Unit 1

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

803424

Work Order Number

3. Work Performed by Arizona Public Service Co.

Type Code Symbol Stamp None

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

Authorization No. N/A

Expiration Date N/A

Address

4. Identification of System CH Boration and Dilution System

5. (a) Applicable Construction Code ASME III CLASS 3 1974 Edition, 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
2" DIAPHRAM VALVE	ITT ENGINEERED	635803-1-2	N/A	1PCHNV172	1999	Replacement	Yes
3" S.W. 40 PIPE	N/A	N/A	N/A	1PCHNL152	1999	REPLACEMENT	No

7. Description of Work Design Modification to line 1PCHNL152 I.A.W. DMWO 803423, EDC 97-00636

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 MASS FLOW SENSOR WAS DEDICATED TO BE SECTION III CLASS 3 ITEM  
UNDER THE NRC LETTER OF MARCH 8 1999 ( TAC NO. MA-2166, MA-2167 & MA-2168  
WO 803424 PAGE 4 OF 4

weld upstream of V-184 on line 1PCHNL193 was cut  
and rewelded to facilitate installation of V210X  
*Alan Monow*  
*11-6-99*

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 Alan Monow Sr. ISI Engineer Date 11-6-99  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-18-99 to 11-6-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

*Richard J. Ferguson*  
Inspector's Signature

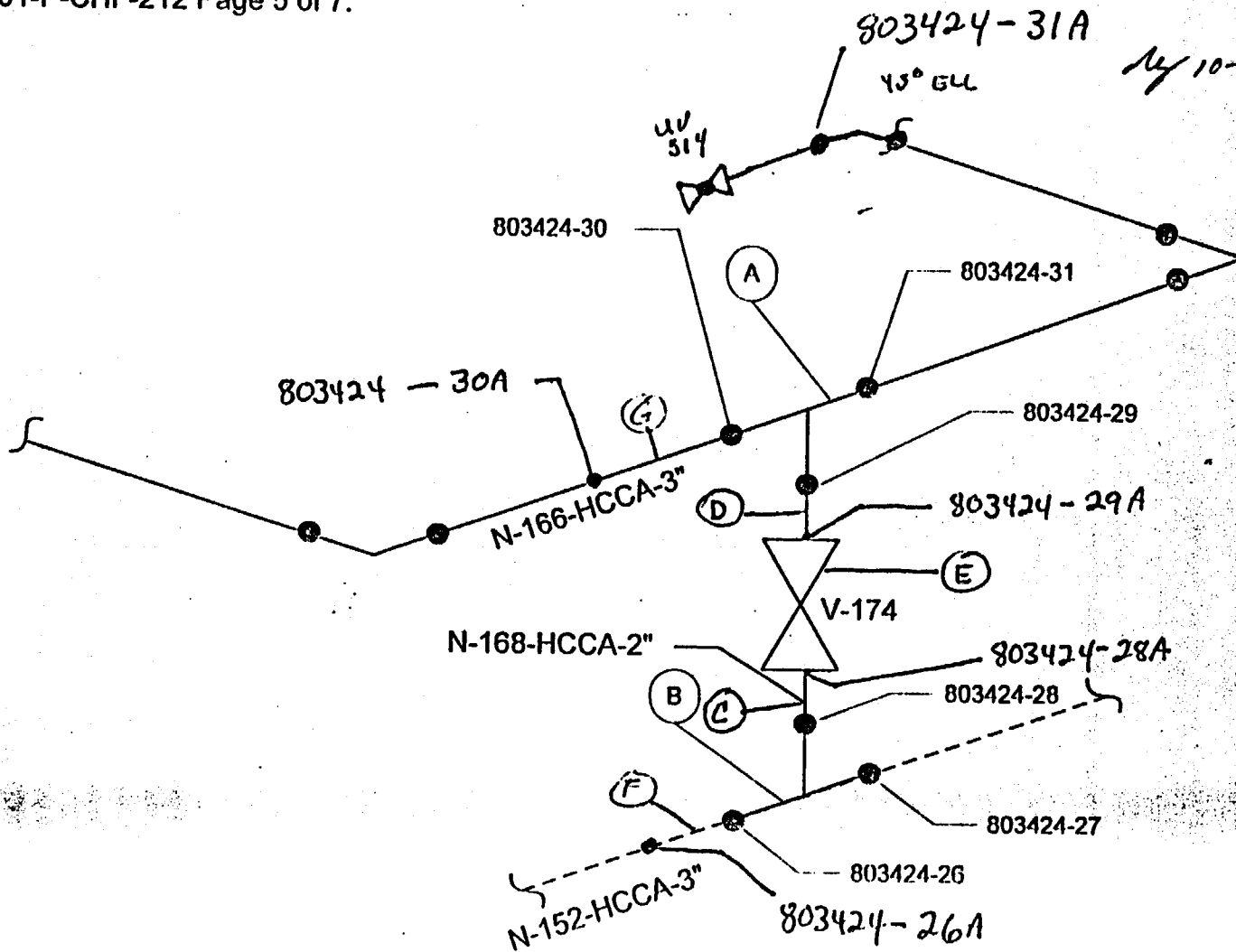
Commissions NS 9685 "N" "I" A2. 264  
National Board, State, Province and Endorsements

Date NOVEMBER 6 1999



# WELD MAP

EDC # 97-00636 - 01-P-CHF-212 Page 5 of 7.



DATE 7/24/99

DESCRIPTION

Work Order # 803424 - 210 X & Y Modification Project

DRAWN BY

MIKE JENKINS



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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 10/15/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 803424  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System CH Boration and Dilution System
5. (a) Applicable Construction Code ASME III CLASS 3 1974 Edition, 75 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 92 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
3" SCH. 40 PIPE	N/A	N/A	N/A	1PCHNL166	1999	Replacement	No
3" X 3" X 2" REDUCING TEE	N/A	N/A	N/A	1PCHNL166	1999	Replacement	No
PIPE SUPPORT	N/A	N/A	N/A	1CH-166-H003	1999	Replacement	No

7. Description of Work Design Modification to line 1PCHNL166 I.A.W. DMWO 803423 EDC 97-00636
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 DMWO 803423 PCWO 803424

PAGE 2 OF 2

## 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 Alan Monow Sr ISF Engineer Date 11-6-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-7-99 to 11-6-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Robert S. Johnson  
Inspector's Signature

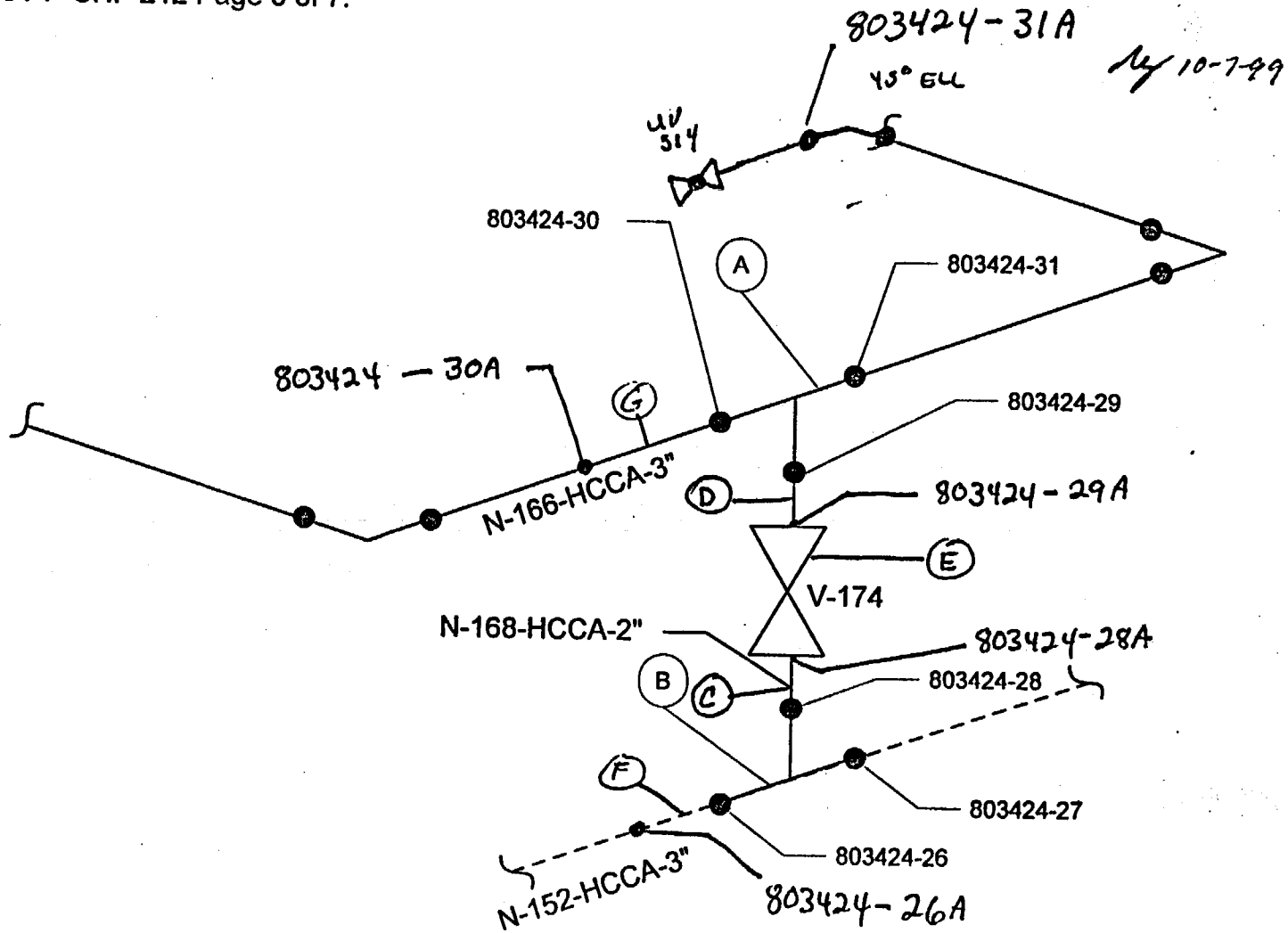
Commissions NB 9685 "N" "I" Az. 264  
National Board, State, Province and Endorsements

Date NOVEMBER 6 1999



# WELD MAP

EDC # 97-00636 - 01-P-CHF-212 Page 5 of 7.



DATE

7/24/99

DESCRIPTION

Work Order # 803424 - 210 X & Y Modification Project

DRAWN BY

MIKE JENKINS





# 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 10/15/99  
Name

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

2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 803424  
Address Work Order Number

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

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

4. Identification of System CH Boration and Dilution System

5. (a) Applicable Construction Code ASME III CLASS 3 1974 Edition, 75 Addenda,        Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
2" SCH. 40 PIPE	N/A	N/A	N/A	1PCHNL168	1999	Replacement	No
2" DIAPHRAM VALVE	ITT ENGINEERED	635803 1-1	N/A	1PCHNV174	1999	Replacement	Yes

7. Description of Work Design Modification to line 1PCHNL168 I.A.W. DMWO 803423 EDC 97-00636

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 DMWO 803423 PCWO 803424

PAGE 2 OF 2

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 Alan Morrow Sr ISI Engineer Date 11-6-99  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-7-99 to 11-6-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date NOVEMBER 6 1999





# PIPING MATERIAL AND CLEANLINESS VERIFICATION SHEET

LINE / SPOOL NUMBER 1PCHNL152 WORK ORDER NUMBER 803424

Worker Verification (Initials Indicate Acceptance of the Attribute.)					Material Verification	Cleanliness Verification (Class "B")		
Item	Item Description	APN Number	MR Number	HT NUMBER/ Serial Number	Worker Verification Initial / Date	CLEANING METHOD	VERIFY METHOD	Worker Verification Initial / Date
A	PIPE SA376/312 TP 304	43510409						
B	ELBOW SA403-WP304 BW 45	43540969	258722-0023	LHW01	CR 9/3/99	WIPE	VISUAL	CR 9/3/99
C	PIPE SA376/312 TP304	43510409	258722-0026	HT# 18401	CR 9/3/99	WIPE	VISUAL	CR 9/11/99
D	ELBOW SA403-WP304 BW 45	43540969	258722-033	LHW01	CR 9/3/99	WIPE	VISUAL	CR 9/11/99
E	PIPE SA376/312 TP 304	43510409	258722-0026	HT# 18401	CR 9/3/99	WIPE	VISUAL	CR 9/11/99
F	VALVE DRAG, 2" DO# 500100045.02.001	00051481	10004502	S/N 705831-12	CR 10/4/99	WIPE	VISUAL	CR 10/4/99
G	PIPE SA376/312 TP 304	43510409	258722-0026	HT# 18401	CR 9/3/99	WIPE	VISUAL	CR 9/11/99
H	TEE SA403-WP304 BW S40 REDUCING	43530214	258722-0047	LZQC	CR 9/3/99	WIPE	VISUAL	CR 9/11/99
I	ELBOW SA403-WP304 BW 90	43540522	258722-0032	LCPP	CR 9/3/99	WIPE	VISUAL	CR 9/11/99
J	PIPE SA376/312 TP 304 HT# 18401	43510409	258722-0026	HT# 18401	CR 9/3/99	WIPE	VISUAL	CR 9/11/99
K	PIPE SA376/312 TP 304	43510409	258722-0026	DB52653	CR 9/3/99	WIPE	VISUAL	CR 9/11/99
L	ELBOW SA403-WP304 BW 90	43540522	258722-0032	LCPP	CR 9/3/99	WIPE	VISUAL	CR 9/11/99
M	PIPE SA376/312 TP304	43510409	258722-0026	DB52653	CR 9/3/99	WIPE	VISUAL	CR 9/11/99
N	FLANGE SA182-F316 WN S40	43580509	258722-0026	D3120	CR 9/3/99	WIPE	VISUAL	CR 9/13/99
O	MASS FLOW SENSOR	00051478	0207172-0004	S/N 361312	CR 9/3/99	WIPE	VISUAL	CR 9/14/99
P	FLANGE SA182-F316 WN S40	43580509	258722-0006	D3120	CR 9/3/99	WIPE	VISUAL	CR 9/13/99
Q	TEE SA403-WP304 BW S40 REDUCER	43530214	258722-0031	LQKK	CR 9/3/99	WIPE	VISUAL	CR 9/13/99
R	ELBOW SA403-WP304 BW 90	43540522	258722-0032	LCPP	CR 9/3/99	WIPE	VISUAL	CR 9/13/99
S	PIPE SA376/312 TP304	43510409	258722-0026	DB52653	CR 9/3/99	WIPE	VISUAL	CR 9/13/99



Material Verification for item L. for step 3.15 and 13-P. 2261-012 Rev 26. 9/1/99

\* SIGNED IN ERROR CR 9/14/99

# PIPING MATERIAL AND CLEANLINESS VERIFICATION SHEET

LINE / SPOOL NUMBER 1PCHNL152 WORK ORDER NUMBER 803424

Worker Verification (Initials Indicate Acceptance of the Attribute.)					Material Verification	Cleanliness Verification (Class "B")		
Item	Item Description	APN Number	MR Number	HT NUMBER/ Serial Number	Worker Verification Initial / Date	CLEANING METHOD	VERIFY METHOD	Worker Verification Initial / Date
T	ELBOW SA403-WP304 BW 90	43540522						
U	GASKET 2.750 X 3.37	43097180	258722-0007	REUSED	CPD 9/3/99	EXISTING		
V	NUT SA564 GR630 /HHNT	43127012	258722-0022	N/A	CPD 9/3/99			
W	STUD SA564 GR630 H1100	43160572	258722-0024	ADT	CPD 9/3/99	N/A		
Y	LUGS SA240 TP304 PLATE	43640382	**	* SEE BELOW	CPD 9/3/99			
Z	PIPE SA376/312 TP304	43510409	258722-0026	17504	CPD 10/7/99			
AA	ELBOW SA403-WP304 BW 90	43540522		D852653	CPD 9/3/99	WIPE	VISUAL	CPD 9/13/99
BB	DIAPHRAM VALVE V-172	00059141	258722-0040	NOT USED	CPD 9/29/99	WIPE	VISUAL	CPD 9/29/99
	** P.O.# 33800846				CPD 10/7/99			

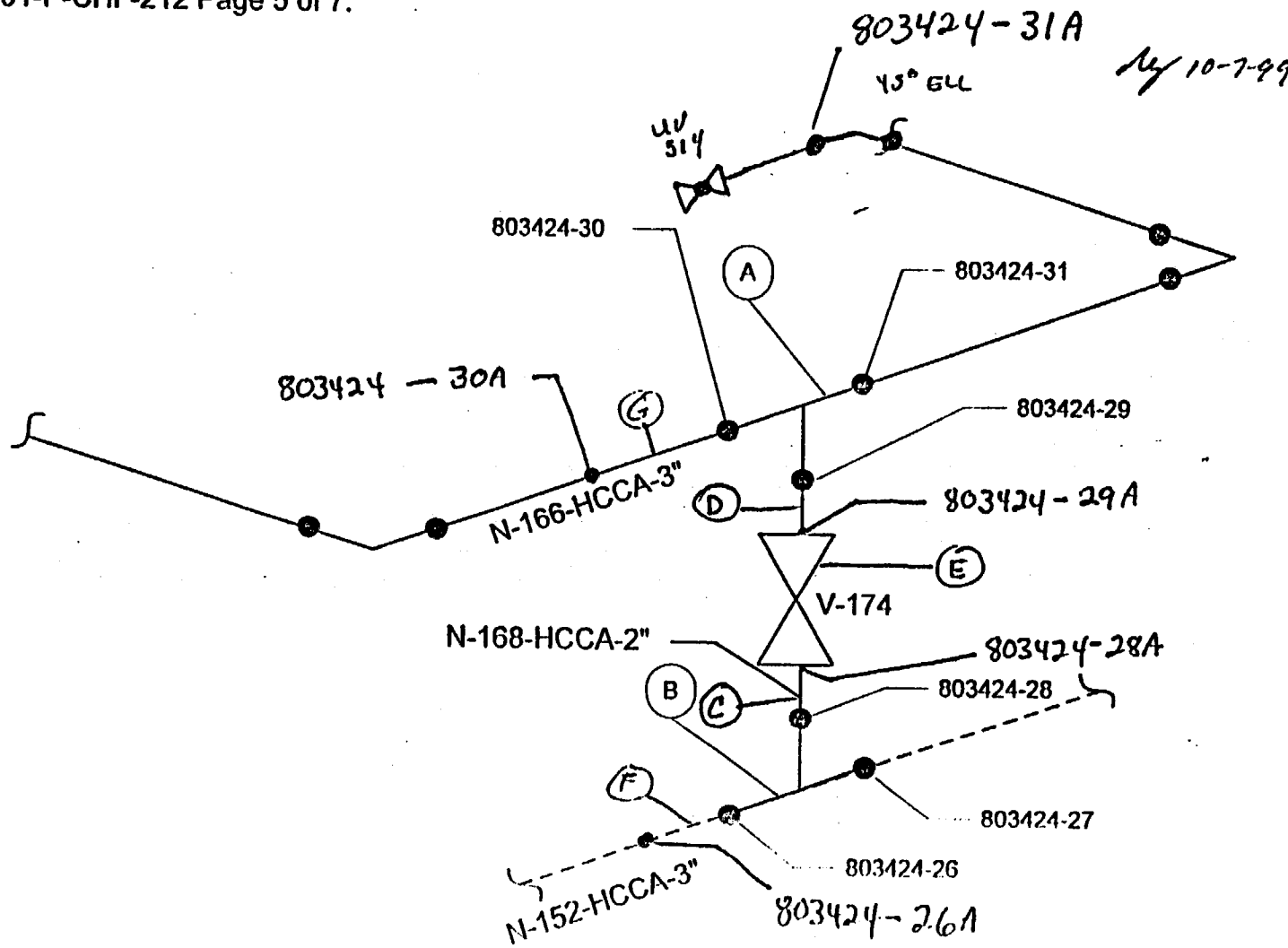
\* HT#'S / S/N { HQM # 39, HQM # 37, HQM # 33, HQM # 35, HQM # 40,  
 (CPD 9/3/99) { HQM # 23, HQM # 31, HQM # 34





# WELD MAP

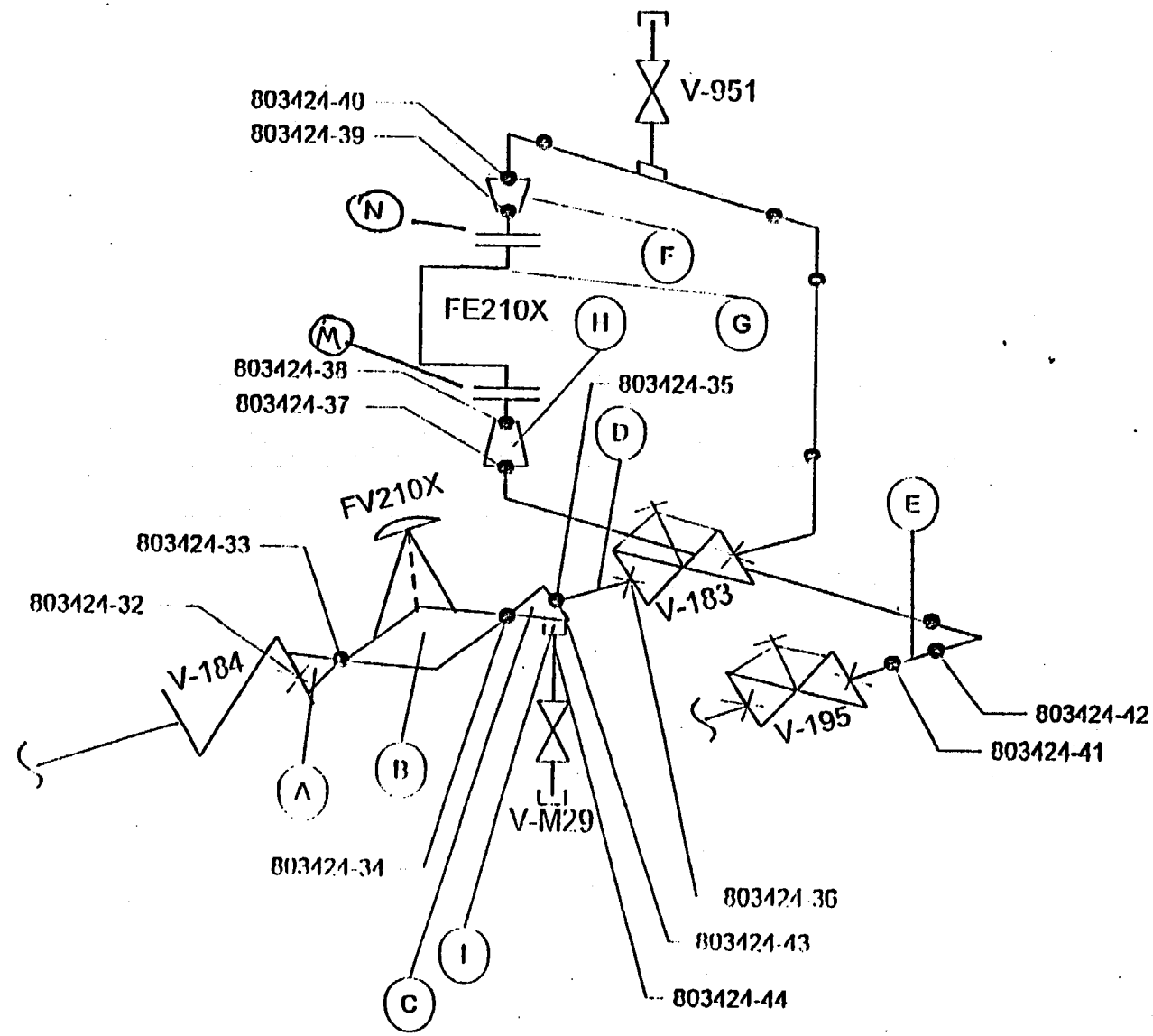
EDC # 97-00636 - 01-P-CHF-212 Page 5 of 7.



DATE	DESCRIPTION	DRAWN BY
7/24/99	Work Order # 803424 - 210 X & Y Modification Project	MIKE JENKINS

# WELD MAP

EDC # 97-00636 - 01-P-CHF-214 Page 2 of 4  
AND 4 OF 4.



DATE	DESCRIPTION	DRAWN BY
7/24/99	Work Order # 803424 - 210 X & Y Modification Project	MIKE JENKINS

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JSIAUV0664      2. Code Class ASME SECTION III CL2
- Item Description 2 INCH GLOBE VALVE ( BORG WARNER )
4. N-5 Package Number ISI09-3      5. W.O. Number 00-820255
6. Original Construction Code Edition 1974 EDITION & 1975 WINTER ADDENDA
7. Original Installation Code Edition 1974 EDITION & 1975 WINTER ADDENDA
8. Work Description INSTALL RISING NON-ROTATING STEM IAW DMWO 00-830233. REMOVE ORIGINAL VALVE INTERNALS AND INSTALL STEM-MOD-KIT. BORG-WARNER VALVE BODY S/N 16959 BLT 1978, IS RE-USED.
9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
NO FAILURE IN ASME CODE BOUNDARY. NEW OPERATOR AND NON-ROTATING STEM ARE BEING INSTALLED TO INCREASE MARGIN AND MINIMIZE MAINTENANCE COSTS. ( THE SMC-04 OPERATOR IS OBSOLETE ) REFER TO DMWO 00-830233 FOR MORE INFO.
11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition 1974 EDITION & 1975 WINTER ADD.
13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION & 1975 WINTER ADDENDA
14. ASME Section XI Code/Edition 1992 EDITION & 1992 ADDENDA

15. Preservice Inspection Required.       YES       NO  
CL      07/22/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date
16. ASME Section XI Pressure Test Required       YES       NO  
CL      07/22/99      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date
- CL      07/22/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date
- CL      07/22/99      18. Include a step in the W.O. to record below all applicable numbers.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
BONNET	2000372	322813A S/N 35	8656124	00262322-0001
DISC	2000368	321976C S/N 2	910315-20	00262322-0001

19. Planner Charles J. Larson      8-18-99      Print Name CHARLES LARSON  
Signature      Date
20. ISI Engineer R.P. Indap      8-18-99      Print Name R.P. Indap  
Signature      Date
21. ANII R.G. Hoastrom      8-18-99      Print 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 07/22/99  
Name
- P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name
- 5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00-820255  
Address Work Order Number
3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A
- SAME AS ABOVE ( ITEM #2 ) Expiration Date N/A  
Address
4. Identification of System SI
5. (a) Applicable Construction Code SECTION III CL 2 1974 Edition, 75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
BONNET	BORG-WARNER	322813A S/N 35	N/A	IJSIAUV0664	1997	Replacement	Yes
DISC	BORG-WARNER	321976C S/N 2	N/A	IJSIAUV0664	1997	Replacement	No

7. Description of Work REPLACED BONNET AND DISC
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 UNDER PCWO 00-820255, INSTALL STEM-MOD-KIT AND SMB-00 OPERATOR.  
WORK IAW DMWO 00-830233. THIS REMOVES THE ORIGINAL VALVE INTERNALS AND  
INSTALLS A NEW STEM & DISC ASSEMBLY, BONNET AND YOKE.. BODY TO BONNET IS  
SEAL WELDED, BONNET TO YOKE IS TACK WELDED. BORG-WARNER VALVE BODY  
S/N 16959 , BLT 1978 ,IS REUSED. (SI-081-HOOR) Was reinstalled on,  
Item 70

## 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 Alan Monow Sr ISI Eng Date 10-25-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-18-99 to 10-25-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date OCTOBER 25 1999

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JSIAUV0669                      2. Code Class ASME SECTION III CL2
3. Item Description 2 INCH GLOBE VALVE ( BORG WARNER )
4. N-5 Package Number 1SI09-3                      5. W.O. Number 00-820257
6. Original Construction Code Edition 1974 EDITION & 1975 WINTER ADDENDA
7. Original Installation Code Edition 1974 EDITION & 1975 WINTER ADDENDA
8. Work Description INSTALL RISING NON-ROTATING STEM IAW DMWO 00-830233. REMOVE ORIGINAL VALVE INTERNALS AND INSTALL STEM-MOD-KIT. BORG-WARNER VALVE BODY S/N 23822 BLT 1977, IS RE-USED.
9.  ISI Flaw                      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
NO FAILURE IN ASME CODE BOUNDARY. NEW OPERATOR AND NON-ROTATING STEM ARE BEING INSTALLED TO INCREASE MARGIN AND MINIMIZE MAINTENANCE COSTS. ( THE SMC-04 OPERATOR IS OBSOLETE ) REFER TO DMWO 00-830233 FOR MORE INFO.
11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition 1974 EDITION & 1975 WINTER ADD.
13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION & 1975 WINTER ADDENDA
14. ASME Section XI Code/Edition 1992 EDITION & 1992 ADDENDA
15. Preservice Inspection Required.                       YES                       NO  
CM                      07/22/99                      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial                      Date
16. ASME Section XI Pressure Test Required                       YES                       NO  
CM                      07/22/99                      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial                      Date
- CM                      07/22/99                      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial                      Date
- CM                      07/22/99                      18. Include a step in the W.O. to record below all applicable numbers.  
Initial                      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
BONNET	2000372	322813A S/N 31	8656124	00015847-0002
DISC	2000368	321976I S/N 291	H2-3-5073	00015847-0002
			<u>P/E 10-26-99</u>	<u>000158347-0002</u>
			<u>CJL ... FOR BOTH OF THE ABOVE:</u>	

19. Planner Charles J. Larson                      8-18-99                      Print Name CHARLES LARSON  
Signature                      Date
20. ISI Engineer R.P. Indap                      8-18-99                      Print Name R.P. INDAP  
Signature                      Date
21. ANII R.C. Hogstrom                      8-18-99                      Print Name R.C. HOGSTROM  
Signature                      Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 07/22/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address

2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00-820257  
Address Work Order Number

3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A  
SAME AS ABOVE ( ITEM #2 ) Expiration Date N/A  
Address

4. Identification of System SI

5. (a) Applicable Construction Code SECTION III CL 2 1974 Edition, 75W 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
BONNET	BORG-WARNER	322813A S/N 31	N/A	1JSIAUV0669	1997	Replacement	Yes
DISC	BORG-WARNER	321976I S/N 291	N/A	1JSIAUV0669	1997	Replacement	No

7. Description of Work REPLACED BONNET AND DISC

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 UNDER PCWO 00-820257, INSTALL STEM-MOD-KIT AND SMB-00 OPERATOR .  
WORK IAW DMWO 00-830233. THIS REMOVES THE ORIGINAL VALVE INTERNALS AND  
INSTALLS A NEW STEM & DISC ASSEMBLY, BONNET AND YOKE.. BODY TO BONNET IS  
SEAL WELDED, BONNET TO YOKE IS TACK WELDED. BORG-WARNER VALVE BODY  
S/N 23822 , BLT 1977 ,IS REUSED.

