



A subsidiary of Pinnacle West Capital Corporation

10 CFR 50.55a

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

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

Dear Sirs:

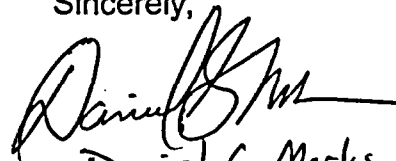
**Subject: Palo Verde Nuclear Generating Station (PVNGS)
Unit 2, Docket No. STN 50-529
Unit 2 Second 10-Year Interval – Twelfth Refueling Outage Inservice
Inspection Summary**

Pursuant to 10 CFR 50.55a and IWA-6240 of Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, 1992 Edition, 1992 Addenda, Arizona Public Service Company (APS) hereby submits in the enclosure PVNGS Unit 2 Inservice Inspection Report for the twelfth refueling outage. This refueling outage was conducted from April 2, 2005 through May 20, 2005.

This letter does not make any commitments to the NRC.

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

Sincerely,


Daniel G. Marks
for CKS

CKS/TNW/RJR/ca

Enclosure

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

A047

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ENCLOSURE 1

SECOND 10-YEAR ISI INTERVAL

SUMMARY REPORT

TWELFTH REFUELING OUTAGE

PALO VERDE NUCLEAR GENERATING STATION

UNIT 2

PALO VERDE NUCLEAR GENERATING STATION

UNIT 2 INSERVICE INSPECTION REPORT

TWELFTH REFUELING OUTAGE

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

PREPARED BY: *908/12/05*

DATE: *7/12/05*

REVIEWED BY: *RL 12*

DATE: *7-13-05*

APPROVED BY: *Michael Meets*

DATE: *7-20-05*

COMMERCIAL SERVICE DATE: 09/19/86

REPORT DATE: 07/12/05

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UNIT 2 INSERVICE INSPECTION REPORT

1. Introduction

This report is a summary of the Inservice Inspection (ISI) examinations performed during the twelfth refueling outage at the Palo Verde Nuclear Generating Station (PVNGS) Unit 2. This report also includes all applicable examinations conducted since the last refueling outage. This was the first refueling for Interval 2, Period 3, which was conducted from April 2, 2005 through May 20, 2005. Palo Verde Unit 2 began commercial operation on September 19, 1986.

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

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

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

2. Examination Summary

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

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

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

3. Examination Techniques

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

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

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

4. Accessibility

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

5. Personnel

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

6. Equipment and Materials

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

7. Repairs and Replacements

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

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

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

APPENDIX A

INSERVICE INSPECTION SUMMARY REPORT

APPENDIX A

Definition of Terms

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

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

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

Zone No - Area designation per PVNGS design

Comp/Sys - Component or system description

Insp Per - Inspection period

Amt Req'd - Number of items *required* to be completed in the period

Amt Comp - Number of *required* items completed

Item ID - Item identification per ISI program/zone drawings

Reports (VOL) - Volumetric exam report number

(SURF) - Surface exam report number

(VIS) - Visual exam report number

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

Definition of terms continued

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

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INSERVICE INSPECTION SUMMARY REPORT

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

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INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

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INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

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INSERVICE INSPECTION SUMMARY REPORT

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

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INSERVICE INSPECTION SUMMARY REPORT

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

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INSERVICE INSPECTION SUMMARY REPORT

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

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INSERVICE INSPECTION SUMMARY REPORT

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

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INSERVICE INSPECTION SUMMARY REPORT

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

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INSERVICE INSPECTION SUMMARY REPORT

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

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INSERVICE INSPECTION SUMMARY REPORT

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

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INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

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INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX A
INSERVICE INSPECTION SUMMARY REPORT

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

APPENDIX B

INSERVICE INSPECTION CODE LIMITATIONS

APPENDIX B

UNIT 2 - REFUELING OUTAGE TWELVE

CODE LIMITATIONS

| <u>ASME Item</u> | <u>Zone / Component</u> | <u>ITEM ID</u> | <u>Report Number(s)</u> |
|-------------------|---|----------------|-------------------------|
| B9.11 | 29 Pressurizer Spray | 29-2 | UT-05-058 |
| B9.11 | 29 Pressurizer Spray | 29-3 | UT-05-059 |
| B9.21 | 30 Aux Pressurizer Spray | 30-1 | UT-05-063 |
| B9.21 | 30 Aux Pressurizer Spray | 30-2 | UT-05-064 |
| <u>Limitation</u> | Single-sided Austenitic weld examinations estimated at 50% coverage, based on ASME Appendix VIII PDI demonstration. | | |

APPENDIX C

NIS-1 FORMS

APS

NIS-1 FORM

OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

1. OWNER - *ARIZONA PUBLIC SERVICE COMPANY, et al*
ADDRESS - *P.O. BOX 52034, PHOENIX, ARIZONA 85072*
2. PLANT - *PALO VERDE NUCLEAR GENERATING STATION*
ADDRESS - *5801 SOUTH WINTERSBURG ROAD; TONOPAH, ARIZONA 85354-7529*
3. UNIT NUMBER - 2
4. OWNERS' CERTIFICATE OF AUTHORIZATION - *NONE*
5. COMMERCIAL SERVICE DATE - September 19, 1986
6. COMPONENTS INSPECTED:

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

This report is a summary of the second interval third period examinations performed to date for Unit 2. The items examined, along with the examination report numbers, are listed in Appendix A.

APS

NIS-1 BACK

OWNERS' DATA REPORT FOR INSERVICE INSPECTIONS

7. EXAM DATES 4-2-2005 TO 5-20-2005
8. INSPECTION INTERVAL FROM 3-18-1997 TO 3-17-2007
9. ABSTRACT OF EXAMINATIONS. INCLUDE A LIST OF EXAMINATIONS AND A STATEMENT CONCERNING STATUS OF WORK REQUIRED FOR CURRENT INTERVAL.

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

10. ABSTRACT OF CONDITIONS NOTED

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

11. ABSTRACT OF CORRECTIVE MEASURES RECOMMENDED AND TAKEN

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

Several repairs and replacements have been performed since the last summary report due to routine or corrective maintenance. The work was performed in accordance with ASME Section XI and APS Work Control procedures. Applicable NIS-2 forms are included in Appendix D and a copy maintained on file at Palo Verde Nuclear Generating Station by Arizona Public Service Company.

WE CERTIFY THAT THE STATEMENTS MADE IN THIS REPORT ARE CORRECT AND THE EXAMINATIONS AND CORRECTIVE MEASURES TAKEN CONFORM TO THE RULES OF THE ASME CODE, SECTION XI.

DATE 7/21/05 SIGNED: ARIZONA PUBLIC SERVICE COMPANY BY

Michael Melton

CERTIFICATE OF INSERVICE INSPECTION

I, THE UNDERSIGNED, HOLDING A VALID COMMISSION ISSUED BY THE NATIONAL BOARD OF BOILER AND PRESSURE VESSEL INSPECTORS AND THE STATE OR PROVINCE OF ARIZONA EMPLOYED BY HSB CT OF HARTFORD, CONNECTICUT HAVE INSPECTED THE COMPONENTS DESCRIBED IN THIS OWNERS REPORT DURING THE PERIOD 12-16-03 TO 5-20-05, AND STATE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE OWNER HAS PERFORMED EXAMINATIONS AND TAKEN CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT IN ACCORDANCE WITH THE REQUIREMENTS OF THE ASME CODE, SECTION XI. BY SIGNING THIS CERTIFICATE NEITHER THE INSPECTOR NOR HIS EMPLOYER MAKES ANY WARRANTY, EXPRESSED OR IMPLIED, CONCERNING THE EXAMINATIONS AND CORRECTIVE MEASURES DESCRIBED IN THIS OWNERS REPORT. FURTHERMORE, NEITHER THE INSPECTOR NOR HIS EMPLOYER SHALL BE LIABLE IN ANY MANNER FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE OR A LOSS OF ANY KIND ARISING FROM OR CONNECTED WITH THIS INSPECTION.

INSPECTOR 

COMMISSIONS

NB 9685 "A.N.I.C" Az 264
NAT'L BOARD, STATE, PROVINCE

DATE 7-21-05

APPENDIX D

NIS-2 FORMS

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2RC018H00A
- 2.. Item Description: Pipe Support
3. N-5 Data Package Number: 2RC03-1B
4. W.O. Number: 219436
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rotate Item 3, 180° and replace 1" U-Bolt IAW drawing 13-RC-018-H-00A
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:

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

No failure of ASME components. Modification to increase clearance of support from pipe weld.

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

14. Preservice Inspection Required:

☒ YES ☒ NO
am 5/10/05

Initial HL Date 5/2/05 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required:

☐ YES ☒ NO

Initial HL Date 5/2/05 If required, include a step in the W.O. for ISI & ANII Inspection.

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

Initial HL Date 5/2/05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|-----------------------------|--|------------|-----------|---------------------------------------|
| Hanger 2RC018H00A U-Bolt | APN 00090004 <u>4314000201</u> | N/A | MGO/92707 | MR P.O. <u>60223694</u> |
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18. Planner Herbert L. Green 5/2/05 Printed Name: Herbert L. Green
Signature Date

19. ISI Alan Morrow 5/2/05 Printed Name: Alan Morrow Log Entry am
Signature Date

20. ANII R.G. HOGSTROM 5-2-05 Printed Name: R.G. HOGSTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/02/2005

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 219436

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant System

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Pipe Support | N/A | N/A | N/A | 2RC018H00A | 2005 | Replacement | NO |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
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| | | | | | | | |

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

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

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/10/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 5-2-05 to 5-10-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RS Linton
Inspectors Signature

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

Date: 5-10-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page of

1. Component ID 2PRCEV244
2. Item Description: 4" Pressurizer Spray Check Valve
3. N-5 Data Package Number: 2RC03-1B
4. W.O. Number: 219436
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: To Remove the 4" Check Valve 2PRCEV244 and replace adjacent piping per Eng-DM 219184
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

The Check Valve internals were removed during Start-up testing and Maintenance has a long history of problems with the body to bonnet seal. Reference Eng-DM 219184 Evaluation.

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

Initial KVS Date 6/3/04 If required, include a step in the W.O. to perform Preservice Inspection

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

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

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

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

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

18. Planner Karl V. Savage Date 6/3/04 Printed Name: Karl V. Savage

19. ISI R. P. Indap Date 6/9/04 Printed Name: R. P. INDAP

20. ANII R. G. Hagstrom Date 6-9-04 Printed Name: R. G. Hagstrom

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/19/2004

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 219436

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

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

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

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

Other ☐ Pressure _____ psi Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

*pre pressure test w.o. Review - ISI Alan Morrow
ANTI 24 system*

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Morrow ISI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Walker E. L. L.
Inspectors Signature

Commissions: NB 9098 ANI WFL
NB 9685 N T A7264-5-14-05
National Board, State, Province, and Endorsements

Date: 5-16-05

1. Component ID 2PRCEL032 2. Code Class ASME Section III Class 1
 3. Item Description: Reactor Vessel to Steam Generator #1 hot leg piping
 4. N-5 Data Package Number: 2RC01-1A 5. W.O. Number: 2448544
 6. Original Construction Code Edition: 1974 Edition, Summer 1974 Addenda
 7. Original Installation Code Edition: 1974 Edition, Winter 1974 Addenda
 8. Work Description: Perform modification of ASME Section III, Class 1 RTD nozzles IAW DMWO 2376926.
 9. ☐ ISI Flaw NDE Method of Flaw Detection:
 Report Number:

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

Potential cracking of ^{existing nozzle} Inconel 600 mat. Being replaced with
Inconel 690. See DMWO 2376926 for complete evaluation.