## 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 X1/A  
Certificate of Authorization No. N/A Expiration Date N/A  
Signed Alan Monow Sr ISE Engineer Date 10-25-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-18-99 to 10-26-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 9685 "N" "I" Az. 264  
Inspector's Signature National Board, State, Province, and Endorsements  
Date OCTOBER 26 1999





## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1SG200H014                      2. Code Class 2
- Item Description SNUBBER SUPPORT CONNECTED TO AIR CYLINDER.
4. N-5 Package Number 1AF02-2                      5. W.O. Number 827275
6. Original Construction Code Edition ASME III Sub Section NF, CLASS 2, 1974 ED.; WINTER 1975
7. Original Installation Code Edition ASME III Sub Section NF, CLASS 2, 1974 ED.; WINTER 1975
8. Work Description Remove and reweld the existing snubber support rear brackets and replace some structural items. Support for new design for valve 1JSGAUV0172 IAW DMWO# 782577.
9.  ISI Flaw                      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
N/A
11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition ASME III Sub Sec. NF, Class 2, '74 Ed.; S'75
13. Repair/Replacement Activity Construction Code/Edition ASME III Sub Sec. NF, Class 2, 1974 Ed.; W'75
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda
15. Preservice Inspection Required.                       YES                       NO  
DMG                      05/21/99                      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial                      Date
16. ASME Section XI Pressure Test Required                       YES                       NO  
DMG                      05/21/99                      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial                      Date
- DMG                      05/21/99                      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial                      Date
- DMG                      05/21/99                      18. Include a step in the W.O. to record below all applicable numbers.  
Initial                      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	ROS/EROS NO.
1SG200H014	N/A	N/A	N/A	N/A
rear end brackets	BH1259	N/A	N/A	N/A
Plate: 1"x8.5"x12"	N/A	N/A	N/A	PL0258597
Plate: 2"x3.5"x15"	N/A	N/A	N/A	PL0270250
Studs: 7/8" dia. x 9" lg.	N/A	N/A	N/A	PL0310888
Nuts: 7/8"	N/A	N/A	N/A	PL0310888

19. Planner *David M Goodlet*                      5-21-99                      Print Name David Goodlet  
Signature                      Date
20. ISI Engineer *Alan Morrow*                      5-21-99                      Print Name Alan Morrow  
Signature                      Date
21. ANII *Robert Hogstrom*                      6-22-99                      Print Name Robert Hogstrom  
Signature                      Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 05/21/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 827275  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85254-7529 Expiration Date N/A  
Address
4. Identification of System "SG" Main Steam
5. (a) Applicable Construction Code ASME III, Class 2 1974 Edition, S'75 Addenda, \_\_\_\_\_ Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or	ASME Code Stamped (Yes or No)
VALVE	Anchor/Darling	2N1657	N/A	1JSGAUV0172	1979	Repaired	Yes
REAR BRACKET	ITT GRINNELL	N/A	N/A	1SG200H014	1979	Replacement	No
Disc	BW/IP	K321	N/A	1JSGAUV0172	1998	Replacement	Yes
plate: 1"x8.5"x12"	N/A	N/A	N/A	1SG200H014	1999	Replacement	No
plate: 12"x3.5"x15"	N/A	N/A	N/A	1SG200H014	1999	Replacement	No
studs: 7/8 dia. 9"lg	N/A	N/A	N/A	1SG200H014	1999	Replacement	No
nuts: 7/8"	N/A	N/A	N/A	1SG200H014	1999	Replacement	No

7. Description of Work Support work for new design to install larger air cylinders; DMWO# 782577..
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

# FORM NIS-2 (Back)

9. Remarks WO# 827275; Valve 1JSGAUV0172. Support work for new design to install larger air cylinder; DMWO# 782577. Remove thr existing cast wedge guides from valve body and replace with new welded in guides. Install new stronger valve disc, remove and reweld snubber bracket and replace some structural items.

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this repair/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 Alan Mowow

Sr ISI Engineer

Date 11-2-99

Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-22-99 to 11-2-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

AS System

Inspector's Signature

Commissions NB 9685 "N" "I" Az. 264

National Board, State, Province, and Endorsements

Date November 2 1999

FORM NIS-2 (Back)

9: Remarks WO# 827275; 1-1/2" PIPE 1PSGEL393; RE-ROUTE DUE TO NEW DESIGN TO VALVE 1JSGAUV0172

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]

ISI ENG

Owner or Owner's Designee, Title

Date 11-6-99

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-17-99 to 11-6-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Inspector's Signature

Commissions NS 9685 "N" "I" Az. 264

National Board, State, Province, and Endorsements

Date NOVEMBER 6 1999

# FORM NIS-2 OWNER'S 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 05/21/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 827275  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85254-7529 Expiration Date N/A  
Address

4. Identification of System "SG" Main Steam
5. (a) Applicable Construction Code ASME III, Class 3 1974 Edition, S'75 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
1/2" PIPE	N/A	N/A	N/A	1PSGEL393	1999	Replacement	No
1-1/2" ELBOWS	N/A	N/A	N/A	1PSGEL393	1999	Replacement	No
LUGS	N/A	N/A	N/A	N/A	1999	Replacement	No

7. Description of Work RE-ROUTED 1-1/2" PIPE DUE TO NEW DESIGN TO VALVE 1JSGAUV0172.

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

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID IPSGEL393 2. Code Class 3
- Item Description 1-1/2" PIPING AND SOCKET WELD ELBOWS.
4. N-5 Package Number \_\_\_\_\_ 5. W.O. Number 827275
6. Original Construction Code Edition ASME III CLASS 3, 1974 ED.; WINTER 1975 ADD.
7. Original Installation Code Edition ASME III CLASS 3, 1974 ED.; WINTER 1975 ADD.
8. Work Description RE-ROUTE THE 1-1/2" PIPING TO PROVIDE CLEARANCE FOR NEW DESIGN TO VALVE 1JSGAUV0172; DMWO# 782577.
9.  ISI Flaw NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
N/A
11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition ASME III CEASS 3, 1974 ED.; S'75 ADD.
13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 3, 1974 ED.; W75 ADD.
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda
15. Preservice Inspection Required.  YES  NO  
DMG 05/21/99 If required, include a step in the W.O. to perform Preservice Inspection.  
Initial Date
16. ASME Section XI Pressure Test Required  YES  NO  
DMG 05/21/99 If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial Date
- DMG 05/21/99 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial Date
- DMG 05/21/99 18. Include a step in the W.O. to record below all applicable numbers.  
Initial Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	ROS/EROS NO.
IPSGEL393	N/A	N/A	N/A	N/A
1-1/2" PIPE	N/A	N/A	698844	PL0310888
1-1/2" ELBOWS	N/A	N/A	AA122	PL0310888
LUGS	N/A	N/A	7457495	PLD306906
ITEM 66 (RENEW)	N/A	N/A	N/A	N/A

19. Planner David Goodlet 5-21-99 Print Name David Goodlet  
Signature Date
20. ISI Engineer R. P. Indap 8-17-99 Print Name R. P. INDAP  
Signature Date
21. ANII Robert Hogstrom 8-17-99 Print Name Robert Hogstrom  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 05/21/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 827275  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85254-7529 Expiration Date N/A  
Address
4. Identification of System "SG" Main Steam
5. (a) Applicable Construction Code ASME III, Class 3 1974 Edition, S'75 Addenda, \_\_\_\_\_ Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
1/2" PIPE	N/A	N/A	N/A	IPSGEL393	1999	Replacement	No
1-1/2" ELBOWS	N/A	N/A	N/A	IPSGEL393	1999	Replacement	No
LUGS	N/A	N/A	N/A	N/A	1999	Replacement	No

7. Description of Work RE-ROUTED 1-1/2" PIPE DUE TO NEW DESIGN TO VALVE 1JSGAUV0172.

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

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



# FORM NIS-2 (Back)

9. Remarks WO# 827275; 1-1/2" PIPE 1PSGEL393; RE-ROUTE DUE TO NEW DESIGN TO VALVE 1JSGAUV0172

## 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] ISI ENG Date 11-6-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-17-99 to 11-6-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 28 9685 "N" "I" A2. 264  
National Board, State, Province, and Endorsements

Date NOVEMBER 6 1999

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1PSGEL403      2. Code Class 3
- Item Description 1-1/2" PIPING
4. N-5 Package Number \_\_\_\_\_ 5. W.O. Number 827276
6. Original Construction Code Edition ASME III CLASS 3, 1974 ED.; WINTER 1975 ADD.
7. Original Installation Code Edition ASME III CLASS 3, 1974 ED.; WINTER 1975 ADD.
8. Work Description RE-ROUTE THE 1-1/2" PIPING TO PROVIDE CLEARANCE FOR NEW DESIGN TO VALVE 1JSGAUV0175.

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
N/A

11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition ASME III CLASS 3, 1974 ED.; S'75 ADD.
13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 3, 1974 ED.; W'75 ADD.
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda

15. Preservice Inspection Required.       YES       NO  
Dug 05/19/99 If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO  
Dug 05/19/99 If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date

Dug 05/19/99 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date

Dug 05/19/99 18. Include a step in the W.O. to record below all applicable numbers.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	ROS/EROS NO.
IPSGEL403 (welds)	N/A	N/A	N/A	N/A
1-1/2" PIPE	N/A	N/A	698844	PL0310888
1-1/2" ELBOWS	NA	NA	AA122	PL0310885

19. Planner David Goodlet 5-21-99      Print Name David Goodlet  
Signature      Date

20. ISI Engineer Alan Morrow 5-21-99      Print Name Alan Morrow  
Signature      Date

21. ANII Robert Hogstrom 6-22-99      Print Name Robert Hogstrom  
Signature      Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 05/19/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 827276  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85254-7529 Expiration Date N/A  
Address
4. Identification of System "SG" Main Steam
5. (a) Applicable Construction Code ASME III, Class 3 1974 Edition, S'75 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
1/2" ELBOWS	N/A	N/A	N/A	IPSGEL403	1999	Replacement	No
1-1/2" PIPE	N/A	N/A	N/A	IPSGEL403	1999	Replacement	No

7. Description of Work RE-ROUTED 1-1/2" PIPE DUE TO NEW DESIGN TO VALVE 1JSGAUV0175.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

# FORM NIS-2 (Back)

9. Remarks WO# 827276; 1-1/2" PIPE 1PSGEL403; RE-ROUTE DUE TO NEW DESIGN TO VALVE 1JSGAUV0175.

## 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 Alan Mowow Sr ISI Eng  
Owner or Owner's Designee, Title

Date 11-6-99

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-22-99 to 11-6-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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- 1-Az-264

National Board, State, Province, and Endorsements

Date NOVEMBER 6 19 99



## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1SG203H014                      2. Code Class 2
- Item Description SNUBBER SUPPORT MOUNTED AT TOP OF AIR CYLINDER.
4. N-5 Package Number 1AF02-2                      5. W.O. Number 827276
6. Original Construction Code Edition ASME III Sub Section NF, CLASS 2, 1974 ED.; WINTER 1975
7. Original Installation Code Edition ASME III Sub Section NF, CLASS 2, 1974 ED.; WINTER 1975
8. Work Description Remove and reweld the existing snubber support rear bracket. Support for new design for valve IJSGBUV0135 IAW DMWO# 782577.
9.  ISI Flaw                      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
N/A
11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition ASME III Sub Sec. NF, Class 2, '74 Ed.; S'75
13. Repair/Replacement Activity Construction Code/Edition ASME III Sub Sec. NF, Class 2, 1974 Ed.; W'75
14. ASME Section XI Code/Edition 1992 Edition and 1992 Addenda
15. Preservice Inspection Required.                       YES                       NO  
Dmg                      05/19/99                      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial                      Date
16. ASME Section XI Pressure Test Required                       YES                       NO  
Dmg                      05/19/99                      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial                      Date
- Dmg                      05/19/99                      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial                      Date
- Dmg                      05/19/99                      18. Include a step in the W.O. to record below all applicable numbers.  
Initial                      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	ROS/EROS NO.
1SG203H014	BH1259	N/A	N/A	N/A
Plate: 1"x8.5"x12"	N/A	N/A	N/A	<u>PL0258597</u>

19. Planner *David Goodlet*                      5-19-99                      Print Name David Goodlet  
Signature                      Date
20. ISI Engineer *Alan Morrow*                      5-21-99                      Print Name Alan Morrow  
Signature                      Date
21. ANII *Robert Hogstrom*                      6-22-99                      Print Name Robert Hogstrom  
Signature                      Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 05/19/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 827276  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85254-7529 Expiration Date N/A  
Address
4. Identification of System "SG" Main Steam
5. (a) Applicable Construction Code ASME III, Class 2 1974 Edition, S'75 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
VALVE	Anchor/Darling	2N1694	N/A	IJSGAUV0175	1979	Repaired	Yes
REAR BRACKET	ITT GRINNELL	N/A	N/A	1SG203H014	1979	Replacement	No
Disc	IP/BW	K312	N/A	IJSGAUV0175	1998	Replacement	Yes
plate: 1"X8.5"X12"	N/A	N/A	N/A	1SG203H014	1999	Replacement	No

7. Description of Work Support work for new design to install larger air cylinders; DMWO# 782577..
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

## FORM NIS-2 (Back)

9. Remarks WO# 827276; Valve 1JSGAUV0175. Support work for new design to install larger air cylinder; DMWO# 782577. Remove the existing cast wedge guides from valve body and replace with new welded in guides. Install new stronger valve disc, remove and reweld snubber bracket.

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp n/a

Certificate of Authorization No. n/a Expiration Date n/a

Signed Alan Morrow Sr ISI Engineer Date 11-2-99  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-22-99 to 11-2-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 Hystrom  
Inspector's Signature

Commissions NB 9685 "S" "1" A2.264  
National Board, State, Province, and Endorsements

Date NOVEMBER 2 1999



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

As Required by the Provisions of the ASME Code Section XI

Arizona Public Service Company, et. al.  
Name

Date 05/19/99

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

Sheet 1 of 2

Yalo Verde Nuclear Generating Station  
Name

Unit 1

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

827276  
Work Order Number

Performed by Arizona Public Service Co.  
Name

Type Code Symbol Stamp None

801 S. Wintersburg Rd., Tonopah, Arizona 85254-7529  
Address

Authorization No. N/A

Expiration Date N/A

Location of System "SG" Main Steam

Applicable Construction Code ASME III, Class 3 1974 Edition, S'75 Addenda,        Code Case

Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

## Location of Components Repaired or Replaced and Replacement Components

Item	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
S	N/A	N/A	N/A	IPSGEL403	1999	Replacement	No
	N/A	N/A	N/A	IPSGEL403	1999	Replacement	No

Description of Work RE-ROUTED 1-1/2" PIPE DUE TO NEW DESIGN TO VALVE 1JSGAUV0175.

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

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

# FORM NIS-2 (Back)

9. Remarks WO# 827276; 1-1/2" PIPE 1PSGEL403; RE-ROUTE DUE TO NEW DESIGN TO VALVE 1JSGAUV0175.

## 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 Alan Monow Sr. ISI Eng Date 11-6-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-22-99 to 11-6-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Alan Monow  
Inspector's Signature

Commissions NB 9685 N. 1. Az. 264  
National Board, State, Province, and Endorsements

Date NOVEMBER 6 19 99



# FORM NIS-2 OWNER'S 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 05/05/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 831565  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. 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 SG - Main Steam
5. (a) Applicable Construction Code ASME III Class 2 1974 Edition, W'74 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Valve body (WELDS)	Anchor/Darling	2N1416	N/A	IJSGAUV0138	1979	Replacement	Yes

7. Description of Work Remove & reweld valve to provide new operator clearance.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

## FORM NIS-2 (Back)

9. Remarks WO# 831565, Valve 1JSGAUV0138.

THIS DESIGN CHANGE IS INSTALLING A NEW LARGER MOTOR OPERATOR ON THE GATE VALVE. THE VALVE WILL BE CUT OUT, REPOSITIONED AT A 45 DEGREE ANGLE AND REWELDED TO PROVIDE CLEARANCE FOR THE LARGER MOTOR OPERATOR.

### 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 Alan Morrow Sr ISI Engineer Date 11-6-99  
Owner or Owner's Designee, Title

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-22-99 to 11-6-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Robert Lytton  
Inspector's Signature

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

Date NOVEMBER 6 1999

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1JSGAUV0134      2. Code Class ASME III, CLASS 2  
 3. Item Description 6"- 900# FLEX WEDGE PRESSURE SEAL GATE VALVE  
 4. N-5 Package Number 1SG01-1      5. W.O. Number 831568  
 6. Original Construction Code Edition ASME III CLASS 2, 1974 ED., SUMMER 1975 ADD.  
 7. Original Installation Code Edition ASME III CLASS 2, 1974 ED., WINTER 1975 ADD.  
 8. Work Description Design change (over-pressurization mod.) iaw DMWO# 767747 to install a larger motor operator. Also cut out valve, reposition to allow clearance for new operator and reweld.

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
not required, not a failure.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition ASME III, CLASS 2, 1974 ED., S'1975 ADD.

13. Repair/Replacement Activity Construction Code/Edition ASME III CLASS 2, 1974 ED., W'1975 ADD.

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

15. Preservice Inspection Required.       YES       NO  
Dmg      05/05/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO  
Dmg      05/05/99      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date

Dmg      05/05/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date

Dmg      05/05/99      18. Include a step in the W.O. to record below all applicable numbers.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	ROS/EROS NO.
N/A	N/A	N/A	N/A	N/A

19. Planner David Goodlet      5-5-99      Print Name DAVID GOODLET  
Signature      Date

20. ISI Engineer Alan Marow      5-18-99      Print Name RAMAKANT INDAP  
Signature      Date

21. ANII Robert Hogstrom      6-22-99      Print Name ROBERT HOGSTROM  
Signature      Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 05/05/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 831568  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. 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 SG - Main Steam
5. (a) Applicable Construction Code ASME III Class 2 1974 Edition, S'75 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Valve body (WELDS)	Anchor/Darling	2N1415	N/A	IJSGAUV0134	1979	Replacement	Yes

7. Description of Work Remove & reweld valve to provide new operator clearance.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure        psi Test Temp.        °F

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

# FORM NIS-2 (Back)

9. Remarks WO# 831568, Valve 1JSGAUV0134.

THIS DESIGN CHANGE IS INSTALLING A NEW LARGER MOTOR OPERATOR ON THE GATE VALVE. THE VALVE WILL BE CUT OUT, REPOSITIONED AT A 45 DEGREE ANGLE AND REWELDED TO PROVIDE CLEARANCE FOR THE LARGER MOTOR OPERATOR.

## 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 Alan Monow Sr ISI Eng Date 11-6-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-22-99 to 11-6-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Alan Monow  
Inspector's Signature

Commissions NB 9685 "N" "1" A2 264  
National Board, State, Province, and Endorsements

Date NOVEMBER 6 1999





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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 10/15/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00832845  
Address Work Order Number
3. Work Performed by Arizona Public Service Company Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd. Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System CH, Chemical Volume Control System, Sec. III Cl. 3
5. (a) Applicable Construction Code Sec. III Cl. 3 1974 Edition, '75 W Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1999 Edition, 1999 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Support Plate Welds on the gate	Borg Warner	N/A	N/A	1JCHEUV0536	1999	Replaced	No

7. Description of Work STEM & SUPPORT PLATE WELD REPLACED(FOR STEM REPLACEMENT)

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 REPLACED STEM AND STEM SUPPORT PLATE WELDS WO# 00832845

## 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 Willard

ISI ENGINEER

Date 10/18/99

Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-5-99 to 10-18-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Willard

Inspector's Signature

Commissions NB 9685 "N" "I" Az. 264

National Board, State, Province, and Endorsements

Date OCTOBER 18 1999





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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 05/13/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 833827  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85254-7529 Expiration Date N/A  
Address
4. Identification of System "SG" Main Steam
5. (a) Applicable Construction Code ASME III, Class 2 1974 Edition, S'75 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
VALVE	Anchor/Darling	2N1633	N/A	1JSGBUV0130	1979	Repaired	Yes
REAR BRACKET	ITT GRINNELL	N/A	N/A	1SG200H013	1979	Replacement	No
DISC	IP/BW	K313	N/A	1JSGBUV0130	1998	Replacement	Yes
plate: 1"x8.5"x12"	N/A	N/A	N/A	1SG200H013	1999	Replacement	No

7. Description of Work Support work for new design to install larger air cylinder; DMWO# 782577.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

# FORM NIS-2 (Back)

9. Remarks WO# 833827; Valve 1JSGBUV0130. Support work for new design to install larger air cylinder; DMWO# 782577. Remove the existing cast wedge guides from valve body and replace with new welded in guides. Install new stronger valve disc, remove and reweld snubber bracket.

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp n/a

Certificate of Authorization No. n/a Expiration Date n/a

Signed Alan Morrow Sr ISI Engineer Date 11-2-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-22-99 to 11-2-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Pat S. Hopton  
Inspector's Signature

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

Date NOVEMBER 2 1999.







# FORM NIS-2 OWNER'S 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 03/18/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 833828  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85254-7529 Expiration Date N/A  
Address
4. Identification of System "SG" Main Steam
5. (a) Applicable Construction Code ASME III, Class 2 1974 Edition, S'75 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
VALVE	Anchor/Darling	2N1637	N/A	IJSGBUV0135	1979	Repaired	Yes
REAR BRACKET	ITT GRINNELL	N/A	N/A	ISG203H013	1979	Replacement	No
DISC	IP/BW	K320	N/A	IJSGBUV0135	1998	Replacement	Yes
plate: 1"X8.5"X12"	N/A	N/A	N/A	ISG203H013	1999	Replacement	No

7. Description of Work Support work for new design to install larger air cylinder; DMWO# 782577.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

FORM NIS-2 (Back)

9. Remarks WO# 833828; Valve 1JSGBUV0135. Support work for new design to install larger air cylinder; DMWO# 782577. Remove the existing cast wedge guides from valve body and replace with new welded in guides. Install new stronger valve disc, remove and reweld snubber bracket.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp n/a

Certificate of Authorization No. n/a

Expiration Date n/a

Signed Alan Monow Sr ISI Engineer Date 11-2-99  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 6-22-99 to 11-2-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Alan Monow  
Inspector's Signature

Commissions NB 9685 "N" "1" Az. 264

National Board, State, Province, and Endorsements

Date NOVEMBER 2 1999

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID IMDGAED4 3 m77      2. Code Class ASME SECTION 111, CL 3  
 3. Item Description DIESEL GENERATOR JACKET WATER COOLER  
 4. N-5 Package Number ED001-2      5. W.O. Number 878770  
 6. Original Construction Code Edition ASME SECTION 111, CLASS 3, 1974, SUMMER 1976 ADD.  
 7. Original Installation Code Edition ASME SECTION 111, CLASS 3, 1974 WINTER, 1975 ADD.  
 8. Work Description Weld build up of corroded areas on the jacket water cooler inlet end cover

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
weld build up required due to exceeding minimum wall thickness of cover due to corrosion caused by holiday in coatings. repaired areas to be coated with belzona which has been proven to protect the surfaces of the coolers.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition 1974 EDITION SUMMER 1976 ADDENDA

13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION WINTER 1975 ADDENDA

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

15. Preservice inspection Required.       YES       NO  
OB      10/07/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO RPT 10-7-99  
OB      10/07/99      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date

OB      10/07/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date

OB      10/07/99      18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
CHANNEL COVER	4-500-19-515-002	N/A	N/A	N/A

19. Planner *[Signature]*      10-07-99      Print Name: DAVE BRUNSON  
Signature      Date
20. ISI Engineer *[Signature]*      10-7-99      Print Name R.P. INDAP  
Signature      Date
21. ANII *[Signature]*             Print Name *[Signature]*  
Signature      Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 10/07/99  
Name  
P. O. Box 53900, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00878770  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. 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 Diesel Generator (DG)
5. (a) Applicable Construction Code ASME Sec. III Cl. 3 1974 Edition, W'75 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

3. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
DG Jacket Water cooler cover	American Standard	9-20016-01-1	31979	IMDGAE05	1978	Repaired	Yes

7. Description of Work Weld build up of corroded area of DG Jacket Water Cooler end cover.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 3 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 #73770

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this Repaired 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 10/2

Signed [Signature] Date 10-14-99  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-1-99 to 10-14-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the inspector nor his employer shall be 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 28 9035 "S" "I" Az. 264  
Inspector's Signature National Board, State, Province, and Endorsements

Date October 14 19 99



# FORM NIS-2 OWNER'S 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 10/18/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00878771  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5810 S. Wintersburg Rd., Tonopah, AZ. 85354-7529 Expiration Date N/A  
Address
4. Identification of System Diesel Generator (DG)
5. (a) Applicable Construction Code ASME <sup>W72</sup> <sup>10-12-99</sup> <sup>10-21-99</sup> AMSE Sec. III CL.3 1974 Edition, W75 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
DG Jacket Water Cooler	American Standard	9-20016-01-3	31979	IMDGBE05	1978	Repaired	Yes

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

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

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



FORM NIS-2 (Back)

9. Remarks Work order 878771

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp n/a

Certificate of Authorization No. n/a Expiration Date n/a

Signed [Signature] ISE ENGINEER Date 10-27-99  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-14-99 to 10-27-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 9635 "N" "I" A2 264  
National Board, State, Province, and Endorsements

Date OCTOBER 27 1999



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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 10/07/99  
Name

P. O. Box 53900, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address

2. Plant Paio Verde Nuclear Generating Station Unit 1  
Name

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00878775  
Address Work Order Number

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

5801 S. Wintersburg Rd., Tonopah, AZ. 85354-7529 Authorization No. N/A  
Address Expiration Date N/A

4. Identification of System Diesel Generator (DG)

5. (a) Applicable Construction Code ASME Sec. III Cl. 3 1974 Edition, W'75 Addenda,        Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
DG Lube Oil cooler cover	American Standard	9-20016-02-1	31979	IMDGAE04	1978	Repaired	Yes

7. Description of Work Weld build up of corroded area of DG Lube Oil Cooler end cover.

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

Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

FORM NIS-2 (Back)

9. Remarks Work Order 878775

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [Signature] Date 10-14-99  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-7-99 to 10-14-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 2B 1685 2071 A2 204  
National Board, State, Province, and Endorsements

Date October 14 1999



# FORM NIS-2 OWNER'S 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 10/18/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00878776  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5810 S. Wintersburg Rd., Tonopah, AZ. 85354-7529 Expiration Date N/A  
Address

4. Identification of System Diesel Generator (DG)
5. (a) Applicable Construction Code ASME <sup>ASME</sup> AMSE Sec. III CL.3 1974 Edition, W75 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
DG Lube Oil Cooler	American Standard	9-20016-01-4	31979	IMDGBE04	1978	Repaired	Yes

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

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

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

# FORM NIS-2 (Back)

9. Remarks Work order 878776

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [Signature] ISI ENGINEER Date 10-27-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-19-99 to 10-27-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions NS 9285 "N" "I" Az. 264  
National Board, State, Province, and Endorsements

Date October 27 1999

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID IPCHNV485 2. Code Class ASME SEC III CL. 3
3. Item Description 3" DIAPHRAGM VALVE
4. N-5 Package Number 1CH16-1 5. W.O. Number 00878935
6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA
7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA
8. Work Description VALVE DIAPHRAGM REPLACEMENT FOR PREVENTATIVE MAINTENANCE.
9.  ISI Flaw NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
REPLACEMENT OF LIKE FOR LIKE FOR DIAPHRAGM.
11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition SECT. III CL. 3/'74 ED. '75 S'ADD
13. Repair/Replacement Activity Construction Code/Edition SECT. III CL 3/'74 ED. W'ADD.
14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA
15. Preservice Inspection Required.  YES  NO

- JSB 10/19/09 If required, include a step in the W.O. to perform Preservice Inspection.  
Initial Date
- YES  NO
- JSB 10/19/99 If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial Date
- JSB 10/19/99 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial Date
- JSB 10/19/99 18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
IPCHNV485	018993	N/A	N/A	MR# 306298

19. Planner James A. Boulanger 10/19/99 Print Name: JIM BOULANGER  
Signature Date
20. ISI Engineer Fred Poteet 10/19/99 Print Name: FRED POTEET  
Signature Date
21. ANII Bob Hogstrom 10/19/99 Print Name: BOB 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 10/19/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00878935  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. et. al. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd. Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System CH, Chemical Volume Control System, ASME Sec. III Cl. 3
5. (a) Applicable Construction Code Section III, Cl 3 1974 Edition, w'75 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 192 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
3" diaphragm	ITT Grinnel	018993	N/A	1PCHNV485	1999	Replaced	No

7. Description of Work Removed/Replaced diaphragm with a new one as Preventative Maintenance.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 Valve diaphragm replacement (PM) WO# 00878935

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## 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 Alan Monow Sr. ISI Engineer Date 10-21-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-12-99 to 10-21-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

AS Inspection Commissions NS 9685 "N" "I" Az. 264  
Inspector's Signature National Board, State, Province, and Endorsements

Date October 21 1999

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1PCHNV48590 2. Code Class ASME SEC III CL. 3  
 3. Item Description 3" DIAPHRAGM VALVE  
 4. N-5 Package Number 1CH16-1 5. W.O. Number 00878936  
 6. Original Construction Code Edition 1974 EDITION, SUMMER 1975 ADDENDA  
 7. Original Installation Code Edition 1974 EDITION, WINTER 1975 ADDENDA  
 8. Work Description VALVE DIAPHRAGM REPLACEMENT FOR PREVENTATIVE MAINTENANCE.

9.  ISI Flaw NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
REPLACEMENT OF LIKE FOR LIKE FOR DIAPHRAGM.

11. Repair/Replacement Work Organization APS  
 12. Replacement Item Construction or reconciled Code/Edition SECT. III CL. 3/74 ED. '75 S'ADD  
 13. Repair/Replacement Activity Construction Code/Edition SECT. III CL 3/74 ED. W'ADD.  
 14. ASME Section XI Code/Edition 1992 EDITION AND 1992 ADDENDA

15. Preservice Inspection Required.  YES  NO

JSB 10/19/99 If required, include a step in the W.O. to perform Preservice Inspection.  
Initial Date

16. ASME Section XI Pressure Test Required  YES  NO

JSB 10/19/99 If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial Date

JSB 10/19/99 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial Date

JSB 10/19/99 18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1PCHNV490	018993	N/A	N/A	MR# 306299

19. Planner James W. Boulanger 10/19/99 Print Name JIM BOULANGER  
Signature Date
20. ISI Engineer Fred Poteet 10/19/99 Print Name FRED POTEET  
Signature Date
21. ANII Bob Hogstrom 10/19/99 Print Name BOB 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 10/19/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00878936  
Address Work Order Number
3. Work Performed by Arizona Public Service Co. et. al. Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd. Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System CH, Chemical Volume Control System, ASME Sec. III Cl. 3
5. (a) Applicable Construction Code Section III, Cl 3 1974 Edition, w'75 Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 192 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
3" diaphragm	ITT Grinnel	018993	N/A	IPCHNV490	1999	Replaced	No

7. Description of Work Removed/Replaced diaphragm with a new one as Preventative Maintenance.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 Valve diaphragm replacement (PM) WO# 00878936

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## 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 Alan Morrow SR. ISI Engineer Date 10-21-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-19-99 to 10-21-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

AS System  
Inspector's Signature

Commissions NS 9685 "N" "I" Az. 264  
National Board, State, Province, and Endorsements

Date OCTOBER 21 1999

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1MRCEP01C      2. Code Class ASME SECTION III CLASS 1  
 3. Item Description REACTOR COOLANT PUMP CLAMP RING & PUMP CASING STUDS & NUTS  
 4. N-5 Package Number 1RC02-6      5. W.O. Number 00886105  
 6. Original Construction Code Edition 1974 EDITION  
 7. Original Installation Code Edition 1974 EDITION & 1975 WINTER ADDENDA  
 8. Work Description INSTALL RCP CLAMP RING & PUMP CASING STUDS & NUTS AS DEEMED NECESSARY BY ENGINEERING AFTER INSPECTION UNDER WO#886105.

9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
REPLACEMENT REQUIRED AFTER ENGINEERING INSPECTION.

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition 1974 EDITION

13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION & 1975 WINTER ADDENDA

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

15. Preservice Inspection Required.       YES       NO  
MBN      07/14/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO  
MBN      07/14/99      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date

MBN      07/14/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date

MBN      07/14/99      18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
CLAMP RING	<sup>8109-100-012</sup> 4515-1835	13002		00334424
PUMP CASING STUD	<u>STUDS OK and reused - VT #1197 MDP#11-6-99</u>			
PUMP CASING NUT	<sup>8109-100-028</sup> 43120496	A128, A033, A027 A025, A021, A063 A066		00334424

19. Planner Michael B Newell      07/14/99      Print Name MICHAEL B NEWELL  
Signature      Date

20. ISI Engineer Alan Morrow      7-15-99      Print Name Alan Morrow  
Signature      Date

21. ANII Robert Hogstrom      7-15-99      Print Name ROBERT HOGSTROM  
Signature      Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 07/14/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00886105  
Address Work Order Number
3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. WINTERBURG RD. TONOPAH ARIZONA Expiration Date N/A  
Address

4. Identification of System RC, ASME SECTION III, CLASS 1
5. (a) Applicable Construction Code SEC III, CLASS 1 1974 Edition, N/A Addenda, N/A Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
CLAMP RING	N/A	N/A	N/A	1MRCEP01C	1999	Replacement	No
PUMP CASING NUT	N/A	N/A	N/A	1MRCEP01C	1999	Replacement	No

7. Description of Work REPLACEMENT OF RCP CLAMP RING & PUMP CASING STUDS & NUTS.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  -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 W.O. 886105

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 Alan Marlow Sr. ISI Engineer  
Owner or Owner's Designee, Title

Date 11-6-99

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 7-15-99 to 11-6-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Pat A. Hyston  
Inspector's Signature

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

Date NOVEMBER 6 1999





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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 10/21/99  
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 Work Order 00888782  
Address Work Order Number
3. Work Performed by Arizona Public Service Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System Safety Injection
5. (a) Applicable Construction Code ASME Sect. III, C12 1974 Edition, W'75 Addenda, Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
CHECK VALVE	BORG-WARNER	49481	N/A	1PSIEV143	1979	Repaired	Yes
BONNET/ARM/DISC ASSEMBLY	BORG -WARNER	SN14	N/A	N/A	1979	Replacement	Yes

7. Description of Work Replaced bonnet/arm/disc assembly due to damage found during internals inspection.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

# FORM NIS-2 (Back)

9. Remarks Work Order 00888782 replaced bonnet /arm/discassembly in existing valve 1PSIEV143;  
Built by Borg Warner in 1979, serial number 49481.

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [Signature] [Signature] Date 11-6-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-21-99 to 11-6-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date NOVEMBER 6 1999

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID IJSIBUV0648      2. Code Class 1
3. Item Description SAFETY INJECTION TANK CHECK VALVE LEAK LINE ISOLATION VALVE.
4. N-5 Package Number IRC01-IC      5. W.O. Number 00889863
6. Original Construction Code Edition ASME Section III, Class 1, 1974 Edition, Summer 75 Addenda
7. Original Installation Code Edition ASME Section III, Class 1, 1974 Edition, Winter 75 Addenda
8. Work Description Leak off piping replacement is required per 13-pn-220 when the valve is repacked. Replacement of the valve plug may be required.
9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.

11. Repair/Replacement Work Organization Arizona Public Service
12. Replacement Item Construction or reconciled Code/Edition ASME Sect. III, CI 1, 1974 Ed., S 75 Add.
13. Repair/Replacement Activity Construction Code/Edition ASME Sect. III, CI 1, 1974 Ed., W 75 Add.
14. ASME Section XI Code/Edition ASme Section XI, 1992 Edition, 92 Addenda

15. Preservice Inspection Required.       YES       NO

J.D. 7-15-99 If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO

J.D. 7-15-99 If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date

J.D. 7-15-99 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date

J.D. 7-15-99 18. Include a step in the W.O. to record below all applicable numbers.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	ROS/EROS NO.
PLUG & STEM ASSEMBLY	21A4452X082	AR 1658-2	HT# 709389-2	MRR 334158
PIPE CAP	N/A	N/A	CODE "LALM"	MRR 334158

19. Planner *James I. Davis* 7-15-99      Print Name James I. Davis  
Signature      Date
20. ISI Engineer *Alan Morrow* 7-15-99      Print Name Alan Morrow  
Signature      Date
21. ANII *Robert L. Holstrom* 7-15-99      Print Name Robert L. 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 10/21/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 WORK ORDER 00889863  
Address Repair Organization P.O. No., Job No., etc.
3. Work Performed by Arizona Public Service Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address

4. Identification of System Safety Injection
5. (a) Applicable Construction Code ASME Sect III, CI 1 1974 Edition, s75 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Valve	Fisher Controls	6540501	4206	IJSIBUV0648	1979	Repaired	Yes
Leakoff Pipe Cap	N/A	CODE LDLM	N/A	IJSIBUV0648	1999	Replacement	No
Stem /Disc Assembly	Fisher Controls	AE1658-2	N/A	IJSIAUV0648	1999	Replacement	Yes

7. Description of Work Replaced the stuffing box leakoff piping with a pipe cap. Replaced the stem/disc asm.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

FORM NIS-2 (Back)

9. Remarks Work Order 00889863 replaced the stem adisc assembly and the stem leakoff piping.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Alan Mowow Sr ISI Engineer Date 10-21-99  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 7-15-99 to 10-21-99, and state that to the best of my knowledge and and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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" "1" Az. 264  
National Board, State, Province, and Endorsements

Date OCTOBER 21 1999

## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1MRCEE01A      2. Code Class ASME Section III, Class 1
3. Item Description Steam Generator # 1
4. N-5 Package Number 1RC01-4      5. W.O. Number 891136
6. Original Construction Code Edition 1971 Edition & 1973 Winter Addenda
7. Original Installation Code Edition 1974 Edition & 1975 Winter Addenda
8. Work Description Installed CE roll plugs in 1MRCEE01A hot leg tubes per DFWO 891136 evaluation and disposition.

9.  ISI Flaw      NDE Method of Flaw Detection Eddy Crnt.  
 Report Number UIR8 Eddy Current Examination Report
10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
Evaluation per DFWO 891136

11. Repair/Replacement Work Organization ABB-CE
12. Replacement Item Construction or reconciled Code/Edition 1971 Edition & 1973 Winter Addenda
13. Repair/Replacement Activity Construction Code/Edition 1974 Edition & 1975 Winter Addenda
14. ASME Section XI Code/Edition 1992 Edition & 1992 Addenda


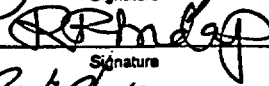
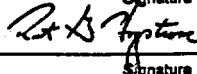
15. Preservice Inspection Required.       YES       NO  
N/A      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO  
JKJ      10/01/99      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date

- JKJ      10/01/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date

- JGJ      10/01/99      18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
Tube Plugs	See Attached List	See Attached List	See Attached List	See Attached List

19. Planner       10-1-99      Print Name Joseph K. Flynn  
Signature      Date
20. ISI Engineer       10-5-99      Print Name Ramakant P. Indap  
Signature      Date
21. ANII       10-7-99      Print Name Robert G. Hogstrom  
Signature      Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 10/01/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 891136  
Address Work Order Number
3. Work Performed by ABB-CE Type Code Symbol Stamp None  
Name Authorization No. N/A  
911 W. Main St., Chatt., TN 37402 Expiration Date N/A  
Address
4. Identification of System Reactor Coolant
5. (a) Applicable Construction Code ASME Sect. III, Cl.1 1971 Edition, W'73 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Steam Generator #1	CE	78273-1	NA	1MRCEE01A	1978	Repaired	Yes
Tube Plugs	CE	*	NA	*	1999	Replacement	No

7. Description of Work Plug SG (1MRCEE01A) tubes per DFWO 891136. \*See attached list of tube plugs.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 DFWO 891136, See attached list for tubes plugged.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp NA

Certificate of Authorization No. NA Expiration Date NA

Signed DBH ENGINEER Date 10-26-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-7-99 to 11-10-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date NOVEMBER 10 1999

**U1R8 SG11 1MRCEE01A PLUGGED TUBES**

**DFWO 891136 SG11 HOT LEG**

Row	Col	Part No.	Serial No.	Heat No.	MR/ROS No.
14	73	C2000CNOP027/028	FR-84	J-9162-2	288931
9	118		FR-83	"	"
24	77		FR-82	"	"
24	113		FR-81	"	"
37	90		FR-80	"	"
37	100		FR-79	"	"
130	43	B9451CO95019/20	8405	J-9161-5	345626
47	64		8423	"	
53	68		8417	"	
50	69		8414	"	
54	69		8549	"	
62	69		8419	"	
57	70		8403	"	
59	70		8418	"	
70	71		8420	"	
49	72		8404	"	
53	72		8407	"	
131	76		8421	"	
66	77		8413	"	
68	81		8410	"	
63	88		8409	"	
60	89		8416	"	
81	102		8408	J-9161-5	
19	118		7523	J-9161-2	
17	122		7516	"	
76	157		7918	"	
81	30		8422	J-9161-5	
100	35		8415	"	
132	67		8424	"	
136	69		8402	"	
119	76		8550	"	
132	89		8411	"	
134	89		8401	"	
126	95		8412	"	
150	97		8035	J-9161-2	
39	104		8029	J-9161-2	
120	107		8033	"	
53	182		7913	"	

52 183  
54 183  
81 40  
81 48  
2 63  
17 72  
71 78  
38 87  
41 98  
40 99  
39 100  
37 104  
31 108  
142 113  
114 149  
72 171  
55 182

7915 J-9161-2  
7919 "  
8425 J-9161-5  
8406 "  
8031 J-9161-2  
8030 "  
8034 "  
7514 "  
8026 "  
8027 "  
8036 "  
8028 "  
8032 "  
7917 "  
7522 "  
7510 "  
7914 "

345626





# FORM NIS-2 OWNER'S 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 10/01/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 891137  
Address Work Order Number
3. Work Performed by ABB-CE Type Code Symbol Stamp None  
Name Authorization No. N/A  
911 W. Main St., Chatt., TN 37402 Expiration Date N/A  
Address
4. Identification of System Reactor Coolant
5. (a) Applicable Construction Code ASME Sect. III, Cl.1 1971 Edition, W73 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Steam Generator #1	CE	78273-1	NA	1MRCEE01A	1978	Repaired	Yes
Tube Plugs	CE	*	NA	*	1999	Replacement	No

7. Description of Work Plug SG (1MRCEE01A) tubes per DFWO 891137. \*See attached list of tube plugs.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 DFWO 891137, See attached list for tubes plugged.

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp NA

Certificate of Authorization No. NA

Expiration Date NA

Signed

DBH

ENGINEER

Owner or Owner's Designee, Title

Date 10-26-99

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-7-99 to 11-10-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Robert S. Johnson

Inspector's Signature

Commissions

NS 9685 "N" "I" 12.264

National Board, State, Province, and Endorsements

Date NOVEMBER 10 1999

**U1R8 SG11 1MRCEE01A PLUGGED TUBES**

**DFWO 891137 SG11 COLD LEG**

Row	Col	Part No.	Serial No.	Heat No.	MR/ROS No.
14	73	C2000CNOP027/028	FR-90	J-9161-2	288931
24	77		FR-88	"	"
37	90		FR-86	"	"
37	100		FR-87	"	"
24	113		FR-89	"	"
9	118		FR-85	"	"
130	43	B9451CO95019/20	8459	J-9161-5	345626
47	64		8435	"	
53	68		8448	"	
50	69		8446	"	
54	69		8440	"	
62	69		8442	"	
57	70		8438	"	
59	70		8451	"	
70	71		8452	"	
49	72		8436	"	
53	72		8439	"	
131	76		8453	"	
66	77		8427	"	
68	81		8449	"	
63	88		8450	"	
60	89		8447	"	
81	102		8433	"	
19	118		8429	"	
17	122		8430	"	
76	157		8431	"	
81	30		8458	"	
100	35		8463	"	
132	67		8460	"	
136	69		8469	"	
119	76		8443	"	
132	89		8444	"	
134	89		8441	"	
126	95		8437	"	
150	97		8445	"	
39	104		8464	"	
120	107		8434	"	
53	182		8432	"	

52 183  
54 183  
81 40  
81 48  
2 63  
17 72  
71 78  
38 87  
41 98  
40 99  
39 100  
37 104  
31 108  
142 113  
114 149  
72 171  
55 182

8428 J-9161-5  
8426 "  
8457 "  
8456 "  
8455 "  
8474 "  
8473 "  
8462 "  
8468 "  
8467 "  
8466 "  
8465 "  
8471 "  
8472 "  
8475 "  
8470 "  
8461 J-9161-5

345626







# FORM NIS-2 OWNER'S 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 10/01/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 891142  
Address Work Order Number
3. Work Performed by ABB-CE Type Code Symbol Stamp None  
Name Authorization No. N/A  
911 W. Main St., Chatt., TN 37402 Expiration Date N/A  
Address

4. Identification of System Reactor-Coolant
5. (a) Applicable Construction Code ASME Sect. III, Cl.1 1971 Edition, W'73 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Steam Generator #2	CE	78273-2	NA	1MRCEE01B	1978	Repaired	Yes
Tube Plugs	CE	*	NA	*	1999	Replacement	No

7. Description of Work Plug SG (1MRCEE01B) tubes per DFWO 891142. \*See attached list of tube plugs.

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 DFWO 891142, See attached list for tubes plugged.

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp NA

Certificate of Authorization No. NA

Expiration Date NA

Signed DJI

Owner or Owner's Designee, Title

ENGINEER

Date 10-26-99

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-7-99 to 11-9-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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[Signature]

Inspector's Signature

Commissions

NS 9685 "S" "I" Az. 264

National Board, State, Province, and Endorsements

Date November 9 1999

**U1R8 SG12 1MRCEE01B PLUGGED TUBES**

**DFWO 891142 SG12 HOT LEG**

Row	Col	Part No.	Serial No.	Heat No.	MR/ROS No.
9	72	C2000CNOP027/028	FR-78	J-9162-2	288931
24	77	"	FR-77	"	"
37	90	"	FR-73	"	"
38	97	"	FR-74	"	"
24	113	"	FR-75	"	"
9	118	"	FR-76	"	"
17	44	B9451CO95019/20	8049	J-9161-2	345626
30	53	"	8037	"	
21	56	"	8155	"	
25	56	"	8153	"	
34	57	"	8154	"	
47	60	"	8188	"	
28	61	"	7274	J-9161-1	
40	61	"	8158	J-9161-2	
20	63	"	7275	J-9161-1	
80	75	"	8179	J-9161-2	
57	76	"	8164	"	
62	77	"	8163	"	
64	77	"	8168	"	
65	80	"	8161	"	
65	110	"	8196	"	
60	111	"	7292	J-9161-1	
64	111	"	7291	"	
105	114	"	8167	J-9161-2	
54	115	"	7299	J-9161-1	
51	120	"	7298	"	
48	121	"	7297	"	
47	124	"	7285	"	
74	133	"	7300	"	
80	133	"	7282	"	
81	138	"	8192	J-9161-2	
78	139	"	7294	J-9161-1	
79	148	"	7281	"	
4	1	"	8159	J-9161-2	
30	3	"	8045	"	
71	54	"	8157	"	
148	61	"	8040	"	
147	62	"	8021	"	







# FORM NIS-2 OWNER'S 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 10/01/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 891143  
Address Work Order Number
3. Work Performed by ABB-CE Type Code Symbol Stamp None  
Name Authorization No. N/A  
911 W. Main St., Chatt., TN 37402 Expiration Date N/A  
Address

4. Identification of System Reactor Coolant
5. (a) Applicable Construction Code ASME Sect. III, Cl.1 1971 Edition, W'73 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Steam Generator #2	CE	78273-2	NA	1MRCEE01B	1978	Repaired	Yes
Tube Plugs	CE	*	NA	*	1999	Replacement	No

7. Description of Work Plug SG (1MRCEE01B) tubes per DFWO 891143. \*See attached list of tube plugs.

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 DFWO 891143, See attached list for tubes plugged.

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp NA

Certificate of Authorization No. NA

Expiration Date NA

Signed

DBH

ENGINEER

Owner or Owner's Designee, Title

Date

DBH  
10-26-99

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-7-99 to 11-9-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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R. S. Dutton

Inspector's Signature

Commissions

NB 9685 "0" "1" h2 264

National Board, State, Province, and Endorsements

Date

NOVEMBER 9 1999

**U1R8 SG12 1MRCEE01B PLUGGED TUBES**

**DFWO 891143 SG12 COLD LEG**

Row	Col	Part No.	Serial No.	Heat No.	MR/ROS No.
9	72	C2000CNOP027/028	FR-67	J-9162-2	288931
24	77	"	FR-69	"	"
37	90	"	FR-68	"	"
38	97	"	FR-70	"	"
24	113	"	FR-71	"	"
9	118	"	FR-72	"	"
17	44	B9451CO95019/20	8014	J-9161-2	345626
30	53	"	8002	J-9161-2	
21	56	"	8003	"	
25	56	"	8010	"	
34	57	"	8015	J-9161-2	
47	60	"	8018	"	
28	61	"	8476	J-9161-5	
40	61	"	8024	J-9161-2	
20	63	"	8483	J-9161-5	
80	75	"	8025	J-9161-2	
57	76	"	8544	J-9161-5	
62	77	"	8543	"	
64	77	"	8533	"	
65	80	"	8534	"	
65	110	"	8537	"	
60	111	"	8535	J-9161-5	
64	111	"	8536	"	
105	114	"	8547	J-9161-5	
54	115	"	8527	J-9161-5	
51	120	"	8526	"	
48	121	"	8529	"	
47	124	"	8531	"	
74	133	"	8484	"	
80	133	"	8481	"	
81	138	"	8486	J-9161-5	
78	139	"	8493	J-9161-5	
79	148	"	8489	"	
4	1	"	8016	J-9161-2	
30	3	"	8530	J-9161-5	
71	54	"	8532	"	
148	61	"	8519	"	
147	62	"	8520	"	

149	62	B9451CO95019/20	8521	J-9161-5
150	63	"	8522	"
147	64	"	8523	"
149	64	"	8506	"
148	65	"	8511	"
150	65	"	8524	"
147	66	"	8501	"
149	66	"	8502	"
151	66	"	8503	"
148	67	"	8512	"
152	67	"	8507	"
149	68	"	8505	"
151	68	"	8509	J-9161-5
105	72	"	8548	J-9161-5
34	83	"	8545	"
115	102	"	8539	"
69	120	"	8542	J-9161-5
58	123	"	8541	J-9161-5
84	131	"	8488	"
70	133	"	8490	J-9161-5
83	134	"	8480	"
97	142	"	8487	"
1	170	"	7927	J-9161-2
80	173	"	7928	"
1	178	"	7925	"
6	187	"	7924	"
4	15	"	8540	J-9161-5
115	32	"	8538	"
122	35	"	8020	J-9161-2
111	42	"	8008	J-9161-2
98	47	"	8009	J-9161-2
104	47	"	8004	"
98	49	"	8005	"
112	49	"	8011	"
87	54	"	8012	"
132	55	"	8013	"
103	64	"	8546	J-9161-5
125	64	"	8508	"
150	67	"	8504	"
133	68	"	8514	"
137	68	"	8513	"
132	69	"	8510	"
138	69	"	8515	"
139	70	"	8517	"
141	76	"	8516	"
141	78	"	8518	"

345626



119	82	"	8528	J-9161-5
125	84	"	8006	J-9161-2
109	108	"	8525	J-9161-5
122	117	"	8479	J-9161-5
98	127	"	8478	"
120	127	"	8477	J-9161-5
129	150	"	7926	J-9161-2
100	157	"	7930	"
105	158	"	7929	"
77	24	"	8170	"
110	51	"	8171	"
90	71	"	8169	J-9161-2
116	75	"	8178	"
144	81	"	8482	J-9161-5
148	83	"	8172	J-9161-2
123	94	"	8173	J-9161-2
118	95	"	8485	J-9161-5
122	105	"	8491	"
35	112	"	8492	"
17	116	"	8454	J-9161-5

345626



## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1PCHNV835      2. Code Class ASME SEC. III CL2.
3. Item Description 1-1/2" CHECK VALVE
4. N-5 Package Number 1CH14-1      5. W.O. Number 891212
6. Original Construction Code Edition 1974 EDITION & 1975 WINTER ADD.
7. Original Installation Code Edition 1974 EDITION & 1975 WINTER ADD.
8. Work Description BONNET TO BODY SEAL WELD REPLACED DUE TO CHECK VALVE INSPECTION PROGRAM.
9.  ISI Flaw      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
WORK REQUIRED FOR VALVE DISASSEMBLY TO ALLOW FOR CHECK VALVE INSPECTION.
11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition 1974 EDITION & 1975 WINTER ADD.
13. Repair/Replacement Activity Construction Code/Edition 1974 EDITION & 1975 WINTER ADD.
14. ASME Section XI Code/Edition 1992 EDITION & 1992 ADDENDA

15. Preservice Inspection Required.       YES       NO  
*JB*      7/26/99      If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO  
*JB*      07/26/99      If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date
- JB*      07/26/99      17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date
- JB*      07/26/99      18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1PCHNV835	N/A	26454	N/A	N/A

19. Planner *James C. Boulanger*      07/26/99      Print Name JIM BOULANGER  
Signature      Date
20. ISI Engineer *Alan Morrow*      8-3-99      Print Name Alan Morrow  
Signature      Date
21. ANII *JB Hogstrom*      8-3-99      Print Name BOB HOGSTROM  
Signature      Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 07/26/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 891212  
Address Work Order Number
3. Work Performed by Arizona Public Service Company, et al. Type Code Symbol Stamp None  
Name Authorization No. N/A  
P.O. Box 53999, Phoenix, Arizona 85072-2034 Expiration Date N/A  
Address

4. Identification of System CH, Chemical Volume Control System ASME SEC. III CL2
5. (a) Applicable Construction Code Section III, CL2 1974 Edition, W'75 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Check Valve	Borg Warner	26454	N/A	1PCHNV835	1979	Replaced	Yes

7. Description of Work Replaced the Body to Bonnet Seal Weld for ISI inspection

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 N/A

WO# 891212

## 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]

ISE ENGINEER

Owner or Owner's Designee, Title

Date 10-15-99

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-3-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

National Board, State, Province, and Endorsements

Date OCTOBER 15 1999





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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 07/27/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 891524  
Address Work Order Number
3. Work Performed by Arizona Public Service Company, et al. Type Code Symbol Stamp None  
Name Authorization No. N/A  
P.O. Box 53999, Phoenix, Arizona 85072-2034 Expiration Date N/A  
Address
4. Identification of System CH, Chemical Volume Control System ASME SEC. III CL 1
5. (a) Applicable Construction Code Section III, CL 1 1974 Edition, W'75 Addenda,      Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Check Valve	Borg Warner	27660	N/A	1PCHNV802	1978	Replaced	Yes

7. Description of Work Replaced the Body to Bonnet Seal Weld for ISI inspection
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 N/A

WO# 891524

## 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]*

ISI ENGINEER  
Owner or Owner's Designee, Title

Date 10/15/99

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-3-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

National Board, State, Province, and Endorsements

Date OCTOBER 15 19 99

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et al. Date 07/28/99  
Name

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

2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 891616  
Address Work Order Number

3. Work Performed by Arizona Public Service Company, et al. Type Code Symbol Stamp None  
Name

P.O. Box 53999, Phoenix, Arizona 85072-2034 Authorization No. N/A  
Address Expiration Date N/A

4. Identification of System CH, Chemical Volume Control System ASME SEC. III CL1

5. (a) Applicable Construction Code Section III, CL1 1974 Edition, W'75 Addenda,        Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Check Valve	Borg Warner	67192	N/A	IPCHNV868	1981	Replaced	Yes

7. Description of Work Replaced the Body to Bonnet Seal Weld for ISI inspection

8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 N/A

WO# 891616

## 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]*

ESI ENGINEER

Owner or Owner's Designee, Title

Date 10-20-99

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 8-3-99 to 10-20-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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

28 9685 "N" "I" Az. 264

National Board, State, Province, and Endorsements

Date

OCTOBER

20

1999

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1PSPAL080 SPOOL S-035 2. Code Class ASME SECTION III CLASS 3
3. Item Description SPOOL S-035 OF 1PSPAL080
4. N-5 Package Number SP01-2 5. W.O. Number 895234
6. Original Construction Code Edition 1974 EDITION & WINTER 1975 ADDENDA
7. Original Installation Code Edition 1974 EDITION & WINTER 1975 ADDENDA
8. Work Description REPLACE SPOOL TO ALLOW ENGINEERING TO DESTRUCTIVELY EXAMINE THE REMOVED SPOOL
9.  ISI Flaw  NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
UNABLE TO EXAMINE THE SPOOL WHILE IN SERVICE, THEREFORE INSTALLING A NEW SPOOL
11. Repair/Replacement Work Organization APS
12. Replacement Item Construction or reconciled Code/Edition 1974 EDITION & 1975 WINTER
13. Repair/Replacement Activity Construction Code/Edition SECTION III, 1974 ED. & 1975 W' ADDENDA
14. ASME Section XI Code/Edition 1992 EDITION, 1992 ADDENDA

15. Preservice Inspection Required.  YES  NO  
N/A N/A If required, include a step in the W.O. to perform Preservice Inspection.  
Initial Date
16. ASME Section XI Pressure Test Required  YES  NO  
DB 09/10/99 If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial Date
- DB 09/10/99 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial Date
- DB 09/10/99 18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
10" PIPE	<u>N/A</u>	<u>N/A</u>	<u>Ry2672</u>	<u>350104-1</u>
10" WN FLANGE	<u>N/A</u>	<u>N/A</u>	<u>DAB9</u>	<u>350104-2</u>
STUDS	<u>C13</u>	<u>N/A</u>	<u>NQY</u>	<u>350104-13</u>
NUTS	<u>C12</u>	<u>N/A</u>	<u>8077124</u>	<u>350104-3</u>

19. Planner David L. Brunson 09/10/99 Print Name David L. Brunson  
Signature Date
20. ISI Engineer Alan Morrison 9/10/99 Print Name Alan Morrison  
Signature Date
21. ANII Alan Morrison 9/10/99 Print Name Alan Morrison  
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 09/10/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00895234  
Address Work Order Number
3. Work Performed by Arizona Public Service Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address

4. Identification of System SP, ASME Section III, Class 3
5. (a) Applicable Construction Code Section III, Class 3 1974 Edition, S'75 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1974 Edition, W'75 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
1-SP-080-S-035	Pullman Power Products	1-SP-080-S-035	N/A	IPSPAL080	1979	Replaced	<u>No</u>

7. Description of Work \_\_\_\_\_
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  Other  Pressure \_\_\_\_\_ psi Test Temp. \_\_\_\_\_ °F

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

# FORM NIS-2 (Back)

9. Remarks WORK ORDER 895234

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## 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]* Date 10-15-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 9-10-99 to 10-15-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 SB 9685 "N" 71" 12 264  
National Board, State, Province, and Endorsements

Date OCTOBER 15 1999



# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1PRCEL063 2. Code Class ASME SECTION III, CL 1  
 3. Item Description REACTOR VESSEL TO STEAM GENERATOR #2 HOT LEG PIPING  
 4. N-5 Package Number 1RC01-4 5. W.O. Number 00899157  
 6. Original Construction Code Edition ASME SECTION III, CLASS 1, 1974, WINTER 1975 ADD.  
 7. Original Installation Code Edition ASME SECTION III, CLASS 1, 1974, WINTER 1975 ADD.