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

15. Preservice Inspection Required: ☐ YES ☒ NO

Initial MS Date 2/15/02 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial MS Date 2/15/02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial MS Date 2/15/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial MS Date 2/15/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/ROS No. |
|--------------------------------------|---------------|------------|----------|------------|
| 2JRCBTW0112HB Inconel 690 Nozzle | APN# 00067199 | N/A 13 | | MR#952874 |
| 2JRCBTW0112HB Inconel 690 Thermowell | APN# 00067116 | N/A 13 | | MR#952874 |
| 2JRCDTW0112HD Inconel 690 Nozzle | APN# 00067199 | N/A 12 | | MR#952879 |
| 2JRCDTW0112HD Inconel 690 Thermowell | APN# 00067116 | N/A 12 | | MR#952879 |
| | | | | |
| | | | | |
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19. Planner Herbert Green 2/15/02 Printed Name: HERBERT GREEN
 Signature Date
 20. ISI Ramakant P. Indap 3/15/02 Printed Name: RAMAKANT P. INDAP
 Signature Date
 21. ANII Robert G. Hogstrom 3-18-02 Printed Name: ROBERT G. HOGSTROM
 Signature Date

ASME SECTION XI - REPAIR / REPLACEMENT

Page 2 of 2

1. Component ID 2PRCEL032 2. Code Class ASME Section III Class 1
3. Item Description: Reactor Vessel to Steam Generator #1 hot leg piping
4. N-5 Data Package Number: 2RC01-1A 5. W.O. Number: 2448544
6. Original Construction Code Edition: 1974 Edition, Summer 1974 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1974 Addenda
8. Work Description: Perform modification of ASME Section III, Class 1 RTD nozzles IAW DMWO 2376926.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA-4150:

see page 1

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

Initial HL Date 2/19/02 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial HL Date 2/15/02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial HL Date 2/15/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial HL Date 2/15/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

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

19. Planner HL 2/15/02 Printed Name: Harriet Green
Signature Date

20. ISI R. P. Indar 2/15/02 Printed Name: RAMANANT P. INDAR
Signature Date

21. ANII R.G. Hogstrom 3-18-02 Printed Name: R.G. HOGSTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 02/15/2002

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2448544

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|----------------|------------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| RCS Hot Leg #1 | Combustion Engineering | 771-301 | N/A | 2PRCEL032 | 1980 | Repaired | YES |
| | | | | | | | |
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7. Description of Work: Perform modification of ASME Section III, Class 1 RTD nozzles IAW DMWO 2376926.

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

Other ☐

Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

W.O. 2448544

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

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. P. Indap, Consulting Metallurgical Engineer Date: 5/4/2005
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 3-18-02 to 5-6-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. P. Indap
Inspectors Signature

Commissions NB 1685 "A.N.I.C" Az 264
National Board, State, Province, and Endorsements

Date: 5-6-2005

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 2

1. Component ID 2PRCEL063
2. Code Class ASME Section III Class 1
3. Item Description: Reactor Vessel to Steam Generator #2 hot leg piping
4. N-5 Data Package Number: 2RC01-1A
5. W.O. Number: 2448549
6. Original Construction Code Edition: 1974 Edition, Summer 1974 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1974 Addenda
8. Work Description: Perform modification of ASME Section III, Class 1 RTD nozzles IAW DMWO 2376926.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA-4150:

Potential cracking of existing Inconel 600 nozzle. Therefore it is being replaced with Inconel 690. See DMWO 2376926 for complete evaluation.

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

Initial HL Date 2/19/02 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial HL Date 2/19/02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial HL Date 2/19/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial HL Date 2/19/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

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

19. Planner Herbert Gless 2/15/02 Printed Name: HERBERT GLESS
Signature Date

20. ISI R.P. Indap 3/15/02 Printed Name: R.P. INDAP
Signature Date

21. ANII R.L. Hoagston 3-18-02 Printed Name: R.L. HOAGSTON
Signature Date

ASME SECTION XI - REPAIR / REPLACEMENT page 2 of 2

1. Component ID 2PRCEL063
2. Code Class ASME Section III Class 1
3. Item Description: Reactor Vessel to Steam Generator #2 hot leg piping
4. N-5 Data Package Number: 2RC01-1A
5. W.O. Number: 2448549
6. Original Construction Code Edition: 1974 Edition, Summer 1974 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1974 Addenda
8. Work Description: Perform modification of ASME Section III, Class 1 RTD nozzles IAW DMWO 2376926.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA-4150:

See page 1

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

15. Preservice Inspection Required: ☐ YES ☒ NO

Initial [Signature] Date 2/19/02 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial [Signature] Date 2/19/02 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial [Signature] Date 2/19/02 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial [Signature] Date 2/19/02 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

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

19. Planner [Signature] 2/19/02 Printed Name: Herbert Green
Signature Date

20. ISI [Signature] 3/15/02 Printed Name: R.P. INDAP
Signature Date

21. ANII [Signature] 3-18-02 Printed Name: R.G. Hogstrom
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. Date: 02/15/2002
P. O. Box 53999, Phoenix Arizona 85072-2034 Sheet: 1 of 2
2. Plant: Palo Verde Nuclear Generating Station Unit: 2
5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2448549
3. Work Performed by: Arizona Public Service Type of Code Stamp None
 Authorization No. N/A
 Expiration Date N/A
4. Identification of System: Reactor Coolant System, line number 2PRCEL063, Spool S-001.
5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 74 Addenda, _____ Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

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

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

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

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

FORM NIS-2 (Back)

W.O. 2448549

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

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. P. Indap, Consulting Metallurgical Engineer Date: 5/4/2005
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 3-18-02 to 5-6-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. P. Indap

Inspectors Signature

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

Date: 5-6-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2JCHBHV0203
- 2.. Item Description: PRESSURIZER AUX SPRAY VALVE
3. N-5 Data Package Number: 2RC03-1A
4. W.O. Number: 2571021
5. Original Construction Code Edition: 1977 EDITION, WINTER 1977 ADDENDA
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: REWORK VALVE INTERNALS AND REINSTALL SEAL WELD
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
THERE HAS BEEN NO FAILURE OF THE CODE PRESSURE BOUNDARY

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: SEC III CL1, 1974 EDITION, 1976 SUMMER ADDENDA
12. Repair/Replacement Activity Construction Code/Edition: Sec. III CL1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial Geo Date 1/18/05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial Geo Date 1/18/05 If required, include a step in the W.O. for ISI & ANII Inspection.

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

Initial Geo Date 1/18/05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|-----------|----------|------------|----------|--------------|
| MAIN DISC | 45020253 | 356 | | HP 926058 |
| | | | | PO 60185389 |
| | | | | WO 2571021 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

18. Planner G. Csmundson 1/19/05 Printed Name: G. CSMUNDSON
Signature Date

19. ISI R.P. INZAP 1/18/05 Printed Name: R.P. INZAP Log Entry R.P.
Signature Date

20. ANII R.G. HOGSTROM 1-18-05 Printed Name: R.G. HOGSTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 12/01/2004

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2571021

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 2RC03-1A

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Main Disc | Target Rock | 356 | N/A | 2JCHBHV0203 | 1983 | Replacement | No |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Rework valve internals and reinstall seal weld.

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

Other ☐ Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

9. Remarks: REWORK VALVE INTERNALS AND REINSTALL SEAL WELD

WO 2571021

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/11/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 1-18-05 to 5-11-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RS [Signature]
Inspectors Signature

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

Date: 5-11-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2PCHNV379
2. Item Description: CHN-D01A IOX RESIN SLUICE HDR SUPPLY
3. N-5 Data Package Number: 2CH01-1 4. W.O. Number: 2630480
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace valve body and gate due to internal damage of valve. (A complete valve assembly (APN 45002793) will be obtained from warehouse and the necessary replacement parts (body and gate) will be removed from valve assembly and installed. ONLY REPLACED GATE *diff 2-21-04*

8. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

*Valve gate guide area damage due to galling.
Replacement is a normal maintenance.
No failure in the pressure retaining part. R.P. Indap
1/23/04*

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

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

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

Initial DWS Date 01/23/04 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DWS Date 01/23/04 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DWS Date 01/23/04 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|--------------------------------------|--------------|--------------|----------|--------------|
| Body | | | | |
| Gate | APN 45050746 | 225195 SN 11 | N/A | MR # 831677 |
| Valve <i>diff 2-21-04</i> | APN 45002793 | | | MR 825348 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

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

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

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

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 02/21/2004

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2630480

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: CH: Volumn and chemical control

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Gate | Borg Warner | 225195SN11 | n/a | 2PCHNV379 | 1992 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Replaced valve gate.

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

Other ☐ Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A _____

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

Signed: Alan Monow ISI Engineer Date: 2-24-04
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 1-23-04 to 2-24-04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RJ Lyman

Inspectors Signature

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

Date: 2-24-04

ASME SECTION XI - REPAIR/REPLACEMENT

Page 1 of 1

1. Component ID 2MRCEE01A - SN#212 2. Code Class ASME Section III, Class 1

3. Item Description Steam Generator #1

4. N-5 Package Number 2RC01-1A

5. W.O. Number 2664794

6. Original Construction Code Edition 1989 Edition & No Addenda

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

8. Work Description Install Westinghouse mechanical plugs in 2MRCEE01A "Cold Leg" tubes per Engineering DFWO# 2664786 evaluation and disposition.

9. ☒ ISI Flaw

NDE Method of Flaw Detection Eddy Current Testing
Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
Evaluation Per Eng-DFWO# 2664786

11. Repair/Replacement Work Organization Westinghouse

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

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

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

15. Preservice Inspection Required.

☐ YES

☒ NO

BV
Initial

04/14/05
Date

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

16. ASME Section XI Pressure Test Required

☐ YES

☒ NO

BV
Initial

04/14/05
Date

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

BV
Initial

04/14/05
Date

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

BV
Initial

04/14/05
Date

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

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

19. Planner

Barbara Vidal
Signature

4/14/05
Date

Print Name

Barbara Vidal

20. ISI Engineer

R.P. Indap
Signature

4/14/05
Date

Print Name

R.P. Indap Log entry - RPI

21. ANII

R.G. HOGSTROM
Signature

4-14-05
Date

Print Name

R.G. HOGSTROM

DFWO 2664786 and DIWO 2664794

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

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

All plugs were from heat NX3171HK.