8. Work Description  
Half nozzle repair of pressure measurement nozzle, located on RCS Hot Leg 1PRCEL063 upstream of Root valve 1PRCAV285 and PDT 125A, per DFWO disposition.

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

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
Weld repair needed due to the identification of leakage. Half nozzle replacement will be performed per DFWO 00899157 disposition by welding a ASME Sec. III, Class 2, nozzle, made from SB166 gr. I-690, to the RCS Hot Leg with an ASME Section III, Class 1 weld.

11. Repair/Replacement Work Organization Arizona Public Service  
 12. Replacement Item Construction Code/Edition N/A  
 13. Repair/Replacement Activity Construction Code/Edition ASME Section III, Class 1, 1974, Winter '75 Add.  
 14. ASME Section XI Code/Edition 1992 Edition, 1992 Add.

15. Preservice Inspection Required.  YES  NO  
 If required, include a step in the W.O. to perform Preservice Inspection..

[Signature] 10/13/99  
 Initial Date  
 16. ASME Section XI Pressure Test Required  YES  NO  
 If required, include a step in the W.O. for ISI & ANII Inspection.

[Signature] 10/13/99  
 Initial Date  
 17. Include a step in the W.O. to complete an NIS-2 Form prior to releasing the Component

[Signature] 10/13/99  
 Initial Date  
 18. Include a step in the W.O. to record below, all applicable numbers for repaired or replaced items

COMP ID	PART NO.	SERIAL NO.	HEAT NO.	ROS/EROS NO.
HALE NOZZLE	* N/A	N/A	131968	MR 361332-0002
	*APN 4361-0094			

19. Planner [Signature] 10/13/99 Print Name HEBERT GREEN  
 Signature Date  
 20. ISI Engineer [Signature] 10/13/99 Print Name Alan Morrow  
 Signature Date  
 21. ANII [Signature] 10/13/99 Print Name Robert 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 10/07/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00899157  
Address Work Order Number
3. Work Performed by Arizona Public Service Company Type Code Symbol Stamp None  
Name Authorization No. N/A  
P.O. Box 53999, Phoenix, AZ 85020 Expiration Date N/A  
Address
4. Identification of System Reactor Coolant System, Hot Leg, Line 1PRCEL063, Spool S001.
5. (a) Applicable Construction Code ASME Sec. III 1974 Edition, W'75 Addenda,        Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Reactor Coolant Hot Leg #2	Combustion Engineering	771-501	N/A	1PRCEL063	1978	Repaired	Yes

7. Description of Work Perform ASME, Class 1, weld for half nozzle repair per DFWO 00899157.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 Performed half nozzle repair of the pressure measurement nozzle located in the RCS Hot Leg upstream of instrument root valve 1PRCAV285 and Pressure Differential Transmitter PDT 125A. All repairs performed as directed by DFWO 00899157.

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Alan Morrow Date 10-21-99  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-13-99 to 10-21-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

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

Date OCTOBER 21 1999

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1PRCEL032 2. Code Class ASME SECTION III, CL 1  
 3. Item Description REACTOR VESSEL TO STEAM GENERATOR #1 HOT LEG PIPING  
 4. N-5 Package Number 1RC01-4 5. W.O. Number 00899536  
 6. Original Construction Code Edition ASME SECTION III, CLASS 1, 1974, WINTER 1975 ADD.  
 7. Original Installation Code Edition ASME SECTION III, CLASS 1, 1974, WINTER 1975 ADD.

8. Work Description  
Half nozzle repair of pressure measurement nozzle, located on RCS Hot Leg 1PRCEL032 upstream of Root valve 1PRCAV277 and PDT 115A, per DFWO disposition.

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

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.  
Weld repair needed due to the identification of leakage. Half nozzle replacement will be performed per DFWO 00899536 disposition by welding a ASME Sec. III, Class 2, nozzle, made from SB166 gr. I-690, to the RCS Hot Leg with an ASME Section III, Class 1 weld.

11. Repair/Replacement Work Organization Arizona Public Service  
 12. Replacement Item Construction Code/Edition N/A  
 13. Repair/Replacement Activity Construction Code/Edition ASME Section III, Class 1. 1974. Winter '75 Add.  
 14. ASME Section XI Code/Edition 1992 Edition, 1992 Add.

15. Preservice Inspection Required.  YES  NO  
 If required, include a step in the W.O. to perform Preservice Inspection..

MS 10/13/99  
Initial Date  
 16. ASME Section XI Pressure Test Required  YES  NO  
 If required, include a step in the W.O. for ISI & ANII Inspection.

MS 10/13/99  
Initial Date  
 17. Include a step in the W.O. to complete an NIS-2 Form prior to releasing the Component

MS 10/13/99  
Initial Date  
 18. Include a step in the W.O. to record below, all applicable numbers for repaired or replaced items

COMP ID	PART NO.	SERIAL NO.	HEAT NO.	ROS/EROS NO.
HALF NOZZLE	* N/A	N/A	131968	MR 361332-0002
	*APN 4361-0094			

Planner Herbert Green 10/13/99 Print Name HERBERT GREEN  
Signature Date  
 20. ISI Engineer Alan Morrow 10-13-99 Print Name Alan Morrow  
Signature Date  
 21. ANII R.G. Hogstrom 10-13-99 Print Name R.G. HOGSTROM  
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 10/07/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 00899536  
Address Work Order Number
3. Work Performed by Arizona Public Service Company Type Code Symbol Stamp None  
Name Authorization No. N/A  
P.O. Box 53999, Phoenix, AZ 85020 Expiration Date N/A  
Address
4. Identification of System Reactor Coolant System, Hot Leg, Line 1PRCEL032, Spool S001.
5. (a) Applicable Construction Code ASME Sec. III 1974 Edition, W'75 Addenda, \_\_\_\_\_ Code Case  
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

Name of Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Reactor Coolant Hot Leg #1	Combustion Engineering	771-301	N/A	1PRCEL032	1978	Repaired	Yes

7. Description of Work Perform ASME, Class 1, weld for half nozzle repair per DFWO 00899536.
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 Performed half nozzle repair of the pressure measurement nozzle located in the RCS Hot Leg upstream of instrument root valve 1PRCAV277 and Pressure Differential Transmitter PDT 115A. All repairs performed as directed by DFWO 00899536.

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [Signature] ISE ENGINEER Date 10-22-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-13-99 to 10-22-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Date OCTOBER 22 1999

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1MEWBE01 2. Code Class ASME III Class 3
3. Item Description Essential Cooling Water Heat Exchanger Train B
4. N-5 Package Number 1EW02-1 5. W.O. Number 901641
6. Original Construction Code Edition 1974 Edition & '75 Winter Addenda
7. Original Installation Code Edition 1974 Edition & '75 Winter Addenda
8. Work Description Perform weld Overlay/Buildup of Corrosion Pits in the East and West Channel Heads per the DFWO Disposition.

9.  ISI Flaw NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_

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

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition Section III Class 3 / '74 ED. & '75 W. Add.

13. Repair/Replacement Activity Construction Code/Edition Section III Class 3 / '74 ED. & '75 W. Add.

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

15. Preservice Inspection Required.  YES  NO

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

16. ASME Section XI Pressure Test Required  YES  NO <sup>KVS 10/23/99</sup>

KVS 10/23/99 Initial Date If required, include a step in the W.O. for ISI & ANII Inspection.

KVS 10/23/99 Initial Date 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

N/A N/A Initial Date 18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1MEWBE01	N/A	17606329132	N/A	N/A

19. Planner *Karl V. Savage* Signature 10/23/99 Date Print Name Karl V. Savage
20. ISI Engineer *Alan Morrow* Signature 10/23/99 Date Print Name Alan Morrow
21. ANII *Robert Hogstrom* Signature 10/23/99 Date Print Name Robert Hogstrom

# FORM NIS-2 (Back)

9. Remarks Weld Repair Corrosion Induced Pitting. WO# 901641

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed *Julie [Signature]* ISI Engineer Date 10-27-99  
Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-23-99 to 10-27-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 NB9685 "N" "I" AZ 264  
National Board, State, Province, and Endorsements

Date October 27 1999



## ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID IPCHEV757                      2. Code Class SEC. III CL. 2
3. Item Description 3" DIAPHRAGM VALVE
4. N-5 Package Number 1CH04-3                      5. W.O. Number 902289
6. Original Construction Code Edition ASME SEC III CL2/ '74 EDITION, S '75 ADDENDA
7. Original Installation Code Edition ASME SEC III CL2/ '74 EDITION, W '75 ADDENDA
8. Work Description REPLACED DIAPHRAGM WITH NEW (LIKE FOR LIKE)

9.  ISI Flaw                      NDE Method of Flaw Detection \_\_\_\_\_  
Report Number \_\_\_\_\_

10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
REPLACED DIAPHRAGM WITH NEW (LIKE FOR LIKE)

11. Repair/Replacement Work Organization APS

12. Replacement Item Construction or reconciled Code/Edition ASME SEC III CL2/W '74 EDITION, '75

13. Repair/Replacement Activity Construction Code/Edition ASME SEC III CL2/W '74 EDITION, '75

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

15. Preservice Inspection Required.                       YES     NO

- JSB    10/25/99    If required, include a step in the W.O. to perform Preservice Inspection.  
Initial                      Date

16. ASME Section XI Pressure Test Required     YES     NO

- JSB    10/25/99    If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial                      Date

- JSB    10/25/99    17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial                      Date

- JSB    10/25/99    18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial                      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
IPCHEV757	018993	Valve SN 77-2075-6-4	N/A	MR# 00368121

19. Planner *J. Boulanger*                      10/25/99    Print Name JIM BOULANGER  
Signature                      Date
20. ISI Engineer *Wiley Allstrom*                      10/25/99    Print Name WILEY ALLSTROM  
Signature                      Date
21. ANII *Bob Hogstrom*                      10/25/99    Print Name BOB 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 10/25/99  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address
2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 902289  
Address Work Order Number
3. Work Performed by APS Type Code Symbol Stamp None  
Name Authorization No. N/A  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 Expiration Date N/A  
Address
4. Identification of System CH. ASME SEC. III CL 2
5. (a) Applicable Construction Code SEC. III CL. 2 1974 Edition, '75 W Addenda, 15401 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
DIAPHRAGM	ITT GRINNEL	N/A	N/A	IPCHEV757	1999	Replaced	No

7. Description of Work Replaced diaphragm with new (like for like)
8. Test Conducted: Hydrostatic  Pneumatic  Nominal Operating Pressure  N-416-1   
 Exempt  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 3" Diaphragm replacement

WO# 902289

## 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] ISI ENGINEER

Date 10-26-99

Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-25-99 to 10-26-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be 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 9635 "N" "I" Az. 264

National Board, State, Province, and Endorsements

Date October 26 1999

# ASME SECTION XI - REPAIR/REPLACEMENT

1. Component ID 1PFPEV090      2. Code Class ASME SECT. III CL2 1974w/W75
3. Item Description TACK WELD HINGE SUPPORT TO BONNET
4. N-5 Package Number \_\_\_\_\_      5. W.O. Number 902589
6. Original Construction Code Edition ASME SECT. III CL 2 1974 ED. W 75 ADD.
7. Original Installation Code Edition ASME SECT. III CL 2 1974 ED. W 75 ADD.
8. Work Description TWO UNDER SIZE AND ONE MISSING TACK WELD, REWORK TO DWG. P221B-146

9.  ISI Flaw NO      NDE Method of Flaw Detection \_\_\_\_\_  
 Report Number \_\_\_\_\_
10. Evaluation of the suitability of this work as per the requirements of IAW-4150.  
NO WELD FAILURE INVOLVED

11. Repair/Replacement Work Organization ARIZONA PUBLIC SERVICE
12. Replacement Item Construction or reconciled Code/Edition ASME SECT. III CL 2 1974 ED. W 75 ADD.
13. Repair/Replacement Activity Construction Code/Edition ASME SECT. III CL 2 1974 ED. W 75 ADD.
14. ASME Section XI Code/Edition 1992 EDITION 1992 ADDENDA


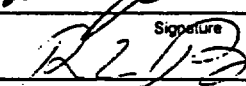
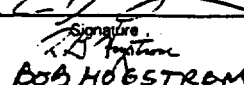
15. Preservice Inspection Required.       YES       NO
- RLB 10-30-99 If required, include a step in the W.O. to perform Preservice Inspection.  
Initial      Date

16. ASME Section XI Pressure Test Required       YES       NO
- RLB 10-30-99 If required, include a step in the W.O. for ISI & ANII Inspection.  
Initial      Date

- AMJ 10-30-99 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.  
Initial      Date

- MA 10-30-99 18. Include a step in the W.O. to record below all applicable numbers for repaired or replaced items.  
Initial      Date

COMP I.D.	PART NO.	SERIAL NO.	HEAT NO.	MR/ROS NO.
1PFPEV090	N/A	N/A	N/A	N/A

19. Planner       10-30-99      Print Name MICHAEL JENKINS  
Signature      Date
20. ISI Engineer       10-30-99      Print Name Robert L. Brown  
Signature      Date
21. ANII PER TELON BOB HOESTROM       10-30-99      Print Name ROBERT HOESTROM  
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 10/30/31  
Name  
P. O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2  
Address

2. Plant Palo Verde Nuclear Generating Station Unit 1  
Name  
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 902589  
Address Work Order Number

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

4. Identification of System Fire Protection

5. (a) Applicable Construction Code ASME III Class 2 1974 Edition, 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 Component	Name of Manufacturer	Manufacturer Serial No.	National Board No.	Other Identification	Year Built	Repaired, Replaced or Replacement	ASME Code Stamped (Yes or No)
Check Valve	Anchor Darling	E6374-4-1	N/A	1PFPEV090	1979 <i>V.R.</i>	Replacement <i>10/31/97</i>	Yes

7. Description of Work REWELD. TACK WELDS TO DWG. CONFIGURATION

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

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

FORM NIS-2 (Back)

9. Remarks WO 902589 ONE MISSING TASK WELD AND TWO UNDERSIZE.

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 Alan Monow Sr ISI Engineer Date 11-1-99  
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSBI & I CO. of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 10-30-99 to 11-1-99, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]  
Inspector's Signature

Commissions NS 9685 "N" "I" 42.264  
National Board, State, Province, and Endorsements

Date 11-1-99 NOVEMBER 1 1999

**ENCLOSURE 2**

**FIRST 10-YEAR ISI INTERVAL**

**SUMMARY REPORT**

**EIGHTH REFUELING OUTAGE**

**PALO VERDE NUCLEAR GENERATING STATION**

**UNIT 1**

**PALO VERDE NUCLEAR GENERATING STATION**

**UNIT 1**

**FIRST INTERVAL  
INSERVICE INSPECTION  
SUMMARY REPORT**

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

PREPARED BY: *Lucy Kotut* DATE: 1/21/00  
REVIEWED BY: *Willy White* DATE: 1-25-00  
APPROVED BY: *Michael Melton* DATE: 1/27/00

COMMERCIAL SERVICE DATE: 01/28/86  
REPORT DATE: 01/21/00



## TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 INTRODUCTION .....	3
2.0 EXAMINATION SUMMARY .....	3
3.0 EXAMINATION TECHNIQUES .....	4
4.0 ACCESSIBILITY .....	4
5.0 PERSONNEL .....	4
6.0 EQUIPMENT AND MATERIALS .....	4
7.0 REPAIRS AND REPLACEMENTS .....	5

## APPENDICES

<u>APPENDIX</u>	<u>PAGE</u>
APPENDIX A - Inservice Inspection Summary Report .....	6
APPENDIX B - Inservice Inspection Code Limitations .....	63
APPENDIX C - Form NIS-1 .....	65

# UNIT 1 INSERVICE INSPECTION REPORT

## 1.0 Introduction

- 1.1 This report is a summary of the examinations performed during the Eighth Inservice Inspection (ISI) at the Palo Verde Nuclear Generating Station (PVNGS) Unit 1. This report also includes all applicable examinations conducted since the last summary report. Reactor Vessel Exams and Reactor Head Vent System pressure tests were conducted during the eighth refueling outage from October 2, 1999 through November 9, 1999 to complete the First Interval, Period 3 examination requirements. The deferral of first interval reactor vessel exams was approved for Relief Request No. 10, Ref: NRC letter dated October 16, 1997 from W. H. Bateman to J. M. Levine, "Examinations First Ten-Year Inservice Inspection Interval (Relief Request No. 10) for the Palo Verde Nuclear Generating Station, Unit 1, TAC No. M99104". The deferral of pressure tests of the Reactor Head Vent System was submitted in Relief Request No. 11, Ref: APS letter dated July 16, 1999 from W. E. Ide to U. S. NRC, Docket No. STN 50-528. Palo Verde Unit 1 began commercial operation on January 28, 1986.
- 1.2 This report identifies the components examined, the examination methods used, the examination report numbers, and summarizes the examination results for each of the following categories:
  1. ASME Section XI, Class 1 and 2 pressure retaining components and their supports.
  2. Augmented High Energy Piping systems in accordance with PVNGS UFSAR Section 6.6.8.
  3. Augmented examinations of Class 2 Safety Injection Piping systems in accordance with 10 CFR 50.55a.
- 1.3 This report is a compilation of the First Interval Period 1, Period 2 and Period 3 ISI examinations, excluding those for ASME Class 3 components and systems. All of the examination report numbers listed in Appendix A for the Eighth Refueling and examinations performed since the last Summary Report are numbered with 98-1XXX or 99-1XXX and are in bold type.

## 2.0 Examination Summary

- 2.1 The evaluation of the results from the ISI examinations indicated the integrity of the systems have been maintained. There were no rejectable or abnormal indications found during this ISI inspection activity.
- 2.2 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:

<b>VT - Visual</b>	<b>VT-1</b>	<b>General Condition</b>
	<b>VT-2</b>	<b>Leakage</b>
	<b>VT-3</b>	<b>Structural Condition</b>
	<b>VT-4</b>	<b>Operability</b>
<b>S - Surface</b>	<b>PT</b>	<b>Liquid Penetrant</b>
	<b>MT</b>	<b>Magnetic Particle</b>
	<b>ET</b>	<b>Eddy Current</b>
<b>VOL - Volumetric</b>	<b>UT</b>	<b>Ultrasonic</b>
	<b>RT</b>	<b>Radiographic</b>

**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. Any code limitations encountered during the examination are documented in Appendix B.

### **5.0 Personnel**

**5.1** All nondestructive examinations were performed by Arizona Public Service Co. (APS), MQS Inspection, Inc. (MQS), Lambert, MacGill, Thomas, Inc. (LMT), Anatec or WesDyne International personnel. 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. The Hartford Steam Boiler Inspection and Insurance Company provided the Authorized Nuclear Inservice Inspector (ANII).

### **6.0 Equipment and Materials**

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

**7.0 Repairs and Replacements**

**7.1 There were no rejectable or abnormal indications noted during this ISI activity.**

**APPENDIX A**

**INSERVICE INSPECTION  
SUMMARY REPORT**

## APPENDIX A

### Definition of Terms

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

ASME Item No -	The ASME Section XI Category/Item Numbers are listed in the Code, Subsections IWB and IWC. The item number prefixes are defined below:
	AHE - Augmented high energy systems piping
	B - ASME Class 1 systems
	BFLYWH - Reactor coolant pump flywheels
	BIWF - ASME Class 1 supports
	C - ASME Class 2 systems
	CIWF - ASME Class 2 supports
	FR - 10 CFR 50 augmented examinations
Zone No -	Area designation per PVNGS design
Comp/Sys -	Component or system description
Insp Per -	Inspection period
Amt Reqd -	Number of items <i>required</i> to be completed in the period
Amt Comp -	Number of <i>required</i> items completed
Item ID -	Item identification per ISI program/zone drawings
Reports (VOL) -	Volumetric exam report number
(SURF) -	Surface exam report number
(VIS) -	Visual exam report number
Remarks -	Re-exam or replacement remarks indicate acceptable examination results

## Definition of terms continued

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

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

ASME Item no	Zone Comp/sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
AHE5.11 & AHE 5.12	51 Bypass V180	Two	20	20	51-101	92-1391	92-1360		
					51-102	92-1392	92-1360		
					51-103	92-1393	92-1360		
					51-104	92-1394	92-1360		
					51-105	92-1395	92-1360		
					51-106	92-1396	92-1360		
					51-107	92-1397	92-1360		
					51-108	92-1398	92-1360		
					51-109	92-1399	92-1360		
					51-110	92-1400	92-1360		
					51-111	92-1401	92-1360		
					51-112	92-1402	92-1360		
					51-113	92-1403	92-1360		
					51-114	92-1404	92-1360		
					51-115	92-1405	92-1360		
					51-116	92-1406	92-1360		
					51-117	92-1407	92-1360		
					51-118	92-1408	92-1360		
					51-119	92-1409	92-1360		
					51-120	92-1410	92-1360		
52 Atmos. Dump No. 2		Three	21	21	52-101	95-1396	95-1357		
					52-102	95-1397	95-1357		
					52-103	95-1398	95-1357		
					52-104	95-1399	95-1357		
					52-105	95-1400	95-1357		
					52-106	95-1401	95-1357		
					52-107	95-1402	95-1357		
					52-108	95-1403	95-1357		
					52-109	95-1404	95-1357		
					52-110	95-1405	95-1357		
					52-111	95-1406	95-1357		
					52-111A	95-1407	95-1357		
					52-112	95-1408	95-1357		
					52-113	95-1409	95-1357		
					52-114	95-1410	95-1357		
					52-115	95-1411	95-1357		
					52-116	95-1412	95-1357		
					52-117	95-1413	95-1357		
					52-118	95-1414	95-1357		
					52-119	95-1415	95-1357		
52-120	95-1416	95-1357							
53 Steam to Aux FW		One	10	10	53-11	87-1415	87-1381		
					53-12	87-1416	87-1381		
					53-13	87-1417	87-1381		
					53-14	87-1418	87-1381		
					53-15	87-1419	87-1381		
					53-21	87-1420	87-1381		
					53-22	87-1421	87-1381		
					53-23	87-1422	87-1381		
53-24	87-1423	87-1381							



**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
AHE 5.21 & 5.22	47 MS SG1 West		Two	9	9	53-25	87-1424	87-1381		
						53-1	92-1438	92-1382		
						53-2	92-1439	92-1414		
						53-4	92-1440	92-1414		
						53-5	92-1441	92-1414		
						53-6	92-1442	92-1414		
						53-7	92-1443	92-1414		
						53-8	92-1444	92-1414		
						53-9	92-1445	92-1414		
						53-10	92-1446	92-1414		
			Three	9	9	53-26	95-1308	95-1215		
						53-27	95-1309	95-1215		
						53-28	95-1310	95-1215		
						53-29	95-1311	95-1215		
						53-30	95-1312	95-1215		
						53-31	95-1313	95-1215		
						53-32	95-1314	95-1215		
						53-34	95-1315	95-1215		
						53-35	95-1316	95-1215		
						47-1	87-1413	87-1374		
						47-2	87-1414	87-1374		
						47-4	87-1440	87-1374		
						47-8	87-1441	87-1374		
						47-12	87-1442	87-1374		
						47-14A	87-1382	87-1373		
			47-16	87-1443	87-1373					
			47-20	87-1444	87-1373					
			47-24	87-1385	87-1396					
			47-25	87-1386	87-1373					
			47-28	87-1391	87-1373					
			47-29	87-1392	87-1373					
			47-30	87-1387	87-1373					
			Two	0	0	47-4	93-1325	93-1177		
						47-8	93-1324	93-1177		
						47-12	93-1323	93-1177		
47-16	93-1322	93-1177								
47-20	93-1321	93-1177								
48 MS SG1 East		Two	13	13	48-1	92-1415	92-1380			
					48-2	92-1416	92-1380			
					48-4	92-1417	92-1380			
						93-1320	93-1180			
					48-8	92-1418	92-1380			
						93-1319	93-1180			
					48-12	92-1419	92-1380			
						93-1318	93-1180			
					48-14A	92-1420	92-1380			
					48-16	92-1421	92-1359			
	93-1317	93-1180								
	48-20	92-1422	92-1359							
	93-1316	93-1180								
	48-24	92-1423	92-1381							

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
					48-25	92-1437 92-1424	92-1381 92-1474		Reject (surf) Re-exam
					48-28	92-1452	92-1380		
					48-29	92-1453	92-1380		
					48-30	92-1427	92-1380		
	49 MS SG2 East	Two	0	0	49-4	93-1283	93-1179		
					49-8	93-1282	93-1179		
					49-12	93-1281	93-1179		
					49-16	93-1280	93-1179		
					49-20	93-1279	93-1179		
		Three	13	13	49-1	95-1285	95-1270		
					49-2	95-1286 95-1287	95-1271		
						95-1288	95-1336		Reject (surf)
							95-1338		Re-exam
							96-1529		Re-exam (long seam)
					49-4	95-1347	95-1271		
					49-8	95-1348	95-1271		
					49-12	95-1349	95-1271		
					49-14A	95-1274	95-1272		
						95-1275	95-1273		
					49-16	95-1350	95-1271		
					49-20	95-1351	95-1271		
					49-24	95-1279	95-1272		
						95-1280	95-1271		
					49-25	95-1281	95-1272		
					49-28	95-1363	95-1271		
					49-29	95-1364	95-1271		
					49-30	95-1283	95-1272		
	50 MS SG2 West	Two	0	0	50-4	93-1278	93-1176		
					50-8	93-1277	93-1176		
					50-12	93-1276	93-1176		
						93-1409			
					50-16	93-1275	93-1176		
					50-20	93-1274	93-1176		
		Three	13	13	50-1	95-1376	95-1297		
						95-1377	95-1297		
					50-2	95-1378	95-1297		
						95-1379	95-1297		
					50-4	95-1352	95-1297		
					50-8	95-1353	95-1297		
					50-12	95-1354	95-1297		
					50-14A	95-1383	95-1297		
						95-1384	95-1297		
					50-16	95-1355	95-1297		
					50-20	95-1356	95-1297		
					50-24	95-1299	95-1298		
						95-1300	95-1298		
					50-25	95-1301	95-1298		
					50-28	95-1358	95-1297		

**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 Atmos Dump SG 1		One	13	13	50-29	95-1359	95-1297					
					50-30	95-1302	95-1298					
					51-1	87-1393	87-1377					
					51-2	87-1399	87-1378					
					51-3	87-1394	87-1378					
					51-4	87-1395	87-1378					
					51-5	87-1400	87-1378					
					51-6	87-1401	87-1380					
					51-7	87-1402			MT inaccessible			
					51-8A	87-1403			MT inaccessible			
					51-8B	87-1404	87-1380					
					51-9	87-1405	87-1380					
					51-51	87-1406	87-1397					
		51-84	89-1013	89-1021		PSE/Block valve						
		51-85	89-1014	89-1021		PSE/Block valve						
		51-86	89-1015	89-1021		PSE/Block valve						
		51-87	89-1016	89-1021		PSE/Block valve						
		Two	14	14	51-26	92-1454	92-1357					
					51-27	92-1455	92-1357					
					51-28	92-1456	92-1451					
					51-29	92-1457	92-1451					
					51-30	92-1458	92-1357					
					51-31	92-1459	92-1357					
					51-32	92-1460	92-1357					
					51-33	92-1461	92-1357		Reject (surf)			
							92-1449		Re-exam			
					51-34	92-1462	92-1357					
					51-37	92-1465	92-1357					
					51-49	92-1466	92-1357					
					51-86	92-1467	92-1357					
					51-87	92-1468	92-1357					
					51-88	92-1469	92-1357					
					52 Atmos Dump SG 2		One	0	0	52-84	89-1017	89-1021
52-85	89-1018									89-1021		PSE/Block valve
52-86	89-1019	89-1021		PSE/Block valve								
52-87	89-1020	89-1012		PSE/Block valve								
Three	29	29	52-1	95-1360			95-1307					
			52-2	95-1386			95-1307					
			52-3	95-1387			95-1303					
			52-4	95-1388			95-1307					
			52-5	95-1389			95-1307					
			52-6	95-1390			95-1307					
52-7	95-1518	95-1442										
52-8	95-1519	95-1442										
52-9	95-1391	95-1307										
52-10	95-1392	95-1307										
52-27	95-1365	95-1307										
		96-1512										
52-28	95-1366	95-1307										
52-29	95-1520	95-1442										
52-30	95-1521	95-1442										

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
						52-31	95-1367	95-1307		
						52-32	95-1368	95-1307		
						52-33	95-1369	95-1304		
						52-34	95-1370	95-1307		
						52-35	95-1393	95-1307		
						52-36		95-1307		
							98-1021	98-1022		
						52-37		95-1305		
								95-1307		
							98-1023	98-1022		
						52-38	95-1371	95-1305		
								95-1307		
						52-50	95-1394	95-1307		
						52-52	95-1372	95-1306		Reject (surf)
								95-1337		Re-exam
								96-1512		Re-exam
						52-84	95-1361	95-1307		
						52-85	95-1362	95-1307		
						52-86	95-1373	95-1307		
						52-87	95-1374	95-1307		
						52-88	95-1375	95-1307		
56 FW SG 1			One	5	5	56-1	92-1504	92-1497		
						56-3	92-1505	92-1497		
						56-4	92-1506	92-1497		
						56-6	92-1507	92-1497		
						56-7	92-1508	92-1497		
			Two	2	2	56-9	92-1502	92-1496		
								92-1497		
						56-11	92-1503	92-1496		
57 FW SG 2			Three	7	7	57-1	96-1559	96-1530		
						57-3	96-1560	96-1530		
						57-4	96-1561	96-1530		
						57-6	96-1555	96-1530		
						57-7	96-1556	96-1530		
						57-9	96-1557	96-1530		
						57-11	96-1558	96-1530		
60 Downcomer FW SG 1			One	9	9	60-7	87-1425	87-1398		
						60-8	87-1426	87-1398		
						60-9	87-1427	87-1364		
						60-11	87-1428	87-1364		
						60-12		87-1364		UT inaccessible
						60-14	87-1429	87-1364		
						60-15	87-1430	87-1364		
						60-16	87-1431	87-1364		
						60-17	87-1432	87-1364		
			Two	5	5	60-2	92-1491	92-1499		
						60-3	92-1492	92-1499		
						60-4	92-1493	92-1499		
						60-5	92-1494	92-1499		
						60-6	92-1495	92-1499		
61 Downcomer FW SG 2			Two	5	5	61-2	92-1367	92-1358		

**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
					61-3	92-1368	92-1358		Reject (surf)
							92-1450		Re-exam
					61-4	92-1369	92-1358		Reject (surf)
							92-1450		Re-exam
					61-5	92-1370	92-1358		Reject (surf)
							92-1450		Re-exam
					61-6	92-1371	92-1358		
		Three	9	9	61-7	95-1318	95-1261		
					61-8	95-1319	95-1261		
					61-9	95-1320	95-1261		
					61-11	95-1580	95-1515		
					61-12	95-1581	95-1261		
							95-1515		
					61-14	95-1321	95-1261		
					61-15	95-1322	95-1261		
					61-16	95-1323	95-1261		
					61-17	95-1324	95-1261		
	66 Blowdown SG1	One	9	9	66-1	87-1370	87-1366		
					66-2	87-1407	87-1366		
					66-3		87-1366		UT Inaccessible
					66-5	87-1408	87-1366		
					66-6	87-1409	87-1366		
					66-7	87-1410	87-1366		
					66-8	87-1411	87-1366		
					66-9	87-1412	87-1366		
					66-26	87-1371	87-1366		
		Two	6	6	66-10	93-1329	93-1220		
					66-11	93-1330	93-1220		
					66-12	93-1331	93-1220		
					66-13	93-1332	93-1220		
					66-14	93-1333	93-1220		
					66-15	93-1334	93-1220		
	67 Blowdown SG2	Two	6	6	67-7	93-1335	93-1221		
					67-8	93-1340	93-1221		
					67-9	93-1336	93-1221		
					67-10	93-1337	93-1221		
					67-11	93-1338	93-1221		
					67-12	93-1339	93-1221		
		Three	6	6	67-1	95-1263	95-1262		
					67-2	95-1264	95-1262		
					67-3	95-1265	95-1262		
					67-3A		99-1024		
					67-5	95-1266	95-1262		
					67-6	95-1267	95-1262		
AHE 5.31 & AHE 5.32	47 MS SG1 West	One	7	7	47-3	87-1388	87-1374		
					47-7	87-1389	87-1374		
					47-11	87-1390	87-1374		
					47-15	87-1438	87-1373		
					47-19	87-1383	87-1373		
					47-23	87-1384	87-1373		
					47-27	87-1439	87-1373		

**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
	48 MS SG1 East	Two	9	9	48-3	92-1428	92-1380		
					48-7	92-1429	92-1380		
					48-11	92-1430	92-1380		
					48-15	92-1431	92-1359		
					48-19	92-1432	92-1359		
					48-23	92-1433	92-1359		
							92-1380		
					48-27	92-1434	92-1380		
					48-34	92-1435	92-1380		
					48-35	92-1436	92-1380		
	49 Main Steam SG 2 East	Three	9	9	49-3	95-1289	95-1271		
					49-7	95-1290	95-1271		
					49-11	95-1291	95-1271		
					49-15	95-1276	95-1271		
					49-19	95-1277	95-1271		
					49-23	95-1278	95-1271		
					49-27	95-1282	95-1271		
					49-34	95-1292	95-1271		
					49-35	95-1284	95-1271		
	50 Main Steam SG 2 West	Three	7	7	50-3	95-1380	95-1297		
					50-7	95-1381	95-1297		
					50-11	95-1382	95-1297		
					50-15	95-1293	95-1297		
					50-19	95-1294	95-1297		
					50-23	95-1295	95-1297		
					50-27	95-1385	95-1297		
B 1.110	01 Reactor Vessel	Three	3	3	1-2	*			* Separate report by WesDyne
					1-6	*			
					1-10	*			
B 1.120	01 Reactor Vessel	Three	9	9	1-3	*			
					1-4	*			
					1-5	*			
					1-7	*			
					1-8	*			
					1-9	*			
					1-11	*			
					1-12	*			
					1-13	*			
B 1.22	02 Closure Head	One	33%	33%	2-4	87-1603	87-1598		
						87-1604			
						87-1605			
		Two	33%	33%	2-4	93-1141	93-1114		
						93-1142			
						93-1143			
		Three	34%	34%	2-4	95-1342			
						95-1344			
						95-1346			
B 1.30	01 Reactor Vessel	One	50%	50%	1-14	92-1331			
						92-1332			
						92-1333			
		Three	100%	100%	1-14	*			

## 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	
B 1.40	02 Closure Head	One	33%	33%	2-1	87-1603	87-1598			
						87-1604				
		Two	33%	33%	2-1	87-1605	93-1138	93-1114		
					93-1139					
		Three	34%	34%	2-1	93-1140	95-1341	95-1395		
						95-1343				
B 2.11	05 PZR	One	33%	33%	5-2	89-1190				
B 2.12							89-1191			
							89-1192			
					5-8	89-1188				
						89-1199				
			Two	33%	33%	5-2	89-1200			
							93-1135			
							93-1136			
							93-1137			
						5-8	93-1230			
							93-1231			
						5-6	93-1232			
							93-1233			Long seam weld for 5-8, 1 ft. min.
		Three	33%	33%	5-2	93-1234				
						93-1235				
						96-1263				
						96-1264				
						96-1265				
					5-3	98-1059			Long seam weld for 5-2, 1 ft. min.	
						98-1060				
						98-1061				
					5-8	96-1361				
						96-1362				
						96-1363				
						98-1062				
						98-1063				
						98-1064				
B 2.31	03 SG1	One	1	1	3-5	89-1222				
						89-1216				
		Two	1	1	3-2	89-1210				
						93-1023				
						93-1024				
		Three	2*	2*	3-17	93-1025				
						96-1381			*Stay Cylinder Exam	
						96-1384				
						96-1387				
					3-18	96-1382				
						96-1385				
						96-1388				
	04 SG2	One	1	1	4-2	89-1146				
						89-1147				
						89-1148				

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
B 2.32	03 SG1		Two	1	1	4-5	93-1038			
							93-1039			
							93-1040			
			Three	2*	2*	4-17	96-1484			*Stay Cylinder Exam
							96-1487			
							96-1490			
							4-18	96-1483		
								96-1486		
								96-1489		
								89-1224		
								89-1218		
						89-1212				
						3-11	89-1225			
							89-1219			
							89-1213			
						3-12	89-1226			
							89-1220			
							89-1214			
						3-13	89-1227			
							89-1221			
							89-1215			
				Two	1	1	3-4	93-1020		
							93-1021			
						93-1022				
			Three	1	1	3-3	96-1204			
						96-1206				
						96-1208				
	04 SG2		Two	5	5	4-4	93-1031			
							93-1032			
							93-1033			
							4-10	93-1038		
								93-1039		
								93-1040		
							4-11	93-1038		
								93-1039		
								93-1040		
							4-12	93-1038		
								93-1039		
						93-1040				
					4-13	93-1038				
						93-1039				
						93-1040				
			Three	1	1	4-3	96-1210			
						96-1213				
						96-1215				
B 2.40	03 SG1		One	1	1	3-6	89-1223			
							89-1217			
							89-1211			
			Three	1*	1*	3-19	96-1383		*Stay Cylinder Exam	
					96-1386					
					96-1389					



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
	04 SG2	Two	1	1	4-6	93-1035 93-1036 93-1037			
		Three	1*	1*	4-19	96-1482 96-1485 96-1488			*Stay Cylinder Exam
B 3.90	01 Reactor Vessel	One	2	2	1-15 1-18	89-W* 89-W*			* Seperate Report by Westinghouse
		Three	4	4	1-16 1-17 1-19 1-20	** ** ** **			**Separate report by Wesdyne
B 3.100	01 Reactor Vessel	One	2	2	1-15 1-18	89-W* 89-W*			
		Three	4	4	1-16 1-17 1-19 1-20	** ** ** **			
B 3.110	05 Pressurizer	One	2	2	5-11	89-1189 89-1201 89-1202			
					5-9	89-1236 89-1237 89-1238			
		Two	2	2	5-10	93-1224 93-1225 93-1226			
					5-13	93-1227 93-1228 93-1229			
		Three	2	2	5-12	98-1065 98-1066 98-1067			
					5-14	98-1068 98-1069 98-1070			
B 3.120	05 Pressurizer	One	2	2	5-11 5-9	89-1234 89-1235			Nozzle Inner Radius Nozzle Inner Radius
		Two	2	2	5-10 5-13	93-1237 93-1236			Nozzle Inner Radius Nozzle Inner Radius
		Three	2	2	5-10	95-1226 95-1224 95-1225			Nozzle Inner Radius Nozzle Bore Nozzle Bore
					5-12 5-14	96-1301 96-1302			Nozzle Inner Radius Nozzle Inner Radius
B 3.130	03 Steam Generator 1	One	1	1	3-9	89-1163 89-1164			
		Two	1	1	3-7	93-1017 93-1018 93-1019			
		Three	1	1	3-8	96-1205			

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
						96-1207			
	04 Steam Generator 2	One	1	1	4-9	96-1209 89-1149 89-1150 89-1151			
		Two	1	1	4-7	93-1028 93-1029 93-1030			
		Three	1	1	4-8	96-1214 96-1216 96-1211			
B 3.140	03 Steam Generator 1	One	1	1	3-9	89-1182			Nozzle Inner Radius
		Two	1	1	3-7	93-1009			Nozzle Inner Radius
		Three	1	1	3-8	96-1222			Nozzle Inner Radius
	04 Steam Generator 2	One	1	1	4-9	89-1183			Nozzle Inner Radius
		Two	1	1	4-7	93-1010			Nozzle Inner Radius
		Three	1	1	4-8	96-1221			Nozzle Inner Radius
B 4.12	02 Closure Head	One	8	8	CEDM			90-1032	
		Two	8	8	CEDM			92-1558	
		Three	9	9	CEDM			95-1579	
B 4.13	01 Reactor Vessel	One	5	5	ICI			90-1032	
		Two	5	5	ICI			92-1558	
		Three	6	6	ICI			95-1579	
B 4.20	05 PZR	One	3	3	HTRS			90-1032	
		Two	3	3	HTRS			92-1558	
		Three	3	3	HTRS			95-1579	
B 5.40	20 PZR Surge	One	1	1	5-34	89-1233	89-1073		
	29 PZR Spray	Two	1	1	5-33	93-1202	93-1105		
						93-1222			
						93-1368*			*RT Supplemental
	31 PZR Safeties	One	1	1	5-29	87-1584	87-1526		
		Two	1	1	5-31	93-1197	93-1104		
		Three	2	2	5-30	98-1056	96-1036		
					5-32	98-1055	96-1036		
B 5.130	20 PZR Surge	Three	1	1	6-4	96-1303	96-1244		
						96-1518			
	21 Shutdown Cooling 1	One	1	1	6-11	89-1186	89-1170		
	22 Shutdown Cooling 2	Two	1	1	7-9	93-1095	93-1106		
						93-1096			
	23 Safety Injection 1A	One	1	1	9-10	89-1205	89-1107		
	24 Safety Injection 1B	Three	1	1	11-10	95-1026	95-1024		
	25 Safety Injection 2A	Two	1	1	13-10	93-1047	93-1008		
						93-1048			
	26 Safety Injection 2B	Three	1	1	15-9	95-1027	95-1025		
B 5.140	27 PZR Spray 1A	One	1	1	9-11	90-1020	89-1108		
	28 PZR Spray 1B	Two	1	1	11-11		93-1395		
	32 Drain Line 1A	One	1	1	8-18		87-1546		
	33 Drain Line 1B	Two	1	1	10-18		92-1316		
	34 Drain Line 2A	Three	1	1	12-18		95-1032		
	36 Letdown Line	Three	1	1	14-18		96-1308		
	37 Charging Line	Two	1	1	13-11	93-1369*	93-1102		*RT Supplemental

**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
B 6.10	02 Closure Head Nuts	Three	0	0	13-11	98-1081	98-1080		IN 97-19
		One	18	18	1 thru 18		89-1042 89-1045		
		Two	18	18	19 thru 36	92-1373	92-1365 92-1480		PSE #25
B 6.30	02 Closure Head Studs	Three	18	18	37 thru 54		95-1419		
		One	18	18	1 thru 18	89-1034	89-1041 89-1044		
		Two	18	18	19 thru 36	92-1372	92-1364 92-1363 92-1544 92-1543		PSE #8
B 6.40	01 Reactor Vessel Flange	Three	18	18	37 thru 54	95-1339	95-1433		
		Three	54	54	1 thru 54	98-1035	*		* Separate report by WesDyne
B 6.50	02 Closure Head Washers	One	18	18	1 thru 18			89-1043	
		Two	18	18	19 thru 36			92-1366 92-1481	PSE #25
B 6.180	16 RCP 1A Flange Studs	Three	18	18	37 thru 54			95-1340	
		One	5	5	1 thru 16	87-1640	87-1633	87-1632	Visual/IEB 82-02
								89-1010 89-1011	
		Two	5	5	1 thru 16	93-1187		93-1158	
		Three	6	6	1 thru 16	96-1276	96-1273		
						96-1323	96-1321		
						96-1324	96-1322	96-1605	
					1 thru 16			98-1024	
	17 RCP 1B Flange Studs	One	5	5	1 thru 16	86-185	86-186		PSE
						87-1641	87-1619	87-1618	Visual/IEB 82-02
							87-1634	87-1635	Visual/IEB 82-02
								89-1010	
								89-1011	
		Two	5	5	1 thru 16	93-1188		93-1160	
		Three	6	6	1 thru 16	96-1278	96-1275		
						96-1323	96-1321		
						96-1324	96-1322	96-1606	
					1 thru 16			98-1024	
	18 RCP 2A Flange Studs	One	5	5	1 thru 16	87-1642	87-1613	87-1614	Visual/IEB 82-02
								89-1010	
								89-1011	
		Two	5	5	1 thru 16	93-1189		93-1159	
		Three	6	6	1 thru 16	96-1277	96-1274		
						96-1323	96-1321		
						96-1324	96-1322	96-1607	
					1 thru 16			98-1024	
	19 RCP 2B Flange Studs	One	5	5	1 thru 16	87-1643	87-1616	87-1617	Visual/IEB 82-02
								89-1010	
								89-1011	
		Two	5	5	1 thru 16	93-1190		93-1161	
		Three	6	6	1 thru 16		96-1023	96-1024	
								96-1022	PSE-Visual
								96-1315	

**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	
B 6.190	RCP Flange 16,17,18,19	One	1	1	1 thru 16	98-1034		96-1608		
		Three	1	1	RCP 1A		98-1024			
			1	1	RCP 1A		89-1033			
			1	1	RCP 1B		96-1316			
			1	1	RCP 2A		96-1317			
			1	1	RCP 2B		96-1318			
			1	1	RCP 1A		96-1025			
			1	1	RCP 1B		98-1032			
			1	1	RCP 2A		98-1032			
			1	1	RCP 2B		98-1032			
B 6.200	16 RCP 1A Nuts & Rings	One	5	5	1 thru 16			87-1539		
		Two	5	5	1 thru 16			93-1158		
		Three	6	6	1 thru 16			96-1312		
	17 RCP 1B Nuts & Rings	One	5	5	1 thru 16			98-1054		
		Two	5	5	1 thru 16			87-1540		
		Three	6	6	1 thru 16			93-1160		
	18 RCP 2A Nuts & Rings	One	5	5	1 thru 16			96-1313		
		Two	5	5	1 thru 16			98-1054		
		Three	6	6	1 thru 16			87-1541		
	19 RCP 2B Nuts & Rings	One	5	5	1 thru 16			93-1159		
		Two	5	5	1 thru 16			96-1314	Nuts only	
		Three	6	6	1 thru 16			96-1320	Ring only	
B 7.20	05 PZR Manway Studs & Nuts	One	20	20	20 pairs			98-1054		
		Two	20	20	20 pairs		90-1029	90-1031		
		Three	20	20	20 pairs		92-1489	92-1490	Reject (1 nut)	
								92-1528	PSE (1 nut)	
								95-1509		
								96-1027		
								96-1357		
						20 studs		98-1030	98-1026	MT incl. nuts
						40 pairs		87-1594	87-1592	
									87-1611	
									87-1615	
		B 7.30	03 SG 1 Manway Studs & Nuts	One	40	40	40 pairs			89-1009
Two	40			40	40 pairs		92-1476	92-1478	Reject (2 studs)	
Three	40			40	40 pairs		92-1488	92-1487	PSE (2 studs)	
								93-1162		
								95-1268		
								96-1319		
						40 studs		98-1028	98-1026	MT incl. nuts
						1 stud			98-1071	PSE (1 stud)
04 SG 2 Manway Studs & Nuts	One			40	40	40 pairs		87-1595	87-1593	
									89-1009	
									89-1022	

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

ASME Item no	Zone Comp/sys	Insp Per	Amt Req	Amt Comp	Item ID	Vol	Reports Surf	Visual	Remarks
		Two	40	40	40 pairs		92-1477	92-1479	
		Three	40	40	39 pairs 1 pair			93-1163 95-1269 95-1296 96-1319	PSE
B 7.50	31 PZR PSV Studs & Nuts	One	1	1	40 studs PSV200		98-1029 87-1590	98-1026 87-1589	MT incl. nuts
								87-1637 87-1638 87-1639 88-1008 91-1001	
					PSV201		87-1590	87-1589 88-1008 91-1001 91-1040	
					PSV202		87-1590	87-1589 88-1008 90-1034 91-1001	
					PSV203		87-1590 87-1591	87-1589 88-1008 90-1034 91-1040	
		Two	1	1	PSV200		92-1470 92-1482	92-1384 92-1527 93-1164	PSE (1 stud)
					PSV201		92-1471	92-1385 93-1164	
					PSV202		92-1472 92-1482	92-1386	Reject (1 nut)
								92-1527 93-1164	PSE (2 nuts)
					PSV203		92-1473 92-1482	92-1387	Reject (1 nut)
								92-1527 93-1164	PSE (2 nuts)
		Three	2	2	PSV 200			93-1165 95-1431 95-1432 95-1435 96-1531	PSE (1 stud & 2 Nuts) Reject PSE PSE
					PSV 201		98-1031	98-1025 95-1431 95-1432 96-1531	Reject PSE
					PSV 202		98-1031	98-1025 95-1431 95-1432 96-1531	Reject PSE
							98-1031	98-1025	

**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
					PSV 203			95-1431 95-1432 96-1531	Reject PSE
							98-1031	98-1025	
B 7.60	37 Charging Line Flange	One	1	1	V435			87-1576	
	16 RCP 1A Seal Cover	One	5	5	1 thru 16			87-1539	
	Bolting	Two	5	5	1 thru 16	93-1185		93-1158	
		Three	6	6	1 thru 16			95-1539	
	17 RCP 1B Seal Cover	One	5	5	1 thru 16			87-1540	
	Bolting	Two	5	5	1 thru 16	93-1184		93-1160	
		Three	6	6	1 thru 16			95-1539	
	18 RCP 2A Seal Cover	One	5	5	1 thru 16			87-1541	
	Bolting	Two	5	5	1 thru 16	93-1183		93-1159	
		Three	6	6	1 thru 16			95-1539	
	19 RCP 2B Seal Cover	One	5	5	1 thru 16			87-1542	
	Bolting	Two	5	5	1 thru 16	93-1182		93-1161	
	Three	6	6	1 thru 16			95-1539		
								96-1022	PSE
								96-1029	PSE
B 7.70	21 Shutdown Cooling Loop 1	One	1	1	UV653			87-1601	
		Three	1	1	UV651			96-1060	
	22 Shutdown Cooling Loop 2	One	1	1	UV654			89-1074	
		Two	1	1	UV652			93-1152	
		Three	0	0	UV652			96-1061	
	23 Safety Injection 1A	One	1	1	V237			89-1106	
		Two	2	2	V235			93-1155	
					UV634			93-1156	
		Three	1	1	V542			96-1062	
	24 Safety Injection 1B	One	1	1	V543			87-1467	
		Two	2	2	V245			93-1151	
					UV644			93-1150	
		Three	1	1	V247			96-1600	
	25 Safety Injection 2A	One	1	1	V540			87-1469	
		Two	1	1	V217			93-1034	
		Three	2	2	UV614			96-1063	
					V215			96-1063	
	26 Safety Injection 2B	One	1	1	V225			87-1472	
		Two	2	2	V541			93-1154	
					UV624			93-1153	
		Three	1	1	V227			96-1603	
	27 PZR Spray 1A	Two	1	1	PV100E			93-1383	
		Three	2	2	V240			96-1358	
					V243			96-1360	
	28 PZR Spray 1B	One	2	2	V241			87-1575	
					V242			87-1575	
		Two	1	1	PV100F			93-1384	
	29 Combined PZR Spray	Three	1	1	V244			96-1510	
	31 PZR Safeties	One	1	1	PSV200			87-1638	
								87-1639	
	Two	1	1	PSV200			92-1557		
				PSV201			92-1557		

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
					PSV202			92-1557	
					PSV203			92-1557	
		Three	2	2	PSV202			98-1087	
					PSV203			98-1087	
	32 Drain 1A	One	2	2	V234			87-1543	
					V334			87-1543	
	33 Drain 1B	Two	2	2	V235			92-1315	
					V335			92-1315	
	34 Drain 2A	Two	2	2	V233			92-1318	
					V333			92-1318	
	35 Drain Line 2B	Three	2	2	V232			95-1034	
					V332			95-1034	
	36 Letdown Line	Three	2	2	UV515			95-1114	
					UV516			95-1114	
	37 Charging Line	One	1	1	PDV240			87-1602	
	38 Drain Line Loop 1	One	1	1	V215			89-1153	
		Three	1	1	V216			95-1115	
	39 HPSI Loop 1	One	1	1	V523			89-1075	
		Two	2	2	V522			92-1322	
					V957			92-1322	
	40 HPSI Loop 2	Two	1	1	V532			92-1447	
		Three	2	2	V533			95-1129	
					V958			95-1420	
B 7.80	02 Closure Head	One	1	1	CEDM 92			87-1612	
					CEDM 96			87-1610	
		Three	1	1	CEDM 92			96-1541	
					CEDM 96			96-1541	
B 8.20	05 Pressurizer	One	33%	33%	5-1	89-1196	89-1187		
						89-1197			
						89-1198			
		Two	33%	33%	5-1	93-1132	93-1090		
						93-1133			
						93-1134			
		Three	34%	34%	5-1	95-1126	95-1156		Re-exam
						95-1597			
						95-1127			
B 8.30	03 SG1	One	33%	33%	3-1	89-1166	89-1102		
						89-1167			
						89-1168			
		Three	34%	34%	3-1	95-1002	95-1098		
						95-1003			
						95-1004			
	04 SG1	Two	33%	33%	4-1	93-1011			
						93-1013			
						93-1016			
B 9.11 & B 9.12	06 RCS Piping	One	7	7	17-2	90-1017	89-1169		
						90-1018			
						90-1019			
					1-31	89-W*	92-1448		*Separate Report by Westinghouse
					1-34	89-W*	92-1448		
					3-30	89-1195	89-1072		