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 04/14/05

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

2. Plant Palo Verde Nuclear Generating Station Unit 2
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2664794
Name
Address Work Order Number

3. Work Performed by Westinghouse Type Code Symbol Stamp None
911 W. Main St. Chattanooga, TN. 37402 Authorization No. N/A
Name
Address Expiration Date N/A

4. Identification of System Reactor Coolant (RC)

5. (a) Applicable Construction Code ASME Sect.III CL.1 19 89 Edition, NO Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|-----------------|----------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Steam Generator | Ansaldo | 212 | NA | 2MRCEE01A | 2002 | Repaired | Yes |
| Tube Plugs | Westinghouse | NA | NA | NA | 2005 | Replacement | No |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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

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

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

FORM NIS-2 (Back)

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

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A _____

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

Signed: R. Phadap, Consulting Metallurgical Engineer Date: 5/4/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 5-4-05 to 4-15-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. Phadap
Inspectors Signature

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

Date: 5-4-05

ASME SECTION XI - REPAIR/REPLACEMENT

Page 1 of 1

1. Component ID 2MRCEE01A - SN#212 2. Code Class ASME Section III, Class 1
3. Item Description Steam Generator #1
4. N-5 Package Number 2RC01-1A 5. W.O. Number 2664795
6. Original Construction Code Edition 1989 Edition & No Addenda
7. Original Installation Code Edition 1974 Edition & 1975 Winter Addenda
8. Work Description Install Westinghouse mechanical plugs in 2MRCEE01A "Hot Leg" tubes per Engineering DFWO# 2664788 evaluation and disposition.
9. ☒ ISI Flaw NDE Method of Flaw Detection Eddy Current Testing
Report Number _____
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
Evaluation Per Eng-DFWO# 2664788
11. Repair/Replacement Work Organization Westinghouse
12. Replacement Item Construction or reconciled Code/Edition 1989 Edition & No Addenda
13. Repair/Replacement Activity Construction Code/Edition 1974 Edition & 1975 Winter Addenda
14. ASME Section XI Code/Edition 1992 Edition & 1992 Addenda
15. Preservice Inspection Required. ☐ YES ☒ NO
BV 04/14/05 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
BV 04/14/05 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
- BV 04/14/05 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
- BV 04/14/05 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

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

19. Planner Barbara Vidal 4/14/05 Print Name Barbara Vidal
Signature Date
20. ISI Engineer R.P. Indap 4/14/05 Print Name R.P. Indap Log Entry-REP
Signature Date
21. ANII R.G. Hogstrom 4-14-05 Print Name R.G. Hogstrom
Signature Date

DFWO 2664788 and DIWO 2664795

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

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

All plugs were from heat NX3171HK.

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 04/14/05

Name

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

Address

Sheet 1 of 22. Plant Palo Verde Nuclear Generating Station Unit 2

Name

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

Address

2664795

Work Order Number

3. Work Performed by Westinghouse Type Code Symbol Stamp None

Name

Authorization No. N/A911 W. Main St. Chattanooga, TN. 37402

Address

Expiration Date N/A4. Identification of System Reactor Coolant (RC)5. (a) Applicable Construction Code ASME Sect.III CL.1 19 89 Edition, NO Addenda, N/A Code Case(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 19 92 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|-----------------|----------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Steam Generator | Ansaldo | 212 | NA | 2MRCEE01A | 2002 | Repaired | Yes |
| Tube Plugs | Westinghouse | NA | NA | NA | 2005 | Replacement | No |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work Plug Steam Generator Hot Leg Tubes Per DFWO# 26647888. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐Other ☐

Pressure _____ psi

Test Temp. _____ °F

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

FORM NIS-2 (Back)

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

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. P. Indeg, Consulting Metallurgical Engineer Date: 5/4/2005
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-14-05 to 5-4-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. P. Indeg
Inspectors Signature

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

Date: 5-4-05

ASME SECTION XI - REPAIR/REPLACEMENT

Page 1 of 1

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

3. Item Description Steam Generator #2

4. N-5 Package Number 2RC01-1A

5. W.O. Number 2664806

6. Original Construction Code Edition 1989 Edition & No Addenda

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

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

9. ☒ ISI Flaw

NDE Method of Flaw Detection Eddy Current Testing

Report Number _____

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

11. Repair/Replacement Work Organization Westinghouse

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

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

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

15. Preservice Inspection Required.

☐ YES

☒ NO

BV
Initial

04/14/05
Date

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

16. ASME Section XI Pressure Test Required

☐ YES

☒ NO

BV
Initial

04/14/05
Date

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

BV
Initial

04/14/05
Date

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

BV
Initial

04/14/05
Date

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

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

19. Planner

Barbara Vidal
Signature

4/14/05
Date

Print Name

Barbara Vidal

20. ISI Engineer

R.P. Indap
Signature

4/14/05
Date

Print Name

R.P. Indap Log entry-RP

21. ANII

R.G. Houston
Signature

4-15-05
Date

Print Name

R.G. Houston

DFWO 2664789 and DIWO 2664806

211 RPE 5/4/05

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

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

All plugs were from heat NX3171HK.

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 04/14/05

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

2. Plant Palo Verde Nuclear Generating Station Unit 2

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2664806
Name Address Work Order Number

3. Work Performed by Westinghouse Type Code Symbol Stamp None

911 W. Main St. Chattanooga, TN. 37402 Authorization No. N/A

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

4. Identification of System Reactor Coolant (RC)

5. (a) Applicable Construction Code ASME Sect.III CL.1 19 89 Edition, NO Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|-----------------|----------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Steam Generator | Ansaldo | 211 | NA | 2MRCEE01B | 2002 | Repaired | Yes |
| Tube Plugs | Westinghouse | NA | NA | NA | 2005 | Replacement | No |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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

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

Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

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

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A

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

Signed: R. P. Pindley Consulting Metallurgical Engineer Date: 5/4/2005
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-15-05 to 5-4-05; and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. P. Pindley
Inspectors Signature

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

Date: 5-4-05

ASME SECTION XI - REPAIR/REPLACEMENT

Page 1 of 1

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

3. Item Description Steam Generator #2

4. N-5 Package Number 2RC01-1A 5. W.O. Number 2664807

6. Original Construction Code Edition 1989 Edition & No Addenda

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

8. Work Description Install Westinghouse mechanical plugs in 2MRCEE01B "Hot Leg" tubes per Engineering DFWO# 2664790 evaluation and disposition.

9. ☒ ISI Flaw NDE Method of Flaw Detection Eddy Current Testing
Report Number _____

10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
Evaluation Per Eng-DFWO# 2664790

11. Repair/Replacement Work Organization Westinghouse

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

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

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

15. Preservice Inspection Required. ☐ YES ☒ NO

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

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

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

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

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

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

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

20. ISI Engineer R.P. Indap 4/14/05 Print Name R.P. INDAP Logentry-RAR
Signature Date

21. ANII R.G. Hestrom 4-14-05 Print Name R.G. HESTROM
Signature Date

DFWO 2664790 and DIWO 2664807

211 ~~RP~~ 5/4/05

Replacement Steam Generator (2MRCEE01B-SN212) Hot Leg, had mechanical plugs (part # 0307-1601) obtained via MR -733382 installed in the following locations:

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

All plugs were from heat NX3171HK.

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 04/14/05

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

2. Plant Palo Verde Nuclear Generating Station Unit 2

Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2664807
Address Work Order Number

3. Work Performed by Westinghouse Type Code Symbol Stamp None

Name
911 W. Main St. Chattanooga, TN. 37402 Authorization No. N/A
Address Expiration Date N/A

4. Identification of System Reactor Coolant (RC)

5. (a) Applicable Construction Code ASME Sect.III CL.1 19 89 Edition, NO Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|-----------------|----------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Steam Generator | Ansaldo | 211 | NA | 2MRCEE01B | 2002 | Repaired | Yes |
| Tube Plugs | Westinghouse | NA | NA | NA | 2005 | Replacement | No |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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

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

Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

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

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A _____

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

Signed: R. P. Indap, Consulting Metallurgical Engineer Date: 5-4-2005
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-14-05 to 5-4-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. P. Indap
Inspectors Signature

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

Date: 5-4-05

Page _____ of _____

Printed Name: RGE HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/29/2005

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2664893

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SI: Safety Injection

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Snubber | PSA | 18742 | n/a | 2PC005H015 | 1981 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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

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

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

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

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow Sr ISI Engineer Date: 4/29/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-19-05 to 4-29-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RL [Signature]
Inspectors Signature

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

Date: 4-29-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2SI106H008
- 2.. Item Description: snubber
3. N-5 Data Package Number: 2SI9-2
4. W.O. Number: 2664897
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: SNUBBER REPLACEMENT
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Replaced due failure of ST..

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III NF C1 2, 1974 Edition Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III C1 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☒ YES ☐ NO

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

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

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

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

Initial MJS Date 4-14-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|---------|----------|------------|----------|--------------|
| SNUBBER | PSA-1/4W | 20941 | n/a | 2664897 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

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

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

20. ANII Rex Houston 4-15-05 Printed Name: Rex Houston
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/14/2005

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2664897

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SI

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Snubber | Pacific scientific | 20941 | n/a | 2SI106H008 | 81 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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

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

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

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

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. P. Jordan, Consulting Metallurgical Engineer Date: 5/4/2005
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-15-05 to 5-5-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. P. Jordan
Inspectors Signature.