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

<b>ASME Item no</b>	<b>Zone</b>	<b>Comp/sys</b>	<b>Insp Per</b>	<b>Amt Req</b>	<b>Amt Comp</b>	<b>Item ID</b>	<b>Vol</b>	<b>Reports Surf</b>	<b>Visual</b>	<b>Remarks</b>
						4-30	89-1152	89-1071		
						6-7	89-W*	92-1448		
						7-7	89-W*	92-1448		
			<b>Two</b>	<b>6</b>	<b>6</b>	16-1	93-1063	93-1050		
							93-1064			
							93-1065			
						9-1	93-1066	93-1050		
							93-1067			
							93-1068			
						17-1	93-1078	93-1050		
							93-1079			
							93-1080			
						11-1	93-1081	93-1050		
							93-1082			
							93-1083			
						18-1	93-1072	93-1270		
							93-1073			
							93-1074			
						13-1	93-1075	93-1093		
							93-1076			
							93-1077			
						19-1	93-1084	93-1270		
							93-1085			
							93-1086			
						15-1	93-1087	93-1093		
							93-1088			
							93-1089			
						3-28	93-1057	93-1042		
							93-1058			
							93-1059			
						6-1	93-1060	93-1042		
							93-1061			
							93-1062			
						4-28	93-1051	93-1042		
							93-1052			
							93-1053			
						7-1	93-1054	93-1042		
							93-1055			
							93-1056			
			<b>Three</b>	<b>13</b>	<b>13</b>	3-29	96-1091	96-1085		
							96-1093			
							96-1095			
						4-29	96-1092	96-1085		
							96-1094			
							96-1096			
						16-2	96-1544	96-1533		
							96-1545			
							96-1546			
						18-2	96-1257	96-1217		
							96-1259			
							96-1261			



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
						19-2	96-1258	96-1217		
							96-1260			
							96-1262			
						1-27	*			* Separate report by WesDyne
						1-28	*			
						1-29	*			
						1-30	*			
						1-31	*			
						1-32	98-1114	98-1112		
							98-1128			
							98-1130			
							*			
						1-33	98-1122	98-1112		
							98-1136			
							98-1116			
							*			
						1-34	*			
						1-35	98-1124	98-1112		
							98-1118			
							98-1134			
							*			
						1-36	98-1120	98-1112		
							98-1126			
							98-1132			
							*			
						6-7	*			
						7-7	*			
						9-7	98-1131	98-1112		
							98-1125			
							98-1119			
							*			
						11-7	98-1113	98-1112		
							98-1127			
							98-1129			
							*			
						13-7	98-1115	98-1112		
							98-1121			
							98-1135			
							*			
						15-7	98-1117	98-1112		
							98-1123			
							98-1133			
							*			
20	Pressurizer	Surge	One	1	1	20-1	89-1232	89-1073		
			Three	2	2	20-10	96-1304	96-1244		
						20-11	96-1305	96-1244		
21	Shutdown	Cooling 1	One	2	2	21-18	89-1184	89-1170		
						21-20	89-1185	89-1070		
			Two	2	2	21-14	92-1337	92-1312		
						21-15	92-1338	92-1312		
			Three	2	2	21-3	95-1006	95-1005		

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
	22 Shutdown Cooling 2	One	2	2	21-4	95-1007	95-1005		
					22-11	89-1144	89-1061		
					22-23	89-1145	89-1061		
		Two	2	2	22-18	92-1390	92-1388		
					22-1	93-1094	93-1106		
					22-4	95-1017	95-1015		
		Three	3	3	22-5	95-1018	95-1016		
					22-6	95-1019	95-1016		
					23-1	89-1206	89-1107		
		23 Safety Injection 1A	One	3	3	23-2	89-1207	89-1171	
23-4	89-1208					89-1107			
Three	2					2	23-24	95-1151	95-1121
24 Safety Injection 1B	Two		3	3	23-26	95-1150	95-1099		
					23-6	98-1046	98-1027		IN 97-19
					24-14	92-1290	92-1235		
25 Safety Injection 2A	One	2	2	24-16	92-1291	92-1235			
				24-19	92-1292	92-1235			
				Three	2	2	24-1	95-1028	95-1024
	26 Safety Injection 2B	Two	3	3	24-2	95-1029	95-1024		
					24-6	98-1038	98-1040		IN 97-19
					25-26	87-1509	87-1468		
29 Combined PZR Spray	One	2	2	25-27	87-1510	87-1468			
				25-1	93-1046	93-1008			
				25-4	93-1044	93-1008			
	Three	1	1	25-6	93-1043	93-1008			
				25-10	98-1039	98-1041		IN 97-19	
				One	2	2	26-8		86-194
	31 PZR Safeties	Two	1	1	26-9	87-1581	87-1485		
					26-11	87-1558	87-1485		
					Two	1	1	26-12	92-1293
		Three	2	2	26-1	95-1030	95-1025		
26-2					95-1031	95-1025			
26-6					98-1045	98-1043		IN 97-19	
36 Letdown Line & B 9.22	One	2	2	26-2	95-1031	95-1025			
				26-6	98-1045	98-1043			
				29-10	87-1582	87-1531			
	Two	1	1	29-11	87-1583	87-1531			
				29-1	93-1203	93-1105			
				Three	2	2	29-2	96-1089	96-1052
27 Pressurizer Spray 1A	One	2	2	29-7	96-1090	96-1052			
				31-1	87-1585	87-1525			
				Two	2	2	31-9	93-1198	93-1104
	Three	2	2	31-10	93-1199	93-1104			
				31-5	96-1037	96-1036			
				31-13	96-1038	96-1036			
27 Pressurizer Spray 1A	Two	1	1	36-75	93-1267	93-1223			
				27-42		89-1108			
				27-43		89-1108			
	Two	3	3	27-44		89-1108			
				27-8		93-1381			
				27-10		93-1381			
				27-16		93-1381			

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	4	4	27-18		96-1511		
						27-20		96-1511		
						27-38		96-1513		
						27-39		96-1513		
	28	Pressurizer Spray 1B	One	4	4	28-31		87-1552		
						28-32		87-1552		
						28-39		87-1574		
						28-40		87-1574		
			Two	3	3	28-9		93-1382		
						28-11		93-1382		
						28-20		93-1382		
			Three	3	3	28-41		96-1532		
						28-42		96-1532		
						28-45		96-1532		
	30	Aux PZR Spray	One	2	2	30-1	89-1051	89-1050		Vol/IEB 88-08
							89-1052			
						30-2	89-1051	89-1050		Vol/IEB 88-08
						30-2	89-1052			
						30-7		87-1535		
						30-13		87-1535		
			Two	2	2	30-5		92-1349		
						30-6		92-1349		
						30-7		92-1352		
						30-13		92-1352		
			Three	0	0	30-1	98-1052	98-1033		IN 97-19
						30-2	98-1053	98-1033		IN 97-19
	32	Drain Line 1A	One	2	2	32-1		87-1546		
						32-2		87-1546		
	33	Drain Line 1B	Two	2	2	33-1		92-1316		
						33-5		92-1316		
	34	Drain Line 2A	Three	2	2	34-1		95-1032		
						34-2		95-1032		
	35	Drain Line 2B	Three	2	2	35-4		95-1033		
						35-5		95-1033		
	36	Letdown	One	4	4	36-8		87-1580		
						36-9		87-1580		
						36-28		87-1609		
						36-35		87-1609		
			Two	6	6	36-25		93-1223		
						36-26		93-1223		
						36-43		93-1223		
						36-44		93-1223		
						36-45		93-1223		
						36-80		93-1242		
			Three	8	8	36-1		96-1308		
						36-2		96-1308		
						36-3		96-1308		
						36-6		96-1308		
						36-7		96-1308		
						36-63		96-1308		
						36-64		96-1308		

## 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		
	37 Charging	One	5	5	36-67		96-1308				
					37-41		87-1536				
					37-42		87-1536				
					37-45		87-1536				
					37-46		87-1536				
		Two	6	6	37-47		87-1536				
					37-28		93-1101				
					37-29		93-1101				
					37-30		93-1147		Reject		
							93-1149		Re-exam		
							37-32		93-1148		Reject
							93-1149		Re-exam		
		Three	6	6	37-33		93-1101				
					37-34		93-1101				
					37-30		95-1445		Re-exam		
					37-32		95-1445		Re-exam		
					37-8		96-1326				
					37-9		96-1326				
					37-18B		96-1326				
					37-19		96-1326				
					37-53		96-1326				
					37-54		96-1326				
		Two	1	1	38-1		93-1049				
					39-1		87-1488				
		One	2	2	39-5		87-1488				
					39-12		92-1321				
		Two	3	3	39-13		92-1321				
39-24					92-1321						
Three	4	4	39-25		95-1037						
			39-28		95-1037						
			39-29		95-1037						
			39-33A		95-1037						
			40-1		89-1062						
One	3	3	40-2		89-1062						
			40-3		89-1062						
			40-6		92-1327						
Two	2	2	40-7		92-1327						
			40-21		95-1128						
Three	2	2	40-23		95-1128						
			9-8	89-1231	89-1209						
B 9.31	06 RCS Piping	One	1	1	13-8		93-1069		93-1093		
					93-1070						
		Three	3	3	11-8		93-1071				
							96-1230		96-1609		
							96-1232				
		6-8						96-1234			
								96-1229		96-1609	
								96-1231			
								96-1233			
								98-1090		98-1110	
		98-1091									

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	
						98-1092				
B 9.32	06 RCS Piping	One	1	1	8-17		87-1559			
		Two	1	1	13-9		93-1093			
		Three	1	1	14-17		96-1533			
	22 SD Cooling Loop 2 36 Letdown Line	One	1	1	22-7A		89-1061			
		Two	2	2	36-41 36-76		93-1223 93-1223			
B 9.40	32 Drain Line 1A 33 Drain Line 1B	One	1	1	32-6		87-1546			
		Two	1	1	33-6 33-8 33-9		92-1330 92-1316 92-1316			
	34 Drain Line 2A	Two	1	1	34-6		92-1317			
					34-8		92-1317			
					34-9		92-1317			
	35 Drain Line 2B	Three	1	1	35-6		95-1033			
	38 Drain Line Loop 1	One	1	1	38-5		89-1154			
	B 10.10	22 SD Cooling Loop 2 24 Safety Injection 1B 25 Safety Injection 2A 26 Safety Injection 2B 36 Letdown	Two	1	1	SI-193-H23		92-1389		
			Three	0	0	SI-223-H6				DCN/Snub Removed
			Three	1	1	SI-160-H5		95-1182		
One			1	1	SI-179-H10		87-1485			
B12.10	19 RCP 2B	One	1	1	RC-91-H5		87-1609			
		Two	1	1	RC-91-H6		93-1242			
		Three	1	1	19-3	96-1235				
						96-1237				
						96-1239				
						96-1331				
						96-1333				
					19-4	96-1236				
						96-1238				
						96-1240				
						96-1241				
						96-1242				
						96-1243				
				96-1332						
				96-1334						
				96-1335						
B 12.20	16 RCP Casing	One			RCP 1A			89-1033	Partial Exam	
		Three			RCP 2B			96-1026	Partial Exam	
			1	1	RCP 1A			98-1028A		
B 12.40	31 Forged PSV 22 Forged Gate 29 Forged Check	Three	1	1	PSV200	96-1604				
			1	1	UV654	98-1109				
			1	1	V244	98-1077				
B12.50	31 Forged PSV 22 Forged Gate 23 Forged Check	Three	1	1	V203			98-1017		
			1	1	UV654			98-1050		
			1	1	V235			98-1149		
B 13.10	01 Reactor Vessel	One	33%	33%	Acc Areas			87-1596		
								87-1597		
		Two	33%	33%	Acc Areas			92-1542		
							95-1574			

**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
								95-1575 98-1105 *	
<b>B 13.31</b>	<b>01 Reactor Vessel</b>	<b>Three</b>	<b>100%</b>	<b>100%</b>	<b>Acc Areas</b>			*	
					<b>1-34</b>	*			
					<b>1-35</b>	98-1124	98-1112		
						98-1118			
						98-1134			
						*			
					<b>1-36</b>	98-1120	98-1112		
						98-1126			
						98-1132			
						*			
<b>B 13.32</b>	<b>01 Reactor Vessel</b>	<b>Three</b>	<b>100%</b>	<b>100%</b>	<b>Acc Areas</b>	*			* Separate report by
<b>B 14.10</b>	<b>02 Closure Head-CEDM Upper Housing</b>	<b>One</b>	<b>2</b>	<b>2</b>	<b>9-84</b>	<b>89-1053</b>			<b>WesDyne</b>
					<b>9-88</b>	<b>89-1055</b>			
		<b>Two</b>	<b>2</b>	<b>2</b>	<b>9-83</b>	<b>93-1308</b>			
					<b>9-91</b>	<b>93-1307</b>			
		<b>Three</b>	<b>3</b>	<b>3</b>	<b>9-89</b>	<b>95-1436</b>			
					<b>9-90</b>	<b>95-1437</b>			
					<b>9-97</b>	<b>95-1438</b>			
	<b>CEDM Lower Housing (Tube)</b>	<b>One</b>	<b>2</b>	<b>2</b>	<b>10-84</b>	<b>89-1054</b>			
					<b>10-88</b>	<b>89-1056</b>			
		<b>Two</b>	<b>2</b>	<b>2</b>	<b>10-83</b>	<b>93-1310</b>			
					<b>10-91</b>	<b>93-1309</b>			
		<b>Three</b>	<b>3</b>	<b>3</b>	<b>10-89</b>	<b>95-1439</b>			
					<b>10-90</b>	<b>95-1440</b>			
					<b>10-97</b>	<b>95-1441</b>			
<b>B 15.10 &amp; B 15.11</b>	<b>01,02 Reactor Vessel</b>	<b>One</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			<b>88-1007</b>	
								<b>90-1032</b>	
		<b>Two</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			<b>92-1558</b>	
								<b>93-1001</b>	
								<b>93-1437</b>	
		<b>Three</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			<b>94-1001</b>	
								<b>95-1579</b>	
								<b>96-1020</b>	
								<b>96-1028</b>	
								<b>96-1030</b>	
								<b>96-1050</b>	
								<b>96-1602</b>	
								<b>98-1001</b>	<b>N-498</b>
								<b>98-1008</b>	
								<b>98-1142</b>	<b>N-498</b>
<b>B 15.20 &amp; B 15.21</b>	<b>05 PZR</b>	<b>One</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			<b>88-1007</b>	
								<b>90-1032</b>	
		<b>Two</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			<b>92-1558</b>	
								<b>93-1001</b>	
								<b>93-1437</b>	
		<b>Three</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			<b>94-1001</b>	

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

<b>ASME Item no</b>	<b>Zone Comp/sys</b>	<b>Insp Per</b>	<b>Amt Req</b>	<b>Amt Comp</b>	<b>Item ID</b>	<b>Vol</b>	<b>Reports Surf</b>	<b>Visual</b>	<b>Remarks</b>
								95-1578	
								95-1579	
								96-1020	
								96-1028	
								96-1030	
								96-1050	
								96-1602	
								98-1001	N-498
								98-1008	
								98-1142	N-498
<b>B 15.30 &amp; B 15.31</b>	<b>03 SG1</b>	<b>One</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			88-1007	
		<b>Two</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			90-1032	
		<b>Three</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			92-1558	
								93-1001	
								93-1437	
								94-1001	
								95-1578	
								95-1579	
								96-1020	
								96-1028	
								96-1030	
								96-1050	
								96-1602	
								98-1001	N-498
								98-1011	
								98-1142	N-498
	<b>04 SG2</b>	<b>One</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			88-1007	
		<b>Two</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			90-1032	
		<b>Three</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			92-1558	
								93-1001	
								93-1437	
								94-1001	
								95-1578	
								95-1579	
								96-1020	
								96-1028	
								96-1030	
								96-1050	
								96-1602	
								98-1001	N-498
								98-1011	
								98-1142	N-498
<b>B 15.50 &amp; B 15.51</b>	<b>All RCS Piping</b>	<b>One</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			88-1007	
		<b>Two</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			90-1032	
		<b>Three</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			92-1558	
								93-1001	
								93-1437	
								94-1001	
								95-1579	
								96-1020	
								96-1028	

**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

<b>ASME Item no</b>	<b>Zone Comp/sys</b>	<b>Insp Per</b>	<b>Amt Req</b>	<b>Amt Comp</b>	<b>Item ID</b>	<b>Vol</b>	<b>Reports Surf</b>	<b>Visual</b>	<b>Remarks</b>
								96-1030	
								96-1050	
								96-1602	
								98-1001	N-498
								98-1011	
								98-1018	N-498
								98-1082	N-498
								98-1142	N-498
								99-1010	N-498
								99-1011	N-498
								99-1013	N-498
								99-1151	N-498
								99-1313	N-498
								99-1434	N-498
<b>B 15.60 &amp; B 15.61</b>	<b>16 RCP 1A</b>	<b>One</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			88-1007	
		<b>Two</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			90-1032	
		<b>Three</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			92-1558	
								93-1001	
								93-1437	
								94-1001	
								95-1579	
								96-1020	
								96-1028	
								96-1030	
								96-1050	
								96-1602	
								98-1001	N-498
								98-1011	
								98-1142	N-498
	<b>17 RCP 1B</b>	<b>One</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			88-1007	
		<b>Two</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			90-1032	
		<b>Three</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			92-1558	
								93-1001	
								93-1437	
								94-1001	
								95-1579	
								96-1020	
								96-1028	
								96-1030	
								96-1050	
								96-1602	
								98-1001	N-498
								98-1011	
								98-1142	N-498
	<b>18 RCP 2A</b>	<b>One</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			88-1007	
		<b>Two</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			90-1032	
		<b>Three</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			92-1558	
								93-1001	
								93-1437	
								94-1001	



**APPENDIX A**

**INSERVICE INSPECTION SUMMARY REPORT**

<b>ASME Item no</b>	<b>Zone Comp/sys</b>	<b>Insp Per</b>	<b>Amt Req</b>	<b>Amt Comp</b>	<b>Item ID</b>	<b>Vol</b>	<b>Reports Surf</b>	<b>Visual</b>	<b>Remarks</b>
								95-1579	
								96-1020	
								96-1028	
								96-1030	
								96-1050	
								96-1602	
								98-1001	N-498
								98-1011	
								98-1142	N-498
	<b>19 RCP 2B</b>	<b>One</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			88-1007	
		<b>Two</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			90-1032	
		<b>Three</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			92-1558	
								93-1001	
								93-1437	
								94-1001	
								95-1579	
								96-1020	
								96-1028	
								96-1030	
								96-1050	
								96-1602	
								98-1001	N-498
								98-1011	
								98-1142	N-498
<b>B 15.70 &amp; B 15.71</b>	<b>All RCS Valves</b>	<b>One</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			88-1007	
		<b>Two</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			90-1032	
		<b>Three</b>	<b>All</b>	<b>All</b>	<b>Press Bound</b>			92-1558	
								93-1001	
								93-1437	
								94-1001	
								95-1579	
								96-1020	
								96-1028	
								96-1030	
								96-1050	
								96-1602	
								98-1001	N-498
								98-1011	
								98-1142	N-498
								99-1151	N-498
								99-1013	N-498
								99-1011	N-498
								99-1010	N-498
								99-1313	N-498
								99-1434	N-498
<b>BFLYWH</b>	<b>16 RCP 1A Flywheel</b>	<b>One</b>	<b>1</b>	<b>1</b>	<b>N/A</b>	<b>89-1030</b>	<b>89-1029</b>		
								89-1032	
								89-1001	
								89-1002	
		<b>Two</b>	<b>1</b>	<b>1</b>	<b>N/A</b>	<b>93-1168</b>			

**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
							93-1169			
	17 RCP 1B	Flywheel	Three	1	1	N/A	98-1100	98-1095		
			One	1	1	N/A	89-1023	89-1028		
							89-1024			
							89-1005			
							89-1006			
			Two	1	1	N/A	93-1166			
							93-1167			
	18 RCP 2A	Flywheel	Three	1	1	N/A	98-1099	98-1096		
			One	1	1	N/A	89-1031	89-1029		
							89-1032			
							89-1007			
							89-1008			
			Two	1	1	N/A	93-1172			
							93-1173			
			Three	1	1	N/A	96-1031			
								98-1097		
	19 RCP 2B	Flywheel	One	1	1	N/A	89-1025	89-1027		
							89-1026			
							89-1003			
							89-1004			
			Two	1	1	N/A	93-1170			
							93-1171			
			Three	1	1	N/A	96-1031			
								98-1098		
BIWF	01	Reactor Vessel Support	Three	4	4	40 at 1A 41 at 1B 42 at 2A 43 at 2B			98-1111 98-1111 98-1111 98-1111	
	03	SG1	One	1	1	3-40			87-1549	
	04	SG2	Two	1	1	4-40			93-1260	
	05	PZR	Three	1	1	5-40			96-1359	
	16	RCP 1A	One	2	2	16-20 16-21			87-1458 87-1458	
			Two	4	4	16-12 16-13 16-14 16-15			92-1298 92-1299 92-1300 92-1301	
			Three	4	4	16-16 16-17 16-18 16-19			95-1540 95-1540 95-1540 95-1540	
	17	RCP 1B	One	2	2	17-20 17-21			87-1459 87-1459	
			Two	4	4	17-12 17-13 17-14 17-15			92-1302 92-1303 92-1304 92-1305	
			Three	4	4	17-16 17-17 17-18			95-1541 95-1541 95-1541	

**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			
18 RCP 2A			One	4	4	17-19			95-1541				
						18-12		87-1460					
						18-13		87-1460					
						18-14		87-1460					
			Two	2	2			18-15			87-1460		
								18-20		92-1306			
								18-21		92-1307			
								18-16		95-1542			
			Three	4	4			18-17			95-1542		
								18-18		95-1542			
								18-19		95-1542			
								19-12		87-1461			
19 RCP 2B			One	4	4	19-13			87-1461				
						19-14		87-1461					
						19-15		87-1461					
						19-20		92-1308					
			Two	2	2			19-21			92-1309		
								19-16		95-1543			
								19-17		95-1543			
								19-18		95-1543			
			Three	4	4			19-19			95-1543		
								RC-28-H1		87-1445			
								RC-28-H2		87-1435			
								RC-28-H842		92-1310			
20 PZR Surge			One	2	2	RC-28-H844			92-1311	Reject			
								92-1546	Re-exam				
								95-1106					
								95-1107	Reject				
			Two	2	2			RC-28-H4			95-1536	Re-exam	
										96-1480	Re-exam		
										95-1108			
										95-1108			
			21 Shutdown Cooling 1			One	7	7	SI-240-H10			87-1462	
									SI-240-H11		87-1463		
									SI-240-H13		87-1464		
									RC-51-H821		89-1157		
Two	7	7						RC-51-H1			89-1155		
								RC-51-H2		89-1156	Reject		
										90-1033	Re-exam		
										89-1172			
Three	8	8						RC-51-H3			91-1004		
								SI-240-H9		92-1264			
								RC-51-H822		92-1262			
								RC-51-H4		92-1263			
Three	8	8			RC-51-H5			92-1267					
					SI-240-H823		92-1268						
					SI-240-H824		92-1266						
					SI-240-H12		92-1265						
Three	8	8			SI-240-H2			92-1265					
					SI-240-H6		92-1529	PSE/Snub. Replace					
					SI-240-H1		95-1008						
					SI-240-H3		95-1009						
Three	8	8			SI-240-H4			95-1010					

**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
					SI-240-H5			95-1011	
					SI-240-H6			95-1012	
					SI-240-H7			95-1013	
					SI-240-H8			95-1014	
					SI-240-H9			95-1109	
					SI-240-H9			96-1575	PSE/Snub. Replace
					RC-51-H3			96-1576	PSE/Snub. Replace
22	Shutdown Cooling 2	One	4	4	SI-193-H17			89-1077	
					SI-193-H19			89-1109	Reject
								89-1241	Re-exam
					RC-68-H5			92-1236	
					RC-68-H6			92-1237	
		Two	5	5	SI-193-H20			92-1240	
					SI-193-H23			92-1374	
					SI-193-H25			92-1241	
					SI-193-H8			92-1238	Reject
								92-1362	Re-exam
					SI-193-H9			92-1239	
		Three	4	4	RC-68-H1			95-1020	
					RC-68-H2			95-1021	
					RC-68-H3			95-1022	
					RC-68-H4			95-1023	
23	Safety Injection 1A	One	1	1	SI-207-H5			89-1110	
		Two	2	2	SI-207-H3			92-1547	PSE
					SI-207-H7			93-1178	
					SI-207-H11			93-1157	
		Three	3	3	SI-207-H1			95-1424	
					SI-207-H2			95-1425	
					SI-207-H3			95-1426	PSE/Snub Reduction
24	Safety Injection 1B	One	2	2	SI-223-H3			87-1437	
					SI-223-H4			87-1436	
					SI-223-H7			86-209	PSE
					SI-223-H8			86-210	PSE
		Two	2	2	SI-223-H1			92-1242	
								92-1541	PSE/Snub. Reduction
					SI-223-H2			92-1243	
		Three	4	4	SI-223-H5			95-1427	
					SI-223-H6			95-1428	
					SI-223-H7			95-1429	
					SI-223-H8			95-1430	
25	Safety Injection 2A	One	2	2	SI-156-H7			87-1623	
					SI-156-H9			87-1508	
		Two	3	3	SI-160-H1			93-1045	
					SI-160-H2			93-1145	DCN/Snub Removed
					SI-160-H3			93-1146	DCN/Snub Removed
		Three	2	2	SI-160-H5			95-1183	DCN/Snub Removed
					SI-160-H4			98-1024A	
26	Safety Injection 2B	One	3	3	SI-179-H7			86-207	PSE
					SI-179-H8			86-208	PSE
					SI-179-H9			87-1473	

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
						SI-179-H10			87-1486	
						SI-179-H11			87-1487	
			Two	3	3	SI-175-H21			92-1271	
									92-1531	PSE/Snub. Reduction
						SI-175-H22			92-1272	
						SI-175-H23			92-1273	
			Three	2	2	SI-179-H7			95-1110	
						SI-179-H8			95-1111	
	27 PZR Spray 1A		One	9	9	RC-62-H26			89-1181	
						RC-62-H27			87-1550	
						RC-62-H28			87-1551	
						RC-62-H29			87-1560	
						RC-62-H30			87-1561	
						RC-62-H31			87-1562	
						RC-62-H32			87-1563	
						RC-62-H33			87-1564	
						RC-62-H34			87-1565	
									87-1624	
			Two	9	9	RC-62-H31			92-1523	PSE/Snub. Replace
						RC-16-H15			93-1398	
						RC-16-H5			93-1397	
						RC-16-H6			93-1370	
						RC-16-H7			93-1371	
						RC-16-H8			93-1372	
						RC-62-H31			93-1363	PSE
						RC-62-H35			93-1373	
						RC-62-H34			93-1399	PSE
						RC-62-H36			93-1374	
						RC-62-H22			93-1400	PSE
						RC-62-H37			93-1375	Reject
									93-1422	Re-exam
						RC-62-H38			93-1376	PSE
			Three	8	8	RC-62-H31			95-1443	PSE
						RC-62-H34			95-1444	PSE
						RC-62-H37			95-1175	Re-exam
						RC-62-H20			96-1506	
						RC-62-H21			96-1509	
						RC-62-H22			96-1508	
						RC-62-H23			96-1503	
						RC-62-H24			96-1492	
						RC-62-H25			96-1505	
						RC-62-H38			96-1569	PSE/Snub. Replace
						RC-62-H39			96-1504	
						RC-62-H40			96-1507	
						RC-62-H36			98-1027A	
	28 PZR Spray 1B		One	9	9	RC-17-H24			87-1566	
						RC-17-H34			87-1567	
						RC-17-H36			87-1568	
						RC-17-H38			87-1569	
						RC-17-H39			87-1570	
									89-1046	PSE/Replacement

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
						RC-17-H40			87-1571	
						RC-17-H41			87-1572	
						RC-17-H42			87-1573	
						RC-18-H11			87-1625	PSE
						RC-17-H35			92-1351	
			Two	8	8	RC-17-H41			92-1522	PSE/Snub. Replace
									93-1401	PSE
						RC-17-H43			93-1377	
						RC-17-H44			93-1378	
						RC-17-H45			93-1379	
						RC-17-H46			93-1380	
						RC-18-H9			93-1402	
						RC-18-H10			93-1403	
						RC-18-H11			93-1404	
						RC-18-H12			93-1405	
			Three	11	11	RC-17-H25			96-1498	
						RC-17-H26			96-1496	
						RC-17-H27			96-1502	
						RC-17-H28			96-1501	
						RC-17-H29			96-1517	
						RC-17-H30			96-1499	
						RC-17-H31			96-1497	
						RC-17-H32			96-1494	
						RC-17-H33			96-1495	
						RC-17-H47			96-1500	
						RC-17-H48			96-1493	
29	PZR	Combined Spray	One	2	2	RC-18-H16			87-1529	
						RC-18-H18			87-1530	
									89-1039	PSE/Replacement
			Two	1	1	RC-18-H17			93-1144	
30	Aux.	PZR Spray	Two	0	0	CH-521-HA			93-1366	PSE
			Three	2	2	CH-521-HA			95-1112	
						CH-521-HB			95-1113	
						CH-521-HA			96-1570	PSE/Snub. Replace
32	Drain	Line 1A	One	2	2	RC-60-HA			87-1544	
						RC-60-HB			87-1545	
			Three	0	0	RC-60-HA			95-1573	PSE
33	Drain	Line 1B	Two	2	2	RC-58-HA			92-1314	
						RC-58-HB			92-1313	
34	Drain	Line 2A	One	0	0	RC-96-HB			89-1040	PSE/Replacement
			Two	2	2	RC-96-HA			92-1319	
						RC-96-HB			92-1320	
35	Drain	Line 2B	Three	2	2	RC-89-HE			95-1035	
						RC-89-HF			95-1036	
36	Letdown		One	9	9	RC-91-H1			87-1607	
						RC-91-H5			87-1608	
						RC-91-HAA			87-1446	
						RC-91-HAK			89-1078	Reject
									90-1025	Re-exam
						RC-91-HB			87-1447	
						RC-91-HD			87-1448	