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

Date: 5-5-05

Page 1 of 1Page 1 of 1

- Initial MS Date 2/26/04 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

[illegible]

18. Planner Glenn E. Moore 2-28-04 Printed Name: Glenn E. Moore
Signature Date

19. ISI *Fred Potteet* 2/26/04 Printed Name: FRED POTTEET
Signature Date

20. ANII Robert Hogstrom 3-26-04 Printed Name: ROBERT HOGSTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 02/27/2004

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2687065

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Item 70 | n/a | n/a | n/a | 2CH034H00A | n/a | Replacement | NO |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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

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

Other ☐ Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A _____

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

Signed: Alan Morrow PSE Engineer Date: 3/2/04
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 2-26-04 to 3-2-04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspectors Signature

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

Date: 3-2-04

ASME SECTION XI - REPAIR/REPLACEMENT

Page 1 of 1

1. Component ID 2MRCEE01A - SN#212 2. Code Class ASME Section III, Class I
3. Item Description Steam Generator #1
4. N-5 Package Number 2RC01-1A 5. W.O. Number 2687154
6. Original Construction Code Edition 1989 Edition & No Addenda
7. Original Installation Code Edition 1974 Edition & 1975 Winter Addenda
8. Work Description Install CE roll plugs in 2MRCEE01A "Cold Leg" tubes Per Engineering DFWO# 2685754 evaluation and disposition.
9. ☒ ISI Flaw NDE Method of Flaw Detection Eddy Current Testing
Report Number _____
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
Evaluation Per Eng-DFWO# 2685754

11. Repair/Replacement Work Organization Westinghouse
12. Replacement Item Construction or reconciled Code/Edition 1989 Edition & No Addenda
13. Repair/Replacement Activity Construction Code/Edition 1974 Edition & 1975 Winter Addenda
14. ASME Section XI Code/Edition 1992 Edition & 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
DWS 02/27/04 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date

16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
DWS 02/27/04 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
- DWS 02/27/04 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
- DWS 02/27/04 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

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

19. Planner DW Shaffer 02/27/04 Print Name David Shaffer
Signature Date
20. ISI Engineer DB Hansen 2-28-04 Print Name DB Hansen
Signature Date
21. ANII R. Hogstrom by DBH 2-28-04 Print Name DB Hansen
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 02/23/04
Name
P.O. Box 53999, Phoenix, Arizona 85072-2034 Sheet 1 of 2
Address

2. Plant Palo Verde Nuclear Generating Station Unit 2
Name
5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2687154
Address Work Order Number

3. Work Performed by Westinghouse Type Code Symbol Stamp None
Name
911 W. Main St. Chattanooga, TN. 37402 Authorization No. N/A
Address Expiration Date N/A

4. Identification of System Reactor Coolant (RC)

5. (a) Applicable Construction Code ASME Sect.III CL.1 1989 Edition, N/A Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|-----------------|----------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Steam Generator | Ansaldo | 212 | 161 | 2MRCEE01A | 2002 | Repaired | Yes |
| | | | | | | | |
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7. Description of Work Plug Steam Generator Cold Leg Tubes Per DIWO# 2687154

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

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

FORM NIS-2 (Back)

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

The following is the tube plug information:

| ASME SECTION XI-REPAIR/REPLACEMENT | | | | | | |
|------------------------------------|-----|-----|-----------|-------------|----------|--------|
| COMP. ID | ROW | COL | PART NO. | SERIAL NO. | HEAT NO. | MR NO. |
| 2MRCEE01A-SN212 | 156 | 143 | 0307-1601 | 40013385-93 | NX3171HK | 733382 |

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [Signature] Sr. Consulting Engr Date 02/29/04
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 2-28-04 to 2-29-04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

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

Date 2-29-04

ASME SECTION XI - REPAIR/REPLACEMENT

Page 1 of 1

1. Component ID 2MRCEE01A - SN#212 2. Code Class ASME Section III, Class 1
3. Item Description Steam Generator #1
4. N-5 Package Number 2RC01-1A 5. W.O. Number 2687155
6. Original Construction Code Edition 1989 Edition & No Addenda
7. Original Installation Code Edition 1974 Edition & 1975 Winter Addenda
8. Work Description Install CE roll plugs in 2MRCEE01A "Hot Leg" tubes Per Engineering DFWO# 2685754 evaluation and disposition.
9. ☒ ISI Flaw NDE Method of Flaw Detection Eddy Current Testing
Report Number _____
10. Evaluation of the suitability of this work as per the requirements of IWA-4150.
Evaluation Per Eng-DFWO# 2685754

11. Repair/Replacement Work Organization Westinghouse
12. Replacement Item Construction or reconciled Code/Edition 1989 Edition & No Addenda
13. Repair/Replacement Activity Construction Code/Edition 1974 Edition & 1975 Winter Addenda
14. ASME Section XI Code/Edition 1992 Edition & 1992 Addenda

15. Preservice Inspection Required. ☐ YES ☒ NO
DWS 02/27/04 If required, include a step in the W.O. to perform Preservice Inspection.
Initial Date
16. ASME Section XI Pressure Test Required ☐ YES ☒ NO
DWS 02/27/04 If required, include a step in the W.O. for ISI & ANII Inspection.
Initial Date
- DWS 02/27/04 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.
Initial Date
- DWS 02/27/04 18. Include a step in the W.O. to record below all applicable numbers for replacement items.
Initial Date

| ITEM I.D. | PART NO. | SERIAL NO. | HEAT NO. | MR/POWO NO. |
|------------|-----------|-------------|----------|-------------|
| Tube Plugs | 0307-1601 | 40013385-94 | PX317/HK | 733382 |
| | | | | |
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| | | | | |
| | | | | |

19. Planner DW Shaffer 02/27/04 Print Name David Shaffer
Signature Date
20. ISI Engineer DBH 2-28-04 Print Name DBHansen
Signature Date
21. ANII R. Hogstrom by DBH 2-28-04 Print Name DBHansen
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner Arizona Public Service Company, et. al. Date 02/29/04

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

2. Plant Palo Verde Nuclear Generating Station Unit 2

5801 S. Wintersburg Rd., Tonopah, Arizona 85354-7529 2687155
Name
Address Work Order Number

3. Work Performed by Westinghouse Type Code Symbol Stamp None

911 W. Main St. Chattanooga, TN. 37402 Authorization No. N/A
Name
Address

Expiration Date N/A

4. Identification of System Reactor Coolant (RC)

5. (a) Applicable Construction Code ASME Sect.III CL.1 1989 Edition, N/A Addenda, N/A Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|-----------------|----------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Steam Generator | Ansaldo | 212 | 161 | 2MRCEE01A | 2002 | Repaired | Yes |
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| | | | | | | | |

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

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

Other ☐ Pressure _____ psi Test Temp. _____ °F

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

FORM NIS-2 (Back)

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

The following is the tube plug information:

| ASME SECTION XI-REPAIR/REPLACEMENT | | | | | | |
|------------------------------------|-----|-----|-----------|-------------|----------|--------|
| COMP. ID | ROW | COL | PART NO. | SERIAL NO. | HEAT NO. | MR NO. |
| 2MRCEE01A-SN212 | 156 | 143 | 0307-1601 | 40013385-94 | NX3171HK | 733382 |

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [Signature] Sr. Consulting Engr Date 02/29/04
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's Report during the period 2-28-04 to 2-29-04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

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

Date 2-29-04

ASME SECTION XI - REPAIR/REPLACEMENT

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

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

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

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

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

| ITEM I.D. | PART NO. | SERIAL NO. | HEAT NO. | MR/ROS NO. |
|-------------------------|--------------|------------|----------|---------------|
| 8" Stainless Steel Pipe | APN 00061187 | | 455385 | MR# 873435 |
| 8" S.S. Elbow 90 Deg. | APN 00067691 | | MBHZ-1 | MR# 873435 |
| 8" Carbon Steel Pipe | APN 00064731 | | C66845 | PO. 500267840 |
| 8" Stainless Steel Pipe | APN 00061187 | | 385840 | MR# 755958 |
| | | | | |
| | | | | |
| | | | | |

19. Planner Karl V. Savage 8/25/2004 Print Name Karl V. Savage
Signature Date
 20. ISI Engineer Ramakant P. Indap 9/15/04 Print Name Ramakant P. Indap
Signature Date
 21. ANII Robert G. Hogstrom 9-15-04 Print Name Robert G. Hogstrom
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/04/2005

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2689066

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|---------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| 8" Pipe Spool | N/A | N/A | N/A | 2PSGEL011 | 2005 | Replacement | No |
| | | | | | | | |
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7. Description of Work: Replaced pipe spool due to flow accelerated corrosion of the original piping.

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

Other ☐ Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

9. Remarks: Work Order 2689066. Replaced 8" Spool S-004 of Line 2PSGEL011 with Stainless Steel.

PRE INSPECTION TEST REVIEW OF WORK ORDER: ISI: Alan Monow

ANIL: RS System

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A _____

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

Signed: Alan Monow ISI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

William T. Baker

Inspectors Signature

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

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page of

1. Component ID 2JECALV0015
- 2.. Item Description: ECWS Expansion Tank Level Control Valve
3. N-5 Data Package Number: 2EC01-4
4. W.O. Number: 2691433
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace main disc and seal weld to correct seat leakage.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No failure of ASME boundry. Trouble shoot and rework seat leakage. Replace bonnet to body seal weld.
10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III CI 3, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III CI 3, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☐ YES ☒ NO

Initial Geo Date 7/21/04 If required, include a step in the W.O. to perform Preservice Inspection

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

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

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

Initial Geo Date 7/21/04 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|---------|----------|------------|----------|--------------|
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18. Planner G Osmundson 7/21/04 Printed Name: G OSMUNDSON
Signature Date

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

20. ANII R.G. Hogstrom 7-21-04 Printed Name: R.G. HOGSTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. Date: 08/17/04
P. O. Box 53999, Phoenix Arizona 85072-2034 Sheet: 1 of 1
2. Plant: Palo Verde Nuclear Generating Station Unit: 2
5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2691433
3. Work Performed by: Arizona Public Service Co. Type of Code Stamp None
5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529 Authorization No. N/A
Expiration Date N/A
4. Identification of System: 2-EC01-4
5. (a) Applicable Construction Code ASME Section III ND, Class 3 1974 Edition, Winter 1975 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Valve | Target Rock | 3 | N/A | 2JECALV015 | 1978 | Repaired | Yes |
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7. Description of Work: Reworked (lapped) main disc & replaced seal weld to correct seat leakage.
8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-1 ☐
Other ☐ Pressure _____ psi Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. P. Indrup, Consulting Metallurgical Engineer Date: 8/17/04
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 7-21-04 to 8-17-04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

R. P. Indrup
Inspectors Signature

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

Date: 8-17-04

Page _____ of _____

Printed Name: R.G. Holstrom

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 01/04/2004

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2692100

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: CHEMICAL AND VOLUME CONTROL

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

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

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

N-416-2 ☐ Other Pressure psi

Test Temperature °F

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

FORM NIS-2 (Back)

9. Remarks: VALVE 2JCHNPSV0115 WAS REPLACED WITH A SPARE VALVE UNDER 2692100 TO EXPIDITE WORK ACTIVITY.

Pre-Pressured Test WO Review - ISI Alan Monow

ANII RS

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

W. Allen E. Allen
Inspectors Signature

Commissions: NB 8098 ANI 5-14-05
NB 9685 NPT AZ264
National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2JCHNPSV0345 2. Code Class ASME Section III Class 2
3. Item Description: Crosby relief valve
4. N-5 Data Package Number: 2CH13-1 5. W.O. Number: 2692107
6. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Remove valve and replace with tested spare.
9. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a pressure boundary failure. Valve is being replaced with spare to minimize maintenance outage time.

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

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

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

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

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

Initial DMS Date 4-17-05 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|--------------|--------------|----------------|----------|--------------|
| 2JCHNPSV0345 | APN 45000476 | N61180-00-0008 | n/a | WO 2606004 |
| | | | | |
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19. Planner David Goodlet 4-17-05 Printed Name: David Goodlet
Signature Date

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

21. ANII RLG 4-18-05 Printed Name: RLG HASTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 4/17/2005

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2692107

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Valve | Crosby | N61180-00-0008 | n/a | 2JCHNPSV0345 | 1986 | Replacement | YES |
| | | | | | | | |
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7. Description of Work: Install spare valve.

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

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

2. Remarks: Valve 2JCHNPSV0345 was replaced with spare under wo# 2692107 to reduce maintenance down time.

Pre-Pressured Test WO Review -- ISI

Alan Monow

4/22/05

ANII

24

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector Signature

Inspectors Signature

Commissions:

NB 8098 AUT
NB 9685 "N" "I" AZ264

National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page of

1. Component ID 2JSPAPSV0143
- 2.. Item Description: PSV
3. N-5 Data Package Number: 2SP01-2
4. W.O. Number: 2692282
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: VALVE REPLACEMENT
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Replaced valve due to disc is stuck in the seat and will not lift. This valve is being replaced so it can be sent to target rock corp. for analysis.

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

14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

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

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

Initial MJS Date 4-9-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|-----------------|----------|--|----------|--------------|
| TARGET ROCK PSV | 76Q-05 | <u>N/A R/L 4-13-05</u> <u>XZ 24</u> | n/a | 2692282 |
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18. Planner Martin J Sullivan 4-8-05 Signature Date Printed Name: Martin J Sullivan
19. ISI Robert L Browning 4-8-05 Signature Date Printed Name: Robert L Browning Log Entry RLB
20. ANII RG Hoagstrom 4-9-05 Signature Date Printed Name: RG Hoagstrom

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/09/2005

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2692282

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SP

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| SP PSV | target rock | 24 | n/a | 2JSPAPSV143 | 2005 | Replacement | YES |
| | | | | | | | |
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| | | | | | | | |

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

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

N-416-2 ☒ Other Pressure _____ psi

Test Temperature _____ °F

am
4/15/05

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

FORM NIS-2 (Back)

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

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

ANII N/A

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Morrow ISI Engineer Date: 4/15/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-9-05 to 4-15-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RS Lytham

Inspectors Signature

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

Date: 4-15-05

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/07/05

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2692582

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SI

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|-----------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| 14" Check Valve | Borg Warner | 31505 | 1020 | 2PSIEV227 | 1978 | Repaired | Yes |
| Bonnet | Borg Warner | 15 | N/A | 2X63 | 1978 | Replaced | Yes |
| Disc | Borg Warner | 17 | N/A | 2X49 | 1978 | Replaced | Yes |
| Bonnet | Borg Warner | 12 | N/A | 2X60 | 1978 | Replacement | Yes |
| Disc | Borg Warner | 20 | N/A | 2X52 | 1978 | Replacement | Yes |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Replaced the bonnet/arm/disk assembly to correct seat leakage.

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

Other ☐ Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

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

ANII: 25

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/17/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

William E. Weber

Inspectors Signature

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

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2PCHNV807
- 2.. Item Description: CHECK VALVE
3. N-5 Data Package Number: 2CH14-2
4. W.O. Number: 2692626
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: SEAL WELD BONNET AFTER REWORK OF SEAT AND DISC
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No failure to ASME Section III boundary. The bonnet seal weld replacement is for access to valve internals for ISI inspections.

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

14. Preservice Inspection Required: ☐ YES ☒ NO

Initial Dmg Date 8-31-2004 If required, include a step in the W.O. to perform Preservice Inspection

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

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

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

Initial Dmg Date 8-31-2004 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|------------------|----------|------------|----------|--------------|
| Bonnet seal weld | N/A | N/A | N/A | N/A |
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18. Planner David Goodlet 8-31-2004 Printed Name: DAVID GOODLET
Signature Date
19. ISI R. P. Indap 9/14/04 Printed Name: R. P. INDAP
Signature Date
20. ANII R. G. Hogstrom 9-15-04 Printed Name: R. G. HOGSTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 08/26/2004

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2692626

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|------------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Bonnet seal weld | Borg Warner | 57652 | n/a | 2PCHNV807 | 1980 | Replacement | YES |
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7. Description of Work: SEAL WELD VALVE BONNET REMOVED FOR ISI INSPECTION

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

Other ☐ Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A

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

Signed: Alan Monow ISI Engineer Date: 4/21/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-15-05 to 4-21-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RB L...

Inspectors Signature

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

Date: 4-21-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2SI123H001
- 2.. Item Description: Pipe Support (Snubber)
3. N-5 Data Package Number: Not Available
4. W.O. Number: 2693355
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the snubber due to suspected binding.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
The snubber is being replaced for precautionary measures. This is a like for like replacement.

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

Initial DWS Date 04/15/2004 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial DWS Date 04/15/2004 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DWS Date 04/15/2004 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DWS Date 04/15/2004 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|---------------|------------|------------|----------|--------------|
| 3 Kip Snubber | 1801106-05 | 9219 | N/A | |
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18. Planner *David Shaffer* 4/15/04 Printed Name: David Shaffer
Signature Date

19. ISI *R.P. Indrap* 4/15/04 Printed Name: R.P. Indrap
Signature Date

20. ANII *R.G. Houston* 4-15-04 Printed Name: R.G. Houston
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/15/2004

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2693355

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection (SI)

5. (a) Applicable Construction Code ASME Section III NF, Class 1 ^{1974 12-8-4-1604} ~~1971~~ 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 Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|---------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| 3 Kip Snubber | PSA | 9219 | N/A | 2SI123H001 | 1979 | Replacement | YES |
| | | | | | | | |
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7. Description of Work: Replace 2SI123H001, no welding.

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

Other ☐ Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A _____

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

Signed: 15/ ENG
RL BROWNING RLB 4-16-04 Date: 4-16-04
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-15-04 to 4-16-04, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RL Browning
Inspectors Signature

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

Date: 4-16-04

Page _____ of _____

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/07/05

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2695179

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SI

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|-----------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| 14" Check Valve | Borg Warner | 31500 | 987 | 2PSIEV235 | 1978 | Repaired | Yes |
| Bonnet | Borg Warner | 3 | N/A | 2X69 | 1978 | Replaced | Yes |
| Disc | Borg Warner | 10 | N/A | 2X42 | 1978 | Replaced | Yes |
| Bonnet | Borg Warner | 20 | N/A | 2X68 | 1978 | Replacement | Yes |
| Disc | Borg Warner | 21 | N/A | 2X53 | 1978 | Replacement | Yes |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Replaced the bonnet/arm/disk assembly to correct seat leakage.

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

Other ☐ Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

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

ANII : 24

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

William E. Weber
5-16-05
Inspector's Signature
Date: 5-16-05

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

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2JCHNUV0500
- 2.. Item Description: 3" Fisher 3-Way Control Valve model FS
3. N-5 Data Package Number: 2CH03-4A
4. W.O. Number: 2711158
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Rework valve to correct internal seat leakage.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a pressure boundary failure. The valve plug/stem assembly is being replaced to improve plug to seat sealing.

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

Initial DGG Date 4-21-05 If required, include a step in the W.O. to perform Preservice Inspection

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

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

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

Initial DGG Date 4-21-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|---------|--------------|------------|----------|--------------|
| Plug | APN 00072816 | AD7914-1 | 3407 | MR 920004 |
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18. Planner David Goodlet 4-21-05 Printed Name: David Goodlet
Signature Date
19. ISI Alan Morrow 4-21-05 Printed Name: Alan Morrow Log Entry can
Signature Date
20. ANII R.G. Hogstrom 4-21-05 Printed Name: R.G. Hogstrom
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 4-21-2005

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2711158

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Plug | Fisher Controls | AD7914-1 | n/a | 2JCHNUV0500 | 2004 | Replacement | YES |
| | | | | | | | |
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7. Description of Work: Overhaul valve to correct seat leakage.

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

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

9. Remarks: WO# 2711158 on valve 2JCHNUV0500 was disassembled and inspected for seat leakage. The plug is being replaced to improve the seat condition.

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

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/10/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-21-05 to 5-10-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RS Hyatt
Inspectors Signature

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

Date: 5-10-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2MCHNE02
- 2.. Item Description: Letdown Heat Exchanger
3. N-5 Data Package Number: 2CH13-9
4. W.O. Number: 2716542
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replacement of end cover gasket to correct leakage.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Not a ASME pressure boundary failure. The cover studs and nuts will be replaced if necessary due to radiological concerns or if mechanical galling is found.

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

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

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

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

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

Initial DMG Date 9-20-04 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|-------------|--------------|------------|-----------------------|--------------|
| cover studs | APN 43115017 | N/A | JBW, INS, K85 8396 | 902003 |
| cover nuts | APN 43126001 | N/A | 151173 JLD 8650692 | 903897 |
| | | | | |
| | | | | |
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18. Planner David Goodlet 9-20-04 Printed Name: David Goodlet
Signature Date
19. ISI R.P. Indap 9/29/04 Printed Name: R.P. INDAP Log Entry RPI
Signature Date
20. ANII RC Holstrom 9-29-04 Printed Name: RC Holstrom
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 9/16/2004

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2716542

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| cover studs | n/a | n/a | n/a | 2MCHNE02 | 2004 | Replacement | NO |
| cover nuts | n/a | n/a | n/a | 2MCHNE02 | 2004 | Replacement | NO |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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

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

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

Pre-Pressured Test WO Review – ISI _____

ANII _____

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A _____

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

Signed: Alan Morrow ISI Engineer Date: 4-15-05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-24-04 to 4-15-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RS Lipton
Inspectors Signature

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

Date: 4-15-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2MRCEX01
- 2.. Item Description: Reactor Head Vent Orifice
3. N-5 Data Package Number: 2RC01-1A 4. W.O. Number: 2717779
5. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Relocate the Reactor Head Vent Orifice DMWO 2717767
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:

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

The Reactor head vent line orifice is being removed from flush with the vessel head and a new orifice is being fabricated and installed downstream of valve 2PRCEV212 per the DMWO. The head vent piping is being upgraded from ASME Class 2 to ASME Class 1. This will allow for NDE of the head vent nozzle to comply with NRC Order EA03-009. There was no failure of the Code boundary.