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
					RC-91-HE			87-1449	
					RC-91-HY			87-1450	
					RC-91-HZ			87-1451	
		Two	10	10	RC-91-H2			93-1249	
					RC-91-H6			93-1248	
					RC-91-HAJ			93-1247	
					RC-91-HAP			93-1251	
					RC-91-HAQ			93-1250	
					RC-91-HP			93-1246	
					RC-91-HQ			93-1396	
					RC-91-HR			93-1253	
					RC-91-HS			93-1252	
					RC-91-HT			93-1254	
		Three	11	11	CH-1-HA			96-1288	
					RC-91-HAB			96-1281	
					RC-91-HAC			96-1280	
					RC-91-HAD			96-1272	
					RC-91-HAM			96-1282	
					RC-91-HAN			96-1284	
					RC-91-HF			96-1283	
					RC-91-HJ			96-1279	
					RC-91-HU			96-1287	
					RC-91-HV			96-1286	
					RC-91-HW			96-1285	
37	Charging Line	One	14	14	CH-5-H2			87-1553	
								89-1047	PSE/Replacement
					CH-5-H3			87-1554	
					CH-5-H6			89-1048	PSE/Replacement
					CH-5-H10			89-1049	PSE/Replacement
					CH-5-H24			89-1058	PSE/Replacement
					CH-5-H25			87-1578	
					CH-5-H26			87-1465	
					CH-5-H27			87-1466	
					CH-5-H28			87-1474	
					CH-5-H30			87-1475	
					CH-5-H34			87-1476	
					CH-5-H35			87-1477	
					CH-5-H36			87-1478	
					CH-5-H42			87-1579	
					CH-5-H43			87-1555	
					CH-5-H44			87-1556	
					CH-5-HAA			87-1577	
		Two	14	14	CH-5-H6			92-1520	PSE/Snub. Replace
					CH-5-H10			92-1521	PSE/Snub. Replace
					CH-5-H17			92-1545	PSE/Snub. Reduction
					CH-5-H22			92-1548	PSE/Snub. Reduction
					CH-5-H32			92-1549	PSE/Reject
								92-1552	PSE/Re-exam
					CH-5-H13			93-1262	
					CH-5-H16			93-1256	
					CH-5-H18			93-1264	

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
						CH-5-H19			93-1263	
						CH-5-H20			93-1265	
						CH-5-H21			93-1266	
						CH-5-H23			93-1259	
						CH-5-H24			93-1258	
						CH-5-H37			93-1261	
						CH-5-H45			93-1255	
						CH-5-H46			93-1257	
			Three	15	15	CH-5-H4			96-1295	
						CH-5-H6			96-1293	
						CH-5-H7			96-1292	
						CH-5-H8			96-1291	
						CH-5-H9			96-1290	
						CH-5-H10			96-1298	
						CH-5-H11			96-1193	
						CH-5-H12			96-1189	
						CH-5-H14			96-1190	
						CH-5-H15			96-1192	
						CH-5-H33			96-1296	
						CH-5-H38			96-1191	
						CH-5-H39			96-1289	
						CH-5-H40			96-1294	
						CH-5-H41			96-1297	
38	Drain Loop 1		One	0	0	RC-70-HA			89-1059	PSE/Replacement
			Three	2	2	RC-70-HA			96-1188	
						RC-70-HB			96-1187	
39	HPSI Loop 1		One	4	4	SI-248-H19			87-1636	PSE
						SI-248-H26			87-1489	
						SI-248-H27			87-1490	
						SI-248-H28			87-1491	
						SI-248-H30			87-1492	
			Two	5	5	SI-248-H17			92-1244	
						SI-248-H18			92-1270	Reject
									92-1519	Reject
									92-1530	Re-exam
						SI-248-H19			92-1245	
						SI-248-H20			92-1383	
						SI-248-H29			92-1246	
			Three	5	5	SI-248-H21			95-1116	
						SI-248-H22			95-1117	
						SI-248-H23			95-1118	
						SI-248-H24			95-1119	
						SI-248-H25			95-1120	
						SI-248-H19			96-1580	PSE/Snub. Replace
40	HPSI Loop 2		One	3	3	SI-199-H13			89-1079	
						SI-199-H14			89-1080	
						SI-199-H21			89-1081	
			Two	4	4	SI-199-H15			92-1274	
						SI-199-H16			92-1275	
						SI-199-H17			92-1276	
						SI-199-H18			92-1277	



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
C 1.10	41 SG 1	Three	2	2	SI-199-H22			95-1131	
					SI-199-H23			95-1130	
		One	1	1	41-3 (50%)	90-1008			
						90-1009			
						90-1010			
					41-4 (50%)	90-1011			
						90-1012			
						90-1013			
		42 SG 2	Three	1	1	42-3 (50%)	96-1536		
						96-1539			
						96-1540			
					42-4 (50%)	96-1537			
						96-1548			
						96-1566			
	68 Regen. HT Exch.	One	1	1	68-7	89-1203			
		Two	1	1	68-5	93-1413			
		Three	1	1	68-3	96-1571			
	69 Letdown HT Exch.	One	1	1	69-1 (50%)	87-1587			
		Three	1	1	69-1 (50%)	96-1551			
	84 SD Cooling A	Two	50%	50%	74-123	92-1218			
						92-1219			
	87 SD Cooling B	Three	50%	50%	75-78	95-1166			
						95-1170			
						95-1173			
C 1.20	41 SG 1	One	50%	50%	41-5	90-1014			
						90-1015			
						90-1016			
	42 SG 2	Three	50%	50%	42-5	96-1542			
					96-1543				
					96-1549				
					96-1550				
	68 Regen. HT Exch.	One	1	1	68-6	89-1204			
		Three	1	1	68-4	96-1572			
C 1.30	41 SG 1	One	50%	50%	41-1	90-1005			
						90-1006			
						90-1007			
	42 SG 2	Two	50%	50%	42-1	93-1012			
						93-1014			
						93-1015			
			Three	1	1	42-11	96-1491		
						96-1519			
						96-1520			
		68 Regen. HT Exch.	Two	2	2	68-1	93-1411		
						68-2	93-1412		
			Three	2	2	68-8	96-1573		
						68-9	96-1574		
		69 Letdown HT Exch.	One	50%	50%	69-2	87-1588		
		Three	50%	50%	69-2	96-1552			
	84 SD Cooling A	Two	50%	50%	74-124	92-1220			
						92-1221			
	87 SD Cooling B	Three	50%	50%	75-79	95-1167			

**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
C 2.21 & C 2.22	41 SG 1	One	1	1	41-34		95-1171 95-1174		
					41-9		89-1193 89-1228 93-1243 93-1239		
		Two	2	2	41-10		93-1244 93-1273 93-1268		Nozzle Inner Radius
					41-10		93-1245 93-1239 93-1271 93-1272		
					41-9		93-1269 95-1038		Nozzle Inner Radius Nozzle Bore
	Three	0	0	41-9		95-1040 95-1042		Nozzle Bore Nozzle Inner Radius	
				41-10		95-1039 95-1041 95-1043		Nozzle Bore Nozzle Bore Nozzle Inner Radius	
				42-35		89-1194 89-1229			
	42 SG 2	One	1	1	42-7		96-1373 96-1270 96-1375 96-1377		
					42-8		98-1051		Nozzle Inner Radius
		Three	3	3	42-8		96-1372 96-1270 96-1374 96-1376		
					42-17		98-1051 96-1538 96-1535 96-1547 96-1567		Nozzle Inner Radius
		84 SD Cooling A	Two	1	1	74-122		92-1214 92-1217 92-1215 92-1216	
	87 SD Cooling B	Three	1	1	75-76		95-1165 95-1193 95-1169 95-1172 95-1168 95-1194		Nozzle Inner Radius Nozzle Inner Radius
	C 3.10	41 SG 1	One	1	1	41-42		90-1001	
42 SG 2		Two	1	1	42-43		93-1191		
68 Regen. HT Exch.		Two	1	1	68-10		93-1415 93-1421		Reject Re-exam
					68-10		95-1181		Re-exam
		68-10		96-1586 96-1591 96-1592		Expansion/Reject Re-exam Re-exam			
68-11		Three	1	1	68-10		98-1036		Re-exam
					68-10		96-1568 96-1593 96-1594 96-1595		Reject Re-exam Re-exam Re-exam
					68-10				
					68-10				

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		
C 3.20	43 MS SG 1 90	One	1	1	SG-36-H17		96-1596		Re-exam		
		Two	1	1	SG-36-H12		96-1597		Re-exam		
		Three	4	4	SG-36-H13		98-1036		Re-exam		
					SG-36-H14		87-1515				
					SG-36-H15		93-1116				
					SG-36-H16		96-1481				
					SG-36-H13		96-1481				
					SG-36-H14		96-1481				
					SG-36-H15		96-1481				
					SG-36-H16		96-1481				
		44 MS SG 1 270	Two	3	3	SG-33-H13		93-1360		Reject (1 bolt)	
					SG-33-H14		93-1362		Reject (2 bolts)		
					SG-33-H15		93-1115				
					SG-33-H16		93-1115				
				Three	2	2	SG-33-H12		96-1534		
						SG-33-H13		96-1534			
		45 MS SG 2 270	One	3	3	SG-42-H14		87-1538			
						SG-42-H15		87-1517			
						SG-42-H16		87-1517			
				Two	1	1	SG-42-H12		93-1099		
		46 MS SG 2 90	Three	1	1	SG-42-H17		96-1348			
			Two	2	2	SG-45-H12		93-1100			
						SG-45-H13		93-1365			
						SG-45-H14		93-1361			
				Three	3	3	SG-45-H15		96-1364		
		54 FW SG 1	Three	1	1	SG-2-H1		96-1515			
			One	1	1	SG-5-H9		89-1076			
			Three	1	1	SG-5-H1		96-1327			
		62 Aux. FW SG 1	Two	1	1	AF-18-H1		93-1091			
		64 Blowdown SG 1	One	3	3	SG-39-H15		89-1064			
					SG-39-H17		89-1064				
					SG-53-H1		89-1130				
			Two	1	1	SG-39-H1		93-1436			
			Three	3	3	SG-39-H28		96-1516			
					SG-39-H22		98-1094				
					SG-53-H5		99-1016				
	65 Blowdown SG 2	One	2	2	SG-48-H20		89-1067				
					SG-52-H1		89-1065				
			Two	3	3	SG-48-H14		93-1285			
					SG-48-H16		93-1285				
					SG-48-H26		93-1285				
			Three	3	3	SG-48-H1		96-1587			
							96-1601				
					SG-48-H17		99-1147				
	71 LSFSI Discharge 1	One	1	1	SI-87-H11		87-1304				
	76 CS Suction 1	One	1	1	SI-9-H4		87-1268				
	77 CS Discharge A	Three	1	1	SI-79-H7		95-1418				
	80 CS Discharge B	Three	1	1	SI-119-H5		95-1049				

**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
	82 SD Cooling HX A	Three	1	1	SI-78-H4		95-1326		
	83 SD Cooling 1	Two	2	2	SI-87-H4		92-1143		
					SI-90-H1		92-1144		
		Three	2	2	SI-70-H1		95-1328		
					SI-70-H6		95-1329		
	86 SD Cooling HX B	Three	2	2	SI-72-H1		95-1187		
					SI-72-H12		95-1053		
	88 SD Cooling 2	One	1	1	SI-72-H13		87-1324		
	89 LPSI Suction 2	One	1	1	SI-194-H14		87-1322		
	91 SD Cooling 1	One	4	4	SI-70-H9		87-1335		
					SI-70-H11		87-1336		
					SI-70-H12		87-1335		
					SI-70-H16		87-1337		
	92 LPSI Suction 1	One	1	1	SI-241-H21		87-1334		
		Two	2	2	SI-239-H1		92-1170		
					SI-241-H16		92-1148		
	93 CS Discharge 1	Two	1	1	SI-89-H13		92-1142		
	94 SD Cooling A	Two	2	2	SI-70-H5		92-1361		
					SI-70-H8		92-1222		
	95 LPSI Suction B	Three	1	1	SI-194-H6		95-1079		
	96 LPSI Header 1A	Three	2	2	SI-202-H5		99-1146		
					SI-202-H17		95-1199		
	99 LPSI 2B	Two	1	1	SI-174-H13		92-1379		
	100 CSP-LPSI Suction 1	One	1	1	SI-369-H1		87-1433		
		Two	1	1	84-5		92-1483		
	101 LPSI Train B	Three	1	1	85-5		98-1076		
C 3.30	72 LPSI Pump A	One	2	2	72-3A		87-1362		
					72-3B		87-1362		
		Two	1	1	72-3A		92-1230		
					72-3B		92-1230		
					72-3C		92-1230		
	75 LPSI Pump B	Two	1	1	73-3A		92-1509		
					73-3B		92-1509		
					73-3C		92-1509		
		Three	2	2	73-3B		95-1218		
					73-3C		95-1218		
	78 CS Pump A	One	2	2	80-3A		87-1261		
					80-3B		87-1261		
		Two	1	1	80-3A		92-1224		
					80-3B		92-1225		
					80-3C		92-1226		
	81 CS Pump B	Two	1	1	81-3A		92-1463		
					81-3B		92-1463		
					81-3C		92-1463		
		Three	2	2	81-3B		95-1221		
					81-3C		95-1222		
C 4.40	47 MS SG1 270	One	20	20	UV170	87-1375			Vol/IEB 79-13
	48 MS SG1 @ 90	One	20	20	UV180	87-1376			Vol/IEB 79-13
	49 MS SG 2 East	Three	20	20	UV171	95-1242			
	50 MS SG 2 West	Three	20	20	UV181	95-1243			
	56 FW SG1	Two	20	20	UV132	92-1501			

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	
C 5.11 & C5.12	57 FW SG 2	Two	20	20	UV174	92-1500				
		Three	20	20	UV137	95-1244				
		Three	20	20	UV177	95-1245				
	58 Aux & FW SG 1	One	1	1	58-1	90-1004	90-1002			
		Two	2(5)	2(5)	58-12	92-1412	92-1378			
					58-13	92-1413	92-1378			Reject (surf.) Re-exam
						58-16	92-1339	92-1343		
						58-16A	92-1340	92-1343		
						58-1	93-1200	93-1026		
							93-1098			
						58-24	93-1204	93-1005		
						58-25	93-1205	93-1192		
		Three	0(5)	0(5)	58-1	96-1306	96-1266			
							98-1101	98-1088		PSE
						58-2	98-1104	98-1089		PSE
						58-3	98-1106	98-1088		PSE
						58-12	96-1330	96-1266		
						58-13	96-1329	96-1266		
						58-16	96-1370	96-1310		
						58-16A	96-1371	96-1310		
					58-16B	98-1102	98-1088		PSE	
					58-17	98-1103	98-1088		PSE	
	59 Aux & FW SG 2	One	1	1	59-1	89-1115	89-1069			
Two		3(5)	3(5)	59-12	92-1347	92-1344				
				59-13	92-1348	92-1344				
					59-16	92-1341	92-1328			
					59-16A	92-1342	92-1328			
					59-1	93-1201	93-1027			
						93-1097	93-1041		Reject (surf.) Re-exam (surf.)	
					59-18	93-1206	93-1007			
					59-24	93-1207	93-1007			
					59-25	93-1208	93-1007			
Three		1(5)	1(5)	59-1		95-1178			Re-exam (surf)	
					59-1	96-1256	96-1245			
					59-3	98-1093	98-1086			
					59-12	96-1311	96-1267			
				59-13	96-1367	96-1267				
				59-16	96-1368	96-1309				
				59-16A	96-1369	96-1309				
C 5.21 & C 5.22	43 MS SG 190	One	3	3	43-1	87-1557	87-1527			
					43-2	87-1547	87-1527			
					43-22	87-1532	87-1515			
	Three	2	2	43-24	96-1228	96-1218				
				43-25	96-1227	96-1218				
	44 MS SG 1270	One	3	3	44-26	87-1548	87-1528			
					44-28	87-1533	87-1528			
					44-30	87-1534	87-1528			
		Two	1	1	44-5	93-1186	93-1115			
		Three	2	2	44-1	96-1366	96-1328			
				44-2	96-1365	96-1328				

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
45 MS SG 2 270		Two	2	2	45-1	93-1193	93-1099		
					45-2	93-1195	93-1099		
		Three	3	3	45-22	96-1226	96-1219		
					45-24	96-1225	96-1219		
					45-25	96-1224	96-1219		
46 MS SG 2 90		One	2	2	46-25	87-1523	87-1519		
					46-27	87-1524	87-1519		
		Two	2	2	46-1	93-1194	93-1100		
					46-2	93-1196	93-1100		
		Three	1	1	46-28	96-1223	96-1220		
54 FW SG 1		One	5	5	54-25A	89-1127	89-1129		
					54-27	89-1128	89-1104		
					54-41	89-1112	89-1063		
					54-49	89-1113	89-1063		
					54-50	89-1114	89-1063		
		Two	5	5	41-45		93-1240		
					54-1		93-1240		
					54-9	93-1388	93-1241		
					54-10	93-1387	93-1241		
					54-11A	93-1327	93-1241		
		Three	6	6	54-59	93-1209	93-1174		
					54-60	93-1210	93-1174		
							93-1175		Reject
					54-60		95-1317		Re-exam
									Re-exam
55 FW SG 2		One	5	5	54-1	96-1035	96-1033		
					41-44	98-1057	96-1033		
					54-15	96-1034	96-1033		
					54-51	96-1521	96-1515		
					54-52	96-1524	96-1515		
		Two	5	5	41-45	98-1047	96-1033		
					42-44	89-1117	89-1066		
					55-11	89-1118	89-1066		
					55-12	89-1119	89-1068		
					55-15	89-1116	89-1066		
		Three	5	5	55-26	89-1120	89-1066		
					42-44		93-1364		
					42-45	93-1408	93-1364		
					55-1	93-1406	93-1364		
					55-2		93-1364		
Three	5	5	55-15	93-1407	93-1364				
			55-16		93-1364				
			55-38	93-1211	93-1004				
					93-1181				
			55-39	93-1212	93-1004				
Three	5	5	55-41	93-1213	93-1004				
					93-1181				
			55-43	96-1380	96-1327				
			55-53	96-1379	96-1327				
			55-54	96-1378	96-1327				

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
					55-59	96-1523	96-1514		
					55-60	96-1522	96-1514		
					42-44	98-1049			
					42-45	98-1048			
	58 Aux & FW SG 1	One	3	3	41-39	90-1003	90-1002		
					58-19	87-1481	87-1480		
					58-20	87-1482	87-1480		
		Three	2	2	58-33	96-1087	96-1053		
					58-34	96-1088	96-1053		
	59 Aux & FW SG 2	One	2	2	59-33	87-1483	87-1479		
					59-34	87-1484	87-1479		
		Two	2	2	59-16C	93-1130	93-1006		
						93-1238			
					59-20	93-1131	93-1103		
		Three	1	1	42-39	96-1307	96-1245		
	62 Aux & FW SG 1	One	1	1	62-24	87-1367	87-1359		
		Two	2	2	62-5	93-1127	93-1091		
					62-6	93-1128	93-1091		
		Three	2	2	62-12	96-1300	96-1269		
					62-13	96-1299	96-1268		
	63 Aux & FW SG 2	One	1	1	63-4	87-1368	87-1360		
		Two	2	2	63-20	93-1129	93-1092		
					63-23	93-1126	93-1092		
		Three	2	2	63-29	96-1554	96-1563		
					63-30	96-1553	96-1563		
	64 Blowdown SG 1	One	2	2	64-1	89-1121	89-1105		
					64-2	89-1122	89-1105		
		Two	4	4	64-1	93-1390	93-1358		
					64-2	93-1389	93-1358		
					64-8	93-1311	93-1284		
					64-16	93-1312	93-1284		
					64-29	93-1392	93-1358		
					64-30	93-1391	93-1358		
						93-1367			RT Exam
		Three	4	4	64-11	96-1527	96-1516		
					64-22	96-1528	96-1516		
					64-52	96-1526	96-1516		
					64-53	96-1525	96-1516		
	65 Blowdown SG 2	One	4	4	65-22	89-1123	89-1065		
					65-24	89-1124	89-1065		
					65-27	89-1125	89-1065		
					65-28	89-1126	89-1065		
		Two	3	3	65-1	93-1394	93-1341		
					65-28	93-1393	93-1341		
					65-49	93-1313	93-1285		
					65-51	93-1314	93-1285		
					65-52	93-1315	93-1285		
		Three	4	4	65-1	96-1564	96-1562		
					65-2	96-1565	96-1086		
							96-1562		
					65-13	96-1098	96-1086		

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
C6.20	86 BW Gate Valves 6"	Three	1	1	65-29 V464	96-1097	96-1086		
	89 BW Gate Valves 16"	Three	1	1	V656		96-1478		
	Dresser PSV 6" X 10"						96-1325		
	47 Main Steam Safety	Three	1	1	PSV572		96-1598		Serial#BT01681
					PSVXXX		96-1598		Serial#BT01683
				PSVXXX		96-1598		Serial#BS08597	
				PSVXXX		96-1598		Serial#BY14539	
C 7.10	N/A Pressure Vessels	One	All	All	Press Bound			*	*91-1005, 91-1020,
C 7.30	N/A Piping								91-1021, 91-1026,
C 7.50	N/A Pumps								91-1027, 91-1028,
C 7.70	N/A Valves								91-1029, 91-1030,
		Two	All	All	Press Bound				91-1036, 91-1037,
									92-1560, 92-1561,
									92-1562, 92-1563,
									92-1567
									93-1001, 93-1437,
									94-1001,
C7.10	N/A Pressure Vessels	Three	All	All	Press Bound		95-1579, 96-1020,		
C7.20							96-1028, 96-1030,		
C7.30	N/A Piping						96-1050, 96-1602,		
C7.40							96-1002, 96-1010,		
C7.50	N/A Pumps						96-1011, 96-1013,		
C7.60							96-1021, 98-1021A		
C7.70	N/A Valves						98-1009 N-498		
C7.80							98-1010 N-498		
							98-1011 N-498		
							98-1014 N-498		
							98-1018 N-498		
							98-1022A N-498		
							98-1082 N-498		
							98-1137 N-498		
							98-1138 N-498		
							98-1141 N-498		
							98-1142 N-498		
							98-1153 N-498		
							98-1154 N-498		
							98-1155 N-498		
							99-1008 N-498		
							99-1009 N-498		
							99-1012 N-498		
							99-1013 N-498		
							99-1015 N-498		
							99-1017 N-498		
							99-1018 N-498		
							99-1019 N-498		
							99-1021 N-498		
							99-1027 N-498		
							99-1026 N-498		
							99-1143 N-498		



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
								99-1144	N-498
								99-1148	N-498
								99-1149	N-498
								99-1154	N-498
								99-1156	N-498
								99-1158	N-498
								99-1176	N-498
								99-1313	N-498
								99-1434	N-498
CIWF	41 SG 1	One	2	2	41-42			90-1023	
					41-43			90-1024	
	42 SG 2	Two	2	2	42-42			93-1385	
					42-43			93-1386	
	43 MS SG 1 90	One	3	3	SG-36-H17			87-1513	
					SG-36-H884			87-1522	
					SG-36-H885			87-1514	
		Two	2	2	SG-36-H11			93-1121	
					SG-36-H12			93-1434	PSE
					SG-36-H13			93-1122	
								93-1432	PSE
		Three	4	4	SG-36-H11			95-1095	Re-exam (U2 reject)
					SG-36-H13			96-1349	
					SG-36-H14			96-1350	
	44 MS SG 1 270	One	2	2	SG-36-H15			96-1353	
					SG-36-H16			96-1352	
		Two	5	5	SG-33-H17			87-1600	
					SG-33-H18			87-1516	
		Three	3	3	SG-33-H14			93-1119	
								93-1435	PSE
					SG-33-H15			93-1433	PSE
					SG-33-H16			93-1120	
					SG-33-H881			93-1117	
					SG-33-H882			93-1118	
					SG-33-H13			93-1419	PSE/Replace
					SG-33-H11			96-1354	
		SG-33-H12			96-1351				
SG-33-H13				95-1434	Re-exam				
			96-1355						
45 MS SG 2 270	One	3	3	SG-42-H14			87-1537		
				SG-42-H15			87-1599		
				SG-42-H16			87-1518		
	Two	3	3	SG-42-H11			93-1107	Reject	
							93-1410	Re-exam	
				SG-42-H12			93-1431	PSE	
				SG-42-H13			93-1108		
	Three	3	3	SG-42-H11			95-1096	Reject	
							95-1510	Re-exam	
							95-1572	Re-exam	
			96-1342	Re-exam					
			96-1343						
			SG-42-H17						

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	
46 MS SG 2 90		One	2	2	SG-42-H890			96-1340		
					SG-42-H891			96-1341		
		Two	5	5	SG-45-H17				87-1520	
					SG-45-H18			87-1521		
					SG-45-H11			93-1111		
					SG-45-H12			93-1112		
					SG-45-H13			93-1113		
								93-1420	PSE/Replace	
		Three	3	3	SG-45-H887				93-1110	
					SG-45-H888			93-1109		
SG-45-H13						95-1097	Re-exam (U2 reject)			
SG-45-H14						96-1345				
SG-45-H15						96-1344				
47 MS SG 1 270		One	1	1	SG-45-H16			96-1346		
					SG-206-H1			87-1240		
48 MS SG1 90		Two	1	1	SG-207-H1			92-1553		
								92-1350	Reject	
49 MS SG 2 90		Two	0	0	SG-208-H1			92-1554	Re-exam	
								92-1555		
50 MS SG 2 270		Three	1	1	SG-209-H1			95-1544		
								92-1556		
51 ADV # 1		Two	0	0	SG-209-H1			95-1421		
								87-1606		
								92-1278		
52 ADV # 2		Three	1	1	SG-59-H6			98-1108	PSE/Replace	
								92-1278		
								98-1108	PSE/Replace	
53 Steam to Aux FW		Three	2	2	SG-84-H6			95-1184		
					SG-84-H6			98-1107	PSE/Replace	
					SG-103-H6			95-1185		
		One	4	4	SG-81-H1				87-1241	
					SG-81-H2			87-1242		
					SG-83-H1			87-1243		
					SG-83-H2			87-1244		
		Two	2	2	SG-81-H4				92-1279	
					SG-83-H4			92-1280		
					SG-81-H3			95-1247		
54 FW SG 1		Three	2	2	SG-83-H3			95-1246		
					SG-2-H4			89-1111	Reject	
								89-1239	Re-exam	
		Two	7	7	SG-2-H5				89-1082	
					SG-2-H12			89-1158		
					SG-2-H13			89-1083	Reject	
								90-1022	Re-exam	
					SG-2-H14			89-1084		
					SG-2-H15			89-1085		
Two	7	7	SG-2-H803				89-1159			
			SG-13-H802			93-1343				
			SG-13-H1			93-1342	Reject			
			93-1425	Re-exam						
			SG-2-H806				93-1002			
			SG-2-H811				93-1426			
			SG-2-H9				93-1430			

## 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
						SG-2-H10			93-1429	
						SG-2-H11			93-1428	
			Three	6	6	SG-13-H1			95-1177	Re-exam
						SG-2-H1			96-1075	
						SG-2-H2			96-1078	
						SG-2-H3			96-1081	
						SG-2-H6			96-1076	
						SG-2-H8			96-1082	Reject
									96-1590	Re-exam
									98-1025A	Re-exam
						SG-2-H807			96-1079	
55 FW	SG 2		One	9	9	SG-5-H8			86-98	PSE
						SG-5-H9			89-1131	
						SG-5-H10			89-1132	
						SG-5-H11			89-1133	
						SG-5-H12			89-1134	
						SG-5-H805			89-1137	
						SG-5-H809			90-1026	
						SG-5-H812			89-1138	
						SG-14-H1			89-1135	
						SG-14-H804			89-1136	
			Two	7	7	SG-5-H14			92-1524	PSE/Snub. Replace
						SG-5-H4			93-1215	
						SG-5-H5			93-1216	
						SG-5-H6			93-1217	
						SG-5-H7			93-1218	
						SG-5-H8			93-1219	
						SG-5-H13			93-1214	
						SG-5-H809			93-1003	
			Three	4	4	SG-5-H1			96-1080	
						SG-5-H2			96-1195	
						SG-5-H3			96-1084	
						SG-5-H808			96-1083	
56 FW	SG 1		Two	1	1	SG-202-H1			92-1511	
57 FW	SG 2		Three	1	1	SG-205-H2			96-1356	
58 Aux & FW	SG 1		One	7	7	SG-8-H2			89-1173	
						SG-8-H3			89-1174	
						SG-8-H4			89-1175	
						SG-8-H5			89-1176	
						SG-8-H20			89-1177	
						SG-8-H901			89-1178	
						SG-8-H903			89-1179	
			Two	7	7	SG-8-H10			92-1525	PSE/Snub. Replace
						SG-8-H6			93-1353	
						SG-8-H7			93-1354	
						SG-8-H8			93-1356	
						SG-8-H9			93-1357	
						SG-8-H11			93-1352	
						SG-8-H17			93-1355	
						SG-8-H20			93-1418	
			Three	8	8	SG-8-H12			96-1056	