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

Initial KVS Date 10/29/2004 If required, include a step in the W.O. to perform Preservice Inspection

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

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

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

Initial KVS Date 10/29/2004 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|--------------------------|--------------|------------|----------|--------------|
| Round Stock, SA479 TP316 | APN 43640489 | | | MR 893055 |
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18. Planner Karl V. Savage 10/29/2004 Printed Name: Karl V. Savage
Signature Date

19. ISI R.P. Indap 11/03/04 Printed Name: R.P. INDAP Log Entry RPZ
Signature Date

20. ANII R.G. Houston 11-12-04 Printed Name: R.G. Houston
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 11/03/2004

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

Sheet: 1 of 1

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2717779

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC - Reactor Coolant

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Orifice | N/A | N/A | N/A | MR 893055 | N/A | Replacement | NO |
| | | | | | | | |
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7. Description of Work: Relocate the head vent orifice and upgrade the vent piping from Class 2 to Class 1

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

N-416-2 ☐ Other Pressure psi

Test Temperature °F

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

FORM NIS-2 (Back)

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

Pre-Pressured Test WO Review – ISI Alan Monow

ANII N/A

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/11/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 11-12-04 to 6-11-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RS Lytton

Inspectors Signature

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

Date: 5-11-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2PSIEV542
2. Item Description: HPSI / LPSI Header Loop Injection Check Valve
3. N-5 Data Package Number: 2RC01-1B
4. W.O. Number: 2721744
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace valve parts as required to correct identified deficiencies
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

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

Initial J.D. Date 11-19-04 If required, include a step in the W.O. to perform Preservice Inspection

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

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

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

Initial J.D. Date 11-19-04 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|---------------|--------------|------------|----------|-------------------|
| <u>Bonnet</u> | <u>76857</u> | <u>19</u> | <u>—</u> | <u>WO 2764987</u> |
| <u>Disc</u> | <u>76865</u> | <u>5</u> | <u>—</u> | <u>WO 2764987</u> |
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18. Planner [Signature] 11-19-04 Printed Name: James I. Davis
Signature Date

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

20. ANII [Signature] 12-1-04 Printed Name: R.G. Hogstrom
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. Date: 05/07/05
P. O. Box 53999, Phoenix Arizona 85072-2034 Sheet: 1 of 2
2. Plant: Palo Verde Nuclear Generating Station Unit: 2
5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2721744
3. Work Performed by: Arizona Public Service Co. Type of Code Stamp None
5801 S. Wintersburg Rd., Tonopah, Arizona. 85354-7529 Authorization No. N/A
Expiration Date N/A
4. Identification of System: SI
5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|-----------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| 12" Check Valve | Borg Warner | 51028 | 1605 | 2PSIEV542 | 1979 | Repaired | Yes |
| Bonnet | Borg Warner | 14 | N/A | 3C62 | 1979 | Replaced | Yes |
| Disc | Borg Warner | 10 | N/A | 3L96 | 1979 | Replaced | Yes |
| Bonnet | Borg Warner | 19 | N/A | 3L97 | 1979 | Replacement | Yes |
| Disc | Borg Warner | 5 | N/A | 3L96 | 1979 | Replacement | Yes |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Replaced the bonnet/arm/disk assembly to correct seat leakage.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ N-416-2 ☐
Other ☐ Pressure _____ psi Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

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

ANII: 34

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Representative Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Willie E. White
Inspectors Signature

Commissions: NO 8098 ANI
National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page of

1. Component ID 2MDGAE05
- 2.. Item Description: DG JACKET WATER COOLER
3. N-5 Data Package Number: 2DG01-2 4. W.O. Number: 2724392
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: REPAIR BASE METAL WITH WELD BUILD UP

8. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

WELD BUILD UP FO THE BASE MATERIAL DUE TO EXCEEDING MINIMUM WALL THICKNESS, REPAIRED AREAS TO BE PROTECTED WITH COATINGS.

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

14. Preservice Inspection Required:

☐ YES

☒ NO

Initial

Date

4-8-05

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

15. ASME Section XI Pressure Test Required:

☒ YES

☐ NO

Initial

Date

4-8-05

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

Initial

Date

4-8-05

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

Initial

Date

4-8-05

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

| Item ID | Part No. | Serial No. | Heat No. | MRPO/WO No. |
|--------------------------|------------------|--------------|----------|-------------|
| 2MDGAE05 REVERSING SPOOL | 4-321-19-815-007 | 9-20016-01-4 | N/A | 2724392 |
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18. Planner

Signature

Date

Printed Name: Martin Sullivan

19. ISI

Signature

Date

Printed Name: Alan Morrow

Log Entry an

20. ANII

Signature

Date

Printed Name: R.G. HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/08/2005

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2724392

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 2MDGAE05

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|----------------------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| DG "A" jacket water cooler | American Standard | 9-20016-01-4 | 33117 | 2MDGAE05 | 1979 | Repaired | YES |
| | | | | | | | |
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7. Description of Work: Weld build up of corroded reversing spool

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

N-416-2 ☒ Other Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 4/15/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 4-15-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]
Inspectors Signature

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

Date: 4-15-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page of

1. Component ID 2MDGAE04
- 2.. Item Description: DG LUBE OIL COOLER
3. N-5 Data Package Number: 2DG01-2 4. W.O. Number: 2724398
5. Original Construction Code Edition: 1974 Edition, Summer 1976 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: REPAIR BASE METAL WITH WELD BUILD UP
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
WELD BUILD UP FO THE BASE MATERIAL DUE TO EXCEEDING MINIMUM WALL THICKNESS, REPAIRED AREAS TO BE PROTECTED WITH COATINGS.

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

14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

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

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

Initial MS Date 4-9-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|--|------------------|--------------|----------|--------------|
| 2MDGAE04 BAFFLE PLATE (INLET/OUTLET SPOOL) | 4-305-19-815-008 | 9-20016-02-3 | N/A | 2724398 |
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18. Planner Martin Sullivan 4-9-05 Printed Name: Martin Sullivan
Signature Date

19. ISI Robert L. Brown 4-9-05 Printed Name: Robert L. Brown Entry ALB
Signature Date

20. ANII R.G. Hogstrom 4-9-05 Printed Name: R.G. HOGSTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/09/2005

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2724398

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 2DG

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|------------------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| DG "A" lube oil cooler | American Standard | 9-20016-02-3 | 33118 | 2MDGAE04 | 1979 | Repaired | YES |
| | | | | | | | |
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7. Description of Work: Weld repair of the base metal on the inlet /outlet baffle. w.o. 2724398

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

N-416-2 ☒ Other Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

9. Remarks: Weld repair of the base metal on the inlet/outlet baffle. w.o. 2724398

Pre-Pressured Test WO Review – ISI _____

ANII _____

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A _____

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

Signed: Alan Monow ISI Engineer Date: 4/15/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-9-05 to 4-15-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RB Lytton
Inspectors Signature

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

Date: 4-15-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

Component ID 2JSGEPSV0579

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

N-5 Data Package Number: 2SG01-1A

4. W.O. Number: 2724427

5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda

6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda

7. Work Description: Replacement of main steam safety valve with a reconditioned and tested spare.

8. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

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

10. Repair/Replacement Work Organization: Arizona Public Service

11. Replacement Items Construction or reconciled Code/Edition: Sec. III CI 2, 1974 Edition Summer 1975 Addenda

12. Repair/Replacement Activity Construction Code/Edition: Sec. III CI 2, 1974 Edition 1975 Winter Addenda

13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required:

☐ YES

☒ NO

Initial Dmg Date 3-28-2005 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required:

☒ YES

☐ NO

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

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

Initial Dmg Date 3-28-2005 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|--------------|--------------|------------|----------|--------------|
| 2JSGEPSV0579 | APN 45003640 | BS-08569 | N/A | MR |
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18. Planner David Goodlet 3-28-05
Signature Date

Printed Name: David Goodlet

19. ISI R.P. Indap 3/30/05
Signature Date

Printed Name: R.P. INDAP Log Entry R.P.

20. R.G. Houston 3-30-05
Signature Date

Printed Name: R.G. Houston

Page 2 of

2.. Item Description: Main Steam Safety valve; Dresser 6" 3707RAX-RT-25; 1315 psig

4. W.O. Number: 2724427

6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda

7. Work Description: Replacement of main steam safety valve with a reconditioned and tested spare.

8. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

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

10. Repair/Replacement Work Organization: Arizona Public Service

11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition Summer 1975 Addenda

12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda

13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required:

☐ YES☒ NO

Initial *Dmg* Date *3-25-2003*

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

15. ASME Section XI Pressure Test Required:

☒ YES☐ NO

Initial MSG Date 3-28-2005

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

Initial DGG Date 3-25-2005

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

Initial *W46* Date *3-28-2005*

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

[illegible]

18. Planner

Signature [Signature] Date 3-28-05

Printed Name: David Goodlet

19. ISI

Signature [Signature] Date 3/30/65

Printed Name: R. P. INDAP Log Entry RP

20. ANII

Signature _____ Date 3-30-05

Printed Name: R. G. HOGSTROM

Page 3 of

Printed Name: RG HOGSTROM

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 03/28/2005

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2724427

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG - Main Steam

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Safety Valve | Dresser | BS-08569 | n/a | 2JSGEPSV579 | 1978 | Replacement | YES |
| Safety Valve | Dresser | BS-08611 | n/a | 2JSGEPSV558 | 1980 | Replacement | YES |
| Safety Valve | Dresser | BS-08586 | n/a | 2JSGEPSV691 | 1978 | Replacement | YES |
| | | | | | | | |
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7. Description of Work: Replace three main steam safety valves with reconditioned & tested spares.

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

N-416-2 ☐

Other Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

Pre-Pressured Test WO Review - ISI

Alan Monow

ANII

RS

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

William E. Huber

Inspectors Signature

Commissions:

NB 9098 ANI 51405
NB 9685 N 1 AZ264
National Board, State, Province, and Endorsements

Date: 5-16-05

Page _____ of _____

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

Initial BV Date 5/12/05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

[illegible]

20. ANII 25/1/2006 5-12-05 Printed Name: R.G. Hogstrom
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 5/12/2005

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2724496

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

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

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|-------------------------------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| 3 rd Stage Seal Retainer | Sulzer | Q95-1869 SN-7 | NA | 2MRCEP01A | 1985 | Replacement | YES |
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7. Description of Work: Mechanical seal replacement as part of normal maintenance

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

N-416-2 ☐ Other Pressure psi

Test Temperature °F

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

FORM NIS-2 (Back)

9. Remarks: WO 2724496 - replacement of mechanical seals as part of normal maintenance.

Pre-Pressured Test WO Review - ISI Alan Monow

ANII 25

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow DSI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

William E. Huber
Inspectors Signature

Commissions: NB 9685 N 5-14-05
National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2JRCEPSV0200
2. Item Description: Pressurizer Safety Relief Valve
3. N-5 Data Package Number: 2RC03-2
4. W.O. Number: 2724921
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the Pressurizer Safety Valve with a reconditioned spare.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08590

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

14. Preservice Inspection Required: ☐ YES ☒ NO

Initial BV Date 11/16/04 If required, include a step in the W.O. to perform Preservice Inspection

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

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

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

Initial BV Date 11/16/04 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|--------------|----------|------------|----------|--------------|
| 2JRCEPSV0200 | N/A | BS-08590 | N/A | 969316 |
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18. Planner B Vidal 11/16/04 Printed Name: Barbara Vidal
Signature Date

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

20. ANII R. G. HOGSTROM 11-22-04 Printed Name: R. G. HOGSTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 11/16/04

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2724921

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC - Reactor Coolant System

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|--|------------|-------------------------|-------------------------------|
| PSV | Dresser | BS-08590 | N/A | 27ALCEPSV0000 27ALCEPSV0200 am 5/11/05 | 1979 | Replacement | YES |
| | | | | | | | |
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7. Description of Work: No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08590