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
					SG-8-H13			96-1194	
					SG-8-H14			96-1054	
					SG-8-H15			96-1058	
					SG-8-H16			96-1057	
					SG-8-H18			96-1059	
					SG-8-H19			96-1196	
					AF-4-H1			96-1055	
59	Aux & FW SG 2	One	6	6	AF-6-H1			87-1452	
					SG-11-H8			87-1453	
					SG-11-H9			87-1454	
					SG-11-H10			87-1455	
					SG-11-H11			87-1456	
					SG-11-H12			87-1457	
		Two	6	6	SG-11-H13			93-1345	
					SG-11-H14			93-1351	
					SG-11-H15			93-1350	
					SG-11-H16			93-1349	
					SG-11-H18			93-1348	
					SG-11-H19			93-1344	
		Three	10	10	SG-11-H2			96-1251	
					SG-11-H3			96-1254	
					SG-11-H4			96-1255	
					SG-11-H5			96-1252	
					SG-11-H6			96-1246	
					SG-11-H7			96-1248	
					SG-11-H17			96-1247	
					SG-11-H20			96-1253	
					SG-11-H902			96-1250	
					SG-11-H904			96-1249	
60	Downcomer FW SG 1	One	1	1	SG-200-H9			87-1296	
		Three	2	2	SG-200-H13			96-1201	
61	Downcomer FW SG 2	Two	2	2	SG-200-H14			96-1202	
					SG-203-H13			92-1281	
					SG-203-H14			92-1282	
		Three	1	1	SG-203-H8			95-1325	
62	Aux FW SG 1	One	1	1	AF-4-H3			87-1245	
		Two	1	1	AF-18-H1			93-1125	
		Three	2	2	AF-18-H2			96-1199	
					AF-18-H3			96-1203	
63	Aux FW SG 2	One	2	2	AF-6-H2			87-1246	
					AF-16-H1			87-1247	
		Two	2	2	AF-6-H3			93-1124	
					AF-6-H5			93-1123	Reject
								93-1427	Re-exam
		Three	1	1	AF-6-H5			95-1446	Re-exam
					AF-6-H4			96-1200	
64	Blowdown SG 1	One	12	12	SG-39-H10			89-1086	
					SG-39-H11			89-1087	
					SG-39-H12			89-1088	Reject
								90-1021	Reject
								90-1027	Re-exam

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
						SG-39-H13			89-1089	Reject
									89-1240	Re-exam
						SG-39-H14			89-1090	
						SG-39-H15			89-1091	
						SG-39-H16			89-1092	Reject
									90-1028	Re-exam
						SG-39-H17			89-1093	
						SG-39-H26			89-1094	
						SG-53-H1			89-1160	
						SG-53-H2			89-1161	
						SG-53-H924			89-1162	
			Two	13	13	SG-39-H1			93-1359	
						SG-39-H2			93-1346	
						SG-39-H3			93-1302	
						SG-39-H4			93-1303	
						SG-39-H5			93-1304	
						SG-39-H6			93-1305	
						SG-39-H27			93-1306	
						SG-39-H922			93-1347	
						SG-53-H3			93-1301	
						SG-53-H4			93-1300	
						SG-53-H5			93-1299	
						SG-53-H6			93-1298	
						SG-53-H7			93-1297	
			Three	12	12	SG-39-H10			95-1537	PSE
						SG-39-H7			96-1043	
						SG-39-H8			96-1044	
						SG-39-H9			96-1045	
						SG-39-H18			96-1046	
						SG-39-H19			96-1041	
						SG-39-H20			96-1039	
						SG-39-H21			96-1047	
						SG-39-H22			96-1049	Reject
									96-1588	Re-exam
									98-1029A	Re-exam
						SG-39-H23			96-1040	
						SG-39-H24			96-1051	
						SG-39-H25			96-1042	Reject
									96-1589	Re-exam
									98-1026A	Re-exam
						SG-39-H28			96-1048	
65	Blowdown	SG 2	One	12	12	SG-48-H2			89-1139	
						SG-48-H3			89-1095	
						SG-48-H4			89-1096	
						SG-48-H19			89-1097	
						SG-48-H20			89-1098	
						SG-48-H21			89-1099	
						SG-48-H925			89-1143	
						SG-52-H1			89-1140	
						SG-52-H2			89-1141	
						SG-52-H3			89-1100	

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
					SG-52-H4			89-1101	
					SG-53-H923			89-1142	
		Two	11	11	SG-48-H13			93-1286	
					SG-48-H14			93-1287	
					SG-48-H15			93-1288	
					SG-48-H16			93-1289	
					SG-48-H17			93-1290	
					SG-48-H18			93-1291	Reject
								93-1423	Re-exam
					SG-48-H22			93-1292	
					SG-48-H23			93-1293	Reject
								93-1424	Re-exam
					SG-48-H24			93-1294	
					SG-48-H25			93-1296	
					SG-48-H26			93-1295	
		Three	13	13	SG-48-H18			95-1179	Re-exam
					SG-48-H23			95-1180	Re-exam
					SG-48-H1			96-1066	
					SG-48-H5			96-1074	
					SG-48-H6			96-1070	
					SG-48-H7			96-1069	
					SG-48-H8			96-1064	
					SG-48-H9			96-1065	
					SG-48-H10			96-1072	
					SG-48-H11			96-1186	
					SG-48-H27			96-1197	
					SG-48-H28			96-1198	
					SG-52-H5			96-1068	
					SG-52-H6			96-1067	
					SG-52-H7			96-1071	
68 Regen. HT Exch.		Two	1	1	68-10			93-1414	
		Three	1	1	68-11			96-1599	
								98-1037	Re-exam
					68-10			98-1037	Re-exam
70 LPSI A Suction		One	1	1	SI-67-H4			87-1301	
		Three	4	4	SI-241-H20			95-1227	
					SI-241-H22			95-1228	
					SI-307-H16			95-1229	
					SI-307-H17			95-1230	
71 LPSI A Discharge		One	1	1	SI-87-H11			87-1302	
		Two	5	5	SI-78-H1			92-1109	
					SI-78-H2			92-1110	
					SI-87-H1			92-1111	
					SI-87-H2			92-1112	
					SI-87-H3			92-1108	
72 LPSI Pump A		One	2	2	72-3A			87-1369	
					72-3B			87-1369	
		Two	1	1	72-3A			92-1231	
					72-3B			92-1232	
					72-3C			92-1233	
73 LPSI Pump B Suction		Two	1	1	SI-308-H14			92-1125	

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	4	4	SI-34-H4			95-1135	
					SI-194-H1			95-1136	
					SI-308-H12			95-1137	
					SI-308-H13			95-1138	
					SI-308-H12			96-1579	PSE/Snub. Replaced
74	LPSI Pump B	Three	6	6	SI-129-H1			95-1100	
					SI-129-H2			95-1101	
					SI-129-H3			95-1140	
					SI-129-H4			95-1102	
					SI-129-H5			95-1103	
					SI-129-H6			95-1219	
75	LPSI Pump B Discharge	Two	1	1	73-3A			92-1510	
					73-3B			92-1510	
					73-3C			92-1510	
		Three	2	2	73-3B			95-1186	
					73-3C			95-1186	
76	CS Pump A Suction	One	1	1	SI-9-H4			87-1259	
		Three	4	4	SI-67-H1			95-1231	
					SI-67-H2			95-1232	
					SI-67-H3			95-1422	
					SI-78-H3			95-1233	
77	CS Pump A Discharge	One	4	4	SI-79-H1			87-1267	
					SI-79-H2			87-1264	
					SI-79-H3			87-1265	
					SI-79-H4			87-1266	
		Two	3	3	SI-79-H5			92-1113	
					SI-79-H6			92-1114	
					SI-82-H2			92-1115	
		Three	3	3	SI-79-H7			95-1417	
					SI-79-H8			95-1234	
					SI-79-H9			95-1235	
78	CS Pump A	One	2	2	80-3A			87-1260	
					80-3B			87-1260	
		Two	1	1	80-3A			92-1227	
					80-3B			92-1228	
					80-3C			92-1229	
79	CS Pump B Suction	One	3	3	SI-34-H1			87-1253	
					SI-34-H2			87-1254	
					SI-34-H3			87-1255	
		Two	2	2	SI-33-H3			92-1127	
					SI-33-H4			92-1126	
		Three	2	2	SI-34-H5			95-1048	
					SI-34-H6			95-1220	
					SI-34-H1			96-1578	PSE/Snub. Replace
					SI-34-H3			96-1583	PSE/Snub. Replace
80	CS Pump B Discharge	One	3	3	SI-119-H7			87-1256	
					SI-119-H8			87-1331	
					SI-119-H9			88-1006	
		Two	4	4	SI-119-H1			92-1128	
					SI-119-H2			92-1129	
					SI-119-H3			92-1130	

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
					SI-119-H4			92-1131	
		Three	3	3	SI-119-H5			95-1050	
					SI-119-H6			95-1051	
					SI-147-H1			95-1052	
	81 CS Pump B	Two	1	1	81-3A			92-1425	
					81-3B			91-1425	
					81-3C			91-1425	
		Three	2	2	81-3A			95-1223	
					81-3B			95-1223	
					81-3C			95-1223	
	82 SD Cooling A	One	2	2	SI-78-H5			87-1278	
					SI-79-H10			87-1279	
		Three	1	1	SI-78-H4			95-1327	
	83 Shutdown Cooling A	One	4	4	SI-87-H9			87-1280	
					SI-89-H1			87-1281	
					SI-89-H2			87-1282	
					SI-89-H3			87-1283	
		Two	3	3	SI-87-H4			92-1104	
					SI-90-H1			92-1145	
					SI-90-H2			92-1105	
		Three	12	12	SI-70-H1			93-1417	PSE
					SI-70-H2			95-1330	
					SI-70-H3			95-1331	
					SI-70-H6			95-1332	
					SI-70-H7			95-1333	
					SI-70-H7			95-1255	
					SI-87-H5			95-1256	
					SI-87-H6			95-1257	
					SI-87-H7			95-1258	
					SI-87-H8			95-1259	
					SI-90-H4			95-1335	
					SI-82-H1			95-1334	
					SI-89-H5			95-1260	
	85 SD Cooling B	One	3	3	SI-119-H10			87-1252	
					SI-123-H6			88-1005	
					SI-123-H7			87-1249	
		Two	6	6	SI-119-H11			92-1183	
					SI-119-H13			92-1184	
					SI-119-H14			92-1102	
					SI-123-H2			92-1185	
					SI-123-H5			92-1103	
					SI-123-H8			92-1186	
		Three	1	1	SI-123-H1			95-1125	
	86 SD Cooling B	One	3	3	SI-129-H10			87-1248	
					SI-129-H11			87-1250	
					SI-129-H12			87-1251	
		Two	7	7	SI-129-H7			92-1107	
					SI-129-H8			92-1106	
					SI-135-H1			92-1134	
					SI-135-H2			92-1135	
					SI-135-H3			92-1136	



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
					SI-72-H3			92-1526	PSE/Snub. Replace
					SI-72-H5			92-1132	
					SI-72-H6			92-1133	
		Three	15	15	SI-129-H9			95-1064	Reject
								95-1511	Re-exam
								96-1479	Re-exam
					SI-129-H13			95-1065	
					SI-134-H1			95-1190	
					SI-134-H2			95-1191	
					SI-134-H3			95-1192	
					SI-134-H5			95-1066	
					SI-134-H6			95-1067	
					SI-134-H7			95-1068	
					SI-134-H8			95-1069	
					SI-72-H1			95-1059	
					SI-72-H2			95-1060	
					SI-72-H3			95-1061	
					SI-72-H4			95-1062	
					SI-72-H12			95-1063	
					SI-147-H2			95-1070	
88 LPSI B		One	8	8	SI-72-H11			87-1314	
					SI-72-H13			87-1315	
					SI-72-H14			87-1316	
					SI-72-H21			87-1317	
					SI-72-H22			87-1318	
					SI-73-H1			87-1319	
					SI-73-H2			87-1320	
					SI-73-H3			87-1321	
		Three	6	6	SI-72-H15			95-1071	
					SI-72-H16			95-1072	
					SI-72-H17			95-1073	
					SI-72-H18			95-1074	
					SI-72-H19			95-1075	
					SI-72-H20			95-1076	Reject
								95-1512	Re-exam
					SI-72-H20			96-1271	Re-exam
89 LPSI B		One	4	4	SI-194-H12			87-1310	
					SI-194-H13			87-1311	
					SI-194-H14			87-1312	
					SI-194-H18			87-1626	
					SI-194-H23			87-1313	
		Three	1	1	SI-173-H1			95-1078	
					SI-194-H13			96-1581	PSE/Snub. Replace
90 CS B		Two	2	2	SI-134-H9			92-1137	
					SI-134-H10			92-1138	
91 LPSI A		One	7	7	SI-70-H9			87-1342	
					SI-70-H10			88-1001	
					SI-70-H11			87-1343	
					SI-70-H12			87-1344	
					SI-70-H13			88-1003	
					SI-70-H15			87-1345	

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			
92 LPSI A		Two	2	2	SI-70-H16			87-1644				
					SI-71-H2			92-1139				
					SI-71-H3			92-1140				
		Three	1	1	SI-70-H14				95-1249			
					SI-239-H3			87-1341				
					SI-241-H12			87-1339				
		One	5	5	SI-241-H14				87-1349			
					SI-241-H15			87-1350				
					SI-241-H21			87-1340				
		93 CS Discharge 1		Two	5	5	SI-239-H1			92-1323		
							SI-239-H2			92-1324		
				Three	2	2	SI-241-H9				92-1164	
							SI-241-H11			92-1165		
							SI-241-H16			92-1166		
				Two	2	2	SI-2-H1				95-1250	
SI-2-H5								95-1251				
Three	2			2	SI-89-H10				92-1141			
					SI-89-H13			92-1182				
					SI-89-H11			95-1252				
94 LPSI A		Three	2	2	SI-89-H12			95-1253				
					SI-89-H7			87-1291				
		One	3	3	SI-89-H8				87-1292			
					SI-89-H9			87-1293				
					SI-70-H4			92-1187				
		95 LPSI B		Two	7	7	SI-70-H5			92-1223		
							SI-70-H8			92-1199		
				Three	5	5	SI-241-H6				92-1123	
SI-241-H7								93-1416				
SI-241-H8								92-1124				
SI-241-H17								92-1188				
SI-89-H6								92-1189	Reject PSE/Re-exam			
95 LPSI B		One	6	6	SI-89-H6			95-1236				
					SI-241-H2			95-1237				
					SI-241-H3			95-1238				
		Two	10	10	SI-241-H4				95-1239			
					SI-241-H5			95-1240				
					SI-72-H8			87-1289				
					SI-72-H10			87-1290				
					SI-134-H11			87-1294				
					SI-134-H12			87-1295				
					SI-194-H3			87-1258				
					SI-194-H5			87-1257				
SI-72-H7			92-1101									
SI-72-H9			92-1116									
SI-194-H4			92-1117									
SI-194-H7			92-1118									
SI-194-H8			92-1119									
SI-194-H9			92-1120									
SI-194-H10			92-1190									
SI-194-H11			92-1121									

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
					SI-194-H15			92-1191	
					SI-194-H21			92-1122	
		Three	3	3	SI-134-H4			95-1146	
					SI-194-H2			95-1122	
					SI-194-H6			95-1080	Reject
								95-1513	Re-exam
								96-1347	Re-exam
					SI-194-H21			95-1516	PSE/Snub. Replaced
					SI-194-H5			96-1585	PSE/Snub. Replaced
					SI-194-H7			96-1584	PSE/Snub. Replaced
					SI-194-H15			96-1582	PSE/Snub. Replaced
96 LPSI To Loop 1A		One	3	3	SI-202-H7			87-1493	
					SI-202-H8			87-1494	
					SI-202-H9			87-1495	
		Two	8	8	SI-202-H2			92-1284	
					SI-202-H3			92-1247	
								92-1533	PSE/Snub. Reduction
					SI-202-H4			92-1248	
					SI-202-H5			92-1249	
					SI-202-H6			92-1250	
					SI-202-H10			92-1251	
					SI-202-H11			92-1252	
					SI-202-H12			92-1534	PSE/Snub. Reduction
					SI-202-H15			92-1269	Reject
								92-1486	Re-exam
		Three	7	7	SI-202-H1			95-1082	
					SI-202-H12			95-1083	
					SI-202-H13			95-1084	
					SI-202-H14			95-1085	DCN/Snub Removed
					SI-202-H16			95-1086	
					SI-202-H17			95-1087	
					SI-202-H18			95-1088	Reject
								95-1577	Re-exam
								96-1339	Re-exam
97 LPSI To Loop 1B		One	10	10	SI-220-H8			89-1180	
					SI-220-H9			87-1496	
					SI-220-H10			87-1497	
					SI-220-H11			87-1498	
					SI-220-H12			87-1499	
					SI-220-H13			87-1500	
					SI-220-H14			87-1501	
					SI-220-H15			87-1506	
					SI-220-H19			87-1502	
					SI-220-H22			87-1507	
		Two	7	7	SI-220-H1			92-1253	
					SI-220-H7			92-1535	PSE/Snub. Reduction
					SI-220-H12			92-1536	PSE/Snub. Reduction
					SI-220-H16			92-1285	
					SI-220-H17			92-1254	
					SI-220-H18			92-1255	
					SI-220-H20			92-1286	

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
					SI-220-H21			92-1256	
					SI-220-H24			92-1537	PSE/Snub. Reduction
					SI-220-H27			92-1538	PSE/Snub. Reduction
					SI-220-H28			92-1287	
		Three	10	10	SI-220-H29			92-1539	PSE/Snub. Reduction
					SI-220-H3			95-1200	
					SI-220-H5			95-1201	
					SI-220-H6			95-1202	
					SI-220-H7			95-1203	
					SI-220-H23			95-1423	
					SI-220-H24			95-1204	
					SI-220-H25			95-1205	
					SI-220-H26			95-1206	
					SI-220-H27			95-1207	
					SI-220-H29			95-1208	
98	LPSI To Loop 2A	One	2	2	SI-155-H4			87-1627	PSE
					SI-155-H5			87-1503	
					SI-155-H6			87-1504	
		Two	5	5	SI-155-H1			92-1288	
					SI-155-H2			92-1289	
					SI-155-H3			92-1257	
					SI-155-H4			92-1258	
					SI-155-H6			92-1540	PSE/Snub. Reduction
					SI-155-H7			92-1259	
99	LPSI To Loop 2B	Two	5	5	SI-174-H7			92-1375	
					SI-174-H8			92-1376	
								92-1532	PSE/Snub. Reduction
					SI-174-H9			92-1260	
					SI-174-H10			92-1261	
					SI-174-H13			92-1377	
		Three	5	5	SI-174-H4			95-1209	
					SI-174-H5			95-1210	
					SI-174-H6			95-1211	
					SI-174-H11			95-1212	
					SI-174-H12			95-1213	
100	LPSI A Suction	One	2	2	SI-241-H19			87-1471	
					SI-369-H1			87-1434	
		Two	1	1	84-5			92-1484	
101	Cont. LPSI B Suction	Three	8	8	SI-194-H16			95-1090	Reject
								95-1538	Re-exam
								96-1337	Re-exam
					SI-194-H18			95-1091	
					SI-194-H22			95-1155	Reject
								95-1576	Re-exam
								96-1338	Re-exam
					SI-194-H25			95-1092	Reject
								95-1514	Re-exam
								96-1336	Re-exam
					SI-194-H26			95-1093	
					SI-368-H1			95-1094	
					SI-368-H2			95-1517	

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			
FR 5.11 & FR 5.12	70 LPSI A Suction	One	3	3	85-5			98-1058				
					70-58	87-1325	87-1303					
					70-69	87-1363	87-1361					
		Two	4	4	70-104	87-1326	87-1303					
	70-44				92-1295	92-1283						
	70-46				92-1294	92-1283						
	70-61				92-1296	92-1283						
	70-103				92-1297	92-1283						
	71 LPSI A Discharge	One	3	3	72-5	87-1327	87-1304					
					72-6	87-1328	87-1304					
					72-8	87-1329	87-1304					
		Two	3	3	72-18	92-1353	92-1345					
	74-45				92-1354	92-1345						
	74-46				92-1355	92-1345						
	73 LPSI B Suction	Three	3	3	71-55	95-1158	95-1157					
					71-69	95-1133	95-1132					
					71-110	95-1134	95-1157					
					73-8	95-1139	95-1241					
	74 LPSI B Discharge	Three	2	2	73-30	95-1217	95-1216					
					76 CS A Suction	One	2	2	80-10	87-1271	87-1262	
	77 CS A Discharge	One	3	3	80-16	87-1270	87-1263					
					82-1	87-1273	87-1269					
					82-1A	87-1272	87-1269					
		Two	4*	4*	82-2	87-1274	87-1269					
					82-15	92-1204	92-1203		*required between 2 zones			
					82-16	92-1205	92-1203					
	79 CS Pump B Suction	Two	2	2	82-31	92-1206	92-1203					
					81-12	92-1207	92-1208					
		Three	2	2	81-15	92-1209	92-1210					
					81-1	95-1254	95-1248					
	80 CS Pump B Discharge	Two	4*	4*	81-8	95-1045	95-1044					
					83-1A	92-1464	92-1426					
		Three	4	4	83-2	95-1057	95-1049					
					83-3	95-1058	95-1049					
					83-16	95-1141	95-1123					
	82 SD Cooling A	One	2	2	83-30	95-1142	95-1123					
					72-48	87-1284	87-1275					
					72-61	87-1285	87-1275					
		Two	4*	4*	72-52	92-1211	92-1213					
					92-1212							
	83 SD Cooling A	One	6	6	74-19	87-1299	87-1277					
					74-21	87-1300	87-1277					
					74-74	87-1286	87-1276					
					74-87	87-1287	87-1276					
					74-100	87-1297	87-1277					
					74-105	87-1298	87-1277					
					Two	3	3	74-1	92-1200	92-1196		
									92-1201			
									74-3	92-1202	92-1196	
									74-117	92-1171	92-1149	
				74-118	92-1172	92-1149						

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
	85 SD Cooling B	Two	4*	4*	73-36	92-1194	92-1181		
					73-37	92-1195	92-1181		
					73-63	92-1197	92-1198		
		Three	1	1	73-54	95-1161	95-1159		
	86 SD Cooling B	Three	8	8	75-11	95-1162	95-1104		
					75-14	95-1164	95-1053		
					75-60	95-1188	95-1054		
					75-61	95-1056	95-1054		
					75-62	95-1160	95-1124		
					75-87	95-1189	95-1055		
					83-40	95-1143	95-1124		
					83-41	95-1144	95-1124		
	88 East Wrap	Three	1	1	79-1	95-1196	95-1195		
	89 LPSI Suction 2	Two	1	1	71-79	92-1173	92-1146		
		Three	2	2	71-88	95-1197	95-1145		
					71-91	95-1198	95-1077		
	90 LPSI B	Two	4*	4*	83-55	92-1174	92-1147		*required between 2 zones
					83-56	92-1175	92-1147		
					83-59	92-1176	92-1167		
	91 LPSI A	One	2	2	74-44	87-1358	87-1335		
					76-2	87-1354	87-1338		
		Two	2	2	77-8	92-1177	92-1180		
					77-10D	92-1178	92-1168		
	92 LPSI A	One	5	5	70-2	87-1355	87-1332		
					70-16	87-1356	87-1333		
					70-17	87-1357	87-1333		
					70-80	87-1353	87-1333		
					70-85	87-1352	87-1333		
	93 SI West Wrap	Two	4*	4*	82-64	93-1328	93-1326		
	94 LPSI A	One	2	2	82-47	87-1308	87-1288		
					82-48	87-1307	87-1288		
	95 B Train 88' Pipe Chase	Three	2	2	71-34	95-1046	95-1079		
					71-36	95-1047	95-1079		
	100 LPSI A Suction	One	1	1	70-134	87-1586	87-1433		
		Two	2*	2*	70-116	92-1346	92-1326		*required between 2 zones
	101 LPSI B Suction	Two	2*	2*	71-130	92-1356	92-1329		
		Three	4	4	71-112	95-1154	95-1089		
					71-113	95-1153	95-1089		
					71-124	95-1214	95-1152		
					85-3	98-1079	98-1076		
FR 5.21	88 LPSI B	One	1	1	78-16	87-1330	87-1323		
	93 Cont. Sump Suction	Two	1	1	84-9	92-1179	92-1169		
	96 Cont LPSI 1A	Three	3	3	76-25	95-1147	95-1081		
					76-27	95-1149	95-1081		
					76-47	95-1148	95-1105		
	97 LPSI B	Two	3	3	77-22	92-1334	92-1325		
					77-27	92-1335	92-1325		
					77-28D	92-1336	92-1325		
	98 LPSI to Loop 2A	One	2	2	78-45	87-1511	87-1505		
					78-47	87-1512	87-1505		
FR 5.31	82 SD Cooling A	One	1	1	72-49A		87-1275		

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
86	SD Cooling B	Three	1	1	75-13	95-1163	95-1053		
91	LPSI A	One	1	1	74-102		87-1351		

**APPENDIX B**  
**CODE LIMITATIONS**



**APPENDIX B**

**CODE LIMITATIONS**

**There were no Code Limitations identified  
after the Seventh Refueling Outage.**

**APPENDIX C**

**FORM  
NIS-1**

# APS

## NIS-1 FORM

### OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

1. OWNER - *ARIZONA PUBLIC SERVICE COMPANY, et al*  
ADDRESS - *P.O. BOX 52034, PHOENIX, ARIZONA 85072*
2. PLANT - *PALO VERDE NUCLEAR GENERATING STATION*  
ADDRESS - *5801 SOUTH WINTERSBURG ROAD; TONOPAH, ARIZONA 85354-7529*
3. UNIT NUMBER -     1
4. OWNERS' CERTIFICATE OF AUTHORIZATION - *NONE*
5. COMMERCIAL SERVICE DATE -     JANUARY 28, 1986
6. COMPONENTS INSPECTED:

COMPONENT OR APPURTENANCE	MANUFACTURER OR INSTALLER	SERIAL NUMBER	STATE OR PROVINCE	NATIONAL BOARD NO
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This report is a running summary of all examinations performed to date for Unit 1. The items examined, along with the examination report numbers, are listed in Appendix A. The examinations performed after the last Summary Report was issued are identified with a 98-1XXX or 99-1XXX report number.

# APS

# NIS-1 BACK

## OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

7. EXAM DATES 8-11-98 TO 11-6-99
8. INSPECTION INTERVAL FROM 1-28-86 TO 7-17-98
9. ABSTRACT OF EXAMINATIONS. INCLUDE A LIST OF EXAMINATIONS AND A STATEMENT CONCERNING STATUS OF WORK REQUIRED FOR CURRENT INTERVAL.  
There were no rejectable indications noted during this ISI activity.
10. ABSTRACT OF CONDITIONS NOTED  
There were no rejectable indications noted during this ISI activity.
11. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN  
There were no corrective measures required as a result of this ISI activity.

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

DATE 1/21/00 SIGNED: ARIZONA PUBLIC SERVICE COMPANY BY [Signature]  
1/26/00

## CERTIFICATE OF INSERVICE INSPECTION

I, 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 HSBI & I CO. OF HARTFORD, CONNECTICUT HAVE INSPECTED THE COMPONENTS DESCRIBED IN THIS OWNERS REPORT DURING THE PERIOD 8-11-98 TO 1-21-00, AND STATE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE OWNER HAS PERFORMED EXAMINATIONS AND TAKEN CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT IN ACCORDANCE WITH THE REQUIREMENTS OF THE ASME CODE, SECTION XI. BY SIGNING THIS CERTIFICATE NEITHER THE INSPECTOR NOR HIS EMPLOYER MAKES ANY WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE EXAMINATIONS AND CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT. FURTHERMORE, NEITHER THE INSPECTOR NOR HIS EMPLOYER SHALL BE LIABLE IN ANY MANNER FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE OR A LOSS OF ANY KIND ARISING FROM OR CONNECTED WITH THIS INSPECTION.

INSPECTOR [Signature] COMMISSIONS 28 9685 "N" "I" Az. 264  
DATE JANUARY 21, 2000 NAT'L BOARD, STATE, PROVINCE