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

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

Pre-Pressured Test WO Review - ISI

Alan Monow

ANII

R. J. L. J. L.

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

W. J. L. J. L.

Inspectors Signature

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

Date: 5-16-05

Page _____ of _____

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

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 11/16/04

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2724922

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC - Reactor Coolant System

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|--|------------|-------------------------|-------------------------------|
| PSV | Dresser | BS-08566 | N/A | 27ALEPSV0201 22CEPSV0201 out 5/19/05 | 1978 | Replacement | YES |
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7. Description of Work: No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08566

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

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

Pre-Pressured Test WO Review - ISI Alan Monow

ANII RS Lipton

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

William Elder
Inspectors Signature

Commissions: NB 9085 NIT AZ264
National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

Component ID 2JRCEPSV0202

2.. Item Description: Pressurizer Safety Relief Valve

3. N-5 Data Package Number: 2RC03-2

4. W.O. Number: 2724923

5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda

6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda

7. Work Description: Replace the Pressurizer Safety Valve with a reconditioned spare.

8. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

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

10. Repair/Replacement Work Organization: Arizona Public Service

11. Replacement Items Construction or reconciled Code/Edition: Sec. III CI 1, 1974 Edition 1974 Summer Addenda

12. Repair/Replacement Activity Construction Code/Edition: Sec. III CI 1, 1974 Edition 1975 Winter Addenda

13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required:

☐ YES

☒ NO

Initial BV Date 11/16/04

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

15. ASME Section XI Pressure Test Required:

☒ YES

☐ NO

Initial BV Date 11/16/04

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

Initial BV Date 11/16/04

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

Initial BV Date 11/16/04

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

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|--------------|----------|------------|----------|--------------|
| 2JRCEPSV0202 | N/A | BS-08592 | N/A | 969316 |
| | | | | |
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18. Planner B Vidal 11/16/04
Signature Date

Printed Name: Barbara Vidal

19. ISI Alan Morrow 11/19/04
Signature Date

Printed Name: Alan Morrow Log Entry am

20. ANII R.G. Houston 11-22-04
Signature Date

Printed Name: R.G. 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: 11/16/04

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2724923

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC - Reactor Coolant System

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|-----------------------------------|------------|-------------------------|-------------------------------|
| PSV | Dresser | BS-08592 | N/A | 2724923 28CEPSV0202 5/16/05 | 1979 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
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7. Description of Work: No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08592

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

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

Pre-Pressured Test WO Review - ISI

Alan Monow

ANII

RS

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

W. H. H.

Inspectors Signature

Date:

5-16-05

Commissions: NB 3098 "A" "N" "I" VA WPH
NB 9685 "N" "T" A7264 5-14-05
National Board, State, Province, and Endorsements

ASME SECTION XI - REPAIR / REPLACEMENT

Page ____ of ____

1. Component ID 2JRCEPSV0203
2. Item Description: Pressurizer Safety Relief Valve
3. N-5 Data Package Number: 2RC03-2
4. W.O. Number: 2724924
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the Pressurizer Safety Valve with a reconditioned spare.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No failure of ASME III pressure boundary. Spare valve is a like-for-like replacement and is being replaced to support Vendor testing. The replacement valve is SN BS-08568

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

14. Preservice Inspection Required: ☐ YES ☒ NO

Initial BV Date 11/16/04 If required, include a step in the W.O. to perform Preservice Inspection

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

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

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

Initial BV Date 11/16/04 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | (MR)PO/WO No. |
|--------------|----------|------------|----------|---------------|
| 2JRCEPSV0203 | N/A | BS-08568 | N/A | 969316 |
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| | | | | |

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

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

20. ANII R.G. Hestrom 11-22-04 Printed Name: R.G. HESTROM
Signature Date

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

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. Date: 11/16/04
P. O. Box 53999, Phoenix Arizona 85072-2034 Sheet: 1 of 2
2. Plant: Palo Verde Nuclear Generating Station Unit: 2
5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2724924
3. Work Performed by: Arizona Public Service Type of Code Stamp None
 Authorization No. N/A
 Expiration Date N/A
4. Identification of System: RC - Reactor Coolant System
5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Summer 1975 Addenda, N/A Code Case
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda
6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|---|------------|-------------------------|-------------------------------|
| PSV | Dresser | BS-08568 | N/A | DALEPSV0203 2RCPSV0203 am 5/16/05 | 1978 | Replacement | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
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| | | | | | | | |

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

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐
 N-416-2 ☐ Other Pressure _____ psi Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

Pre-Pressured Test WO Review - ISI Alan Monow

ANII RS

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 5-16-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Walter Ellis
Inspectors Signature

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

Date: 5-16-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2PSIEV247
- 2.. Item Description: SIT 1B Discharge Check Valve to RC Loop 1B
3. N-5 Data Package Number: 2RC01-1B 4. W.O. Number: 2726216
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace valve parts as required to correct identified deficiencies

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

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

Replaced bonnet, arm & disc assembly to improve operability of the valve & leak tightness. No structural failure. R. G. Houston 5/4/05

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

14. Preservice Inspection Required: ☐ YES ☒ NO

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

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

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

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

Initial I.D. Date 11-6-04 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|-------------------------|----------|--------------|----------|--------------|
| BONNET, ARM & DISC ASSY | 75906 | DISC SN 15 | N/A | 2748686 |
| BONNET | 75907 NC | 9919-27 | N/A | 2748686 |
| | | P66R1R2 | | |
| | | 5WN243 | | |
| | | P638 | | |
| | | BONNET SN 14 | N/A | 2748686 |
| | | | | |

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

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

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

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2726216

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SI

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|-----------------|---------------------|----------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| 14" Check Valve | Borg Warner | 31500 | 987 | 2PSIEV235 | 1978 | Repaired | Yes |
| Bonnet | Borg Warner | 23 | N/A | 2X69 | 1978 | Replaced | Yes |
| Disc | Borg Warner | <i>unknown per 5/16/05</i> | N/A | 2X42 | 1978 | Replaced | Yes |
| Bonnet | Borg Warner | 14 | N/A | 2X62 | 1978 | Replacement | Yes |
| Disc | Borg Warner | 15 | N/A | 2X47 | 1978 | Replacement | Yes |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Replaced the bonnet/arm/disk assembly to correct seat leakage.

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

Other ☐ Pressure _____ psi Test Temperature _____ °F

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

FORM NIS-2 (Back)

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

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

ANII: WE. Allen 5-16-05

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow FSI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Virginia and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

William Allen
Inspectors Signature

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

Date: 5-16-05

Page of

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 04/25/2005

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2733193

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

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

Authorization No. N/A

Expiration Date N/A

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

5. (a) Applicable Construction Code ASME Section III ND, Class 3 1974 Edition, Winter '75 Addenda, Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|----------------|----------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| 2B EW Ht. Exh. | Struther Wells Corp. | 17606329142 | 14533 | 2MEWBE01 | 1979 | Repaired | YES |
| | | | | | | | |
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7. Description of Work: Weld Build-up, Material Repair.

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

Other ☐ Pressure psi

Test Temperature °F

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

FORM NIS-2 (Back)

Remarks: Work Order 2733197 Reformed Weld Repair/Build-up of Eroded areas designated by Engineering in the Tube (Spray Pond) side of the EW Heat Exchanger. Pressure Test at Normal Operating Pressure.

Certificate of Compliance

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

Type Code Symbol Stamp _____ N/A

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

Signed: Alan Monow ISI Engineer _____ Date: 5/4/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-26-05 to 5-5-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RS [Signature]

Inspectors Signature

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

Date: 5-5-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID BS-08592
2. Item Description: Reactor coolant system pressurizer relief valve to RDT
3. N-5 Data Package Number: N/A
4. W.O. Number: 2733478
5. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Overhaul and testing of spare pressurizer safety valves.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
No failure of ASME III pressure boundry. The spindle replacement was to correct normal wear, there was no structural failure.

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

14. Preservice Inspection Required: ☐ YES ☒ NO

Initial SRB Date 04/01/2005 If required, include a step in the W.O. to perform Preservice Inspection

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

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

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

Initial SRB Date 04/01/2005 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|---------|--------------|------------|----------|--------------|
| Spindle | APN 45560002 | N/A | 75903 | MR 735255 |
| | | | | |
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18. Planner Scott R. Baize 04/01/2005 Printed Name: Scott R. Baize 245 4-1-05

19. ISI R.P. Indap 04/05/05 Printed Name: R.P. Indap Log Entry RPI

ANII R.G. Houston 4-5-05 Printed Name: R.G. 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: 04/01/2005

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2733478

3. Work Performed by: NWS Technologies

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: RC (Reactor Coolant)

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| spindle | Dresser | N/A | N/A | 2JRCEPSV0202 | 2005 | Replacement | NO |
| | | | | | | | |
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| | | | | | | | |
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7. Description of Work: Recondition and test spare pressurizer safety valves

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

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

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

FORM NIS-2 (Back)

7. Remarks: WO#2733478 Replaced pressure safety valve spindle A/N 45560002. In the PSV serial # BS-08592

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

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: RR Pindap, Consulting Metallurgical Engineer Date: 4/5/2005
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-5-05 to 4-5-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

RR Pindap
Inspectors Signature

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

Date: 4-5-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

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

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

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

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

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

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

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

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|---------------------|-------------|------------|----------|---|
| 76HH-001 Valve Body | 00086699 | 7441 | | MR/00930716-0001 PO/50037983-01.001 |
| Main Disc | 4502-000497 | 21A | | MR/0094247-0002 PO/60409410-2744635 |
| Main Disc | 4502-000497 | 21A | | MR/0913062-0001 PO/60209410-2744635 |
| Bonnet | 4506-0111 | 327 | | MR/00928492-0002 PO/60185393 WO/2744635 |
| | | | | |
| | | | | |

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

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

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

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 2/3/2004

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2744635

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 2EW01-3

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

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

6. Identification of Components Repaired or Replaced and Replacement Components

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

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

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

Other ☐ Pressure 120 psi

Test Temperature 70 °F

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

FORM NIS-2 (Back)

9. Remarks: remove bonnet tack, remove internals, replace valve body and bonnet, rework valve internals and reinstall bonnet tack

W.O. 2744635

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

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: R. P. Pruden - Consulting Metallurgical Engineer Date: 2-3-2005
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

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

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

R. P. Pruden
Inspectors Signature

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

Date: 2-3-05

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

Pg. 1 of 2

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

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

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

| Part or Appurtenance Serial Number | National Board No. In Numerical Order | Part or Appurtenance Serial Number | National Board No. In Numerical Order |
|---------------------------------------|---|---------------------------------------|---|
| (1) <u>7441</u> | <u>NA</u> | (26) | |
| (2) <u>---</u> | | (27) | |
| (3) | | (28) | |
| (4) | | (29) | |
| (5) | | (30) | |
| (6) | | (31) | |
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| (21) | | (46) | |
| (22) | | (47) | |
| (23) | | (48) | |
| (24) | | (49) | |
| (25) | | (50) | |

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

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

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

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

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

CERTIFICATION OF DESIGN

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

CERTIFICATE OF COMPLIANCE

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

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

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

CERTIFICATE OF INSPECTION

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

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

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

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

Pg. 1 of 1

*Revised 11-6-91

1. Manufactured and certified by Target Rock Corp., 1966E Broadhollow Rd, E. Farmingdale, NY 11735
(name and address of NPT Certificate Holder)
2. Manufactured for Arizona Public Service Co., Phoenix, Arizona
(name and address of purchaser)
3. Location of installation Palo Verde Nuclear Generating Station, Wintersburg, Arizona
(drawing no.) SA 479 410 70 KSI (tensile strength) (CRN) 1990 (year built)
4. Type 200861-1 SA 479 316L 70 KSI N/A 1990
(drawing no.) (mat'l. spec. no.) (tensile strength) (CRN) (year built)
5. ASME Code, Section III: 1974 *-S-76-1975 3 N/A
(edition) (addenda date) (class) (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) N/A Revision N/A Date N/A
(no.)
7. Remarks: Spare Parts for a completed valve - Model 76HH-001
'Bonnet Ass'y

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

| Part or Appurtenance Serial Number | National Board No. in Numerical Order |
|---------------------------------------|---|
| (1) 324 | N/A |
| (2) 323 | N/A |
| (3) 325 | N/A |
| (4) 327 | N/A |
| (5) 330 | N/A |
| (6) 333 | N/A |
| (7) 342 | N/A |
| (8) N/A | N/A |
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| Part or Appurtenance Serial Number | National Board Number in Numerical Order |
|---------------------------------------|--|
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| (30) | |
| (31) | |
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| (49) | |
| (50) | |

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

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

112/861

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

E. Bajada / G.A. Manager
11/6/91
DateW.A. Roland, AMI
11/6/91
Date

CERTIFICATION OF DESIGN

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

CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that this (these) _____ Part
conforms to the rules of construction of the ASME Code, Section III.NPT Certificate of Authorization No. 1948 Expires 12-12-92Date 11/1/90 Name Target Rock Corporation Signed E. Bajada
(NPT Certificate Holder) (authorized representative)
E. Bajada, Q.A. Manager

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of
New York and employed by Commercial Union Insurance Company
of Boston, Mass. have inspected these items described in this Data Report on 11/1/90, and state that to thebest of my knowledge and belief, the Certificate Holder has fabricated these parts or appurtenances in accordance with the ASME Code, Section
III. Each part listed has been authorized for stamping on the date shown above.By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described
in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage
loss of any kind arising from or connected with this inspection.Date 11/1/90 Signed William J. Redmond Commissions N.Y. STATE COMMISSIONED INS. AGENT
(Authorized Inspector) ALSO COMMISSIONED IN PENN., OHIO & CONN.
[Nat'l. Bd. Incl. endorsements) state or prov. and no.]

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

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

Pg. 1 of 1

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

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

| Part or Appurtenance Serial Number | National Board No. in Numerical Order |
|---------------------------------------|---|
| (1) 17A | N/A |
| (2) 18A | N/A |
| (3) 19A | N/A |
| (4) 20A | N/A |
| (5) 21A | N/A |
| (6) 22A | N/A |
| (7) 23A | N/A |
| (8) N/A | N/A |
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| Part or Appurtenance Serial Number | National Board Number in Numerical Order |
|---------------------------------------|--|
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| (50) | |

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

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

(12/86)

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

FORM N-2 (back)

Mfr. Serial No. N/A

CERTIFICATION OF DESIGN

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

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

CERTIFICATE OF SHOP COMPLIANCE

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

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

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

CERTIFICATE OF SHOP INSPECTION

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

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

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

P. O. No. 60209410
 QUALITY DOCUMENTS
 PAGE 20 of 36

ASME SECTION XI - REPAIR / REPLACEMENT

Page of

Component ID 2JCHAHV0205

2. Item Description: Pressurizer aux spray control valve

3. N-5 Data Package Number: 2RC03-1A

4. W.O. Number: 2747369

5. Original Construction Code Edition: 1977 edition, winter 1977 addenda

6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda

7. Work Description: Remove valcor valve and replace with Target Rock iaw eng diwo 2747369

8. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

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

Valve seat leakage unacceptable and being replaced with a valve with better design. RPI 2/10/05

10. Repair/Replacement Work Organization: Arizona Public Service

11. Replacement Items Construction or reconciled Code/Edition: Sec III CII, 1977 edition, 1977 winter Addenda

12. Repair/Replacement Activity Construction Code/Edition: Sec. III CI 1, 1974 Edition 1975 Winter Addenda

13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☒ YES ☒ NO *RPI 2/10/05*

Initial LEO Date 2/10/05 If required, include a step in the W.O. to perform Preservice Inspection

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

Initial LEO Date 2/10/05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial LEO Date 2/10/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial LE Date 2/10/05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|---------|--------------------|------------|-------------|-----------------|
| valve | 77L-003 | 5 | | MR 960198-1+2 |
| CPLG | SA182-F3046000 | | HT CODE-HVA | PO 34270090.01 |
| | | | | PO 34270090.01 |
| | | | | 01.483 |
| | | | | W/O 2747369 |
| PIPE | SA376/312 TYPE 304 | | HT 30549 | MR 863835 |
| | | | | PO 500259216.01 |

18. Planner G. Osmundson 2/10/05 Printed Name: G. OSMUNDSON

19. ISI R. P. Indap 2/10/05 Printed Name: R. P. INDAP Log Entry RPI

20. ANII R. G. Hestrom 2-10-05 Printed Name: R. G. HESTROM

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

As Required by the Provisions of the ASME Code Section XI

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

Date: 05/13/05

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

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

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

Work Order Number 2747369

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

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

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SP

5. (a) Applicable Construction Code

1974 Edition, Addenda, Code Case

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

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Valve | Target Rock | 8 | N/A | 2JCHAHV0205 | 1996 | Replacement | Yes |
| Valve | Valcor | 4 | N/A | 2JCHAHV0205 | 1983 | Replaced | Yes |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Remove Valcor Valve and replace with Target Rock Valve

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

Other ☐

Pressure psi

Test Temperature °F

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

FORM NIS-2 (Back)

2747369. Remove Valcor valve because of persistent seat leakage and replace it with Target Rock Valve. Additional welds made (described in W.O.) to facilitate field installation.

Pre-Pressure Test W.O. Review : ISI OPDap 5/13/05

ANII William E. Haber 5/13/05

Certificate of Compliance

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

Type Code Symbol Stamp N/A

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

Signed: Alan Monow ISI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

William E. Haber
Inspectors Signature

Commissions: NB 3-058 ANI
National Board, State, Province, and Endorsements

Date: 5-16-05

Page 1 of 3

ASME SECTION XI – REPAIR / REPLACEMENT

Page 2 of 3

1. Component ID S/N: BS-08569
2. Code Class ASME Section III Class 2
3. Item Description: Main Steam Safety Valve; Dresser - 6" 3707RAX-RT-25 1250 psig
4. N-5 Data Package Number: n/a
5. W.O. Number: 2757217
6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Maintenance overhaul & testing of spare valve. Code part replacement from other spare valves or from approved purchased spare parts based upon inspection results.

9. ☐ ISI Flaw

NDE Method of Flaw Detection:

Report Number:

10. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

No failure in the ASME Section III boundary. The spindle replacement is to correct normal wear, there was no structural failure.

11. Repair/Replacement Work Organization: NWS Technologies
12. Replacement Items Construction or reconciled Code/Edition: Sec. III CI 2, 1974 Edition Summer 1975 Addenda
13. Repair/Replacement Activity Construction Code/Edition: Sec. III CI 2, 1974 Edition 1975 Winter Addenda
14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

15. Preservice Inspection Required:

☐ YES

☒ NO

Initial DMG Date 3-29-2005 If required, include a step in the W.O. to perform Preservice Inspection

16. ASME Section XI Pressure Test Required:

☐ YES

☒ NO

Initial DMG Date 3-29-2005 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DMG Date 3-29-2005 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DMG Date 3-29-2005 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|---------|---------------|------------|----------|--------------|
| Spindle | Apn# 45560003 | 6008552-1 | N/A | MR# 653408 |
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19. Planner David M. Goodlet 3-29-05
Signature Date

Printed Name: David Goodlet

20. ISI R.P. Indap 3/31/05
Signature Date

Printed Name: R.P. INDAP Ins Entry-RPT

21. ANII R.G. Houston 4-2-05
Signature Date

Printed Name: R.G. Houston

Page 3 of 3

1. Component ID S/N: BS-08586
2. Code Class ASME Section III Class 2
3. Item Description: Main Steam Safety Valve; Dresser - 6" 3707RAX-RT-25 1315 psig
4. N-5 Data Package Number: n/a
5. W.O. Number: 2757217
6. Original Construction Code Edition: 1974 Edition, Summer 1975 Addenda
7. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
8. Work Description: Maintenance overhaul & testing of spare valve. Code part replacement from other spare valves or from approved purchased spare parts based upon inspection results.

Report Number:

No failure in the ASME Section III boundary. The disc will be replaced with preoxidized ASME SB637 OR ASTM B637 INCONEL X-750 material to enhance performance. The spindle replacement is to correct normal wear, there was no structural failure.

14. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

☒ NO

Initial Dmg Date 3-29-2005 If required, include a step in the W.O. to perform Preservice Inspection

☒ NO

Initial DSG Date 3-29-2005 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DYS Date 3-29-2005 17. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial Dmg Date 3-29-2005 18. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|---------|---------------|------------|----------|--------------|
| DISC | Apn# 00064290 | ADG52 | N/A | MR# 943938 |
| Spindle | Apn# 45560003 | 6008552-2 | N/A | MR# 653408 |
| | | | | |
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| | | | | |

Date _____

Printed Name: David Goodlet

Date _____

Printed Name: K.P. INDAP Log Entry-RE

Date _____

Printed Name: KG HOLSTROM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

Date: 3/29/2005

P. O. Box 53999, Phoenix Arizona 85072-2034

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

Work Order Number 2757217

3. Work Performed by: NWS Technologies

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG - Main Steam

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Summer 1975 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Disc | Dresser | ADG51 | n/a | BS-08611 | 2005 | Replacement | NO |
| Nozzle | Dresser | ABC41 | n/a | BS-08611 | 2005 | Replacement | NO |
| Disc | Dresser | ADG52 | n/a | BS-08586 | 2005 | Replacement | NO |
| Spindle | Dresser | 6008552-2 | n/a | BS-08586 | 2005 | Replacement | NO |
| Spindle | Dresser | 6008552-1 | n/a | BS-08569 | 2005 | Replacement | NO |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Overhaul and testing of three spare Main Steam Safety valves

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

- 1.0. Remarks: Work Order #2757217 for off-site disassembly, reconditioning and testing of spare Main Steam Safety valves, s/n BS-08611, BS-08586 & BS-08569.

Pre-Pressure Test W.O. Review : ISI N/A
ANII N/A

Certificate of Compliance

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: RP Indap, Consulting Metallurgical Engineer Date: 4-4-2005
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 4-5-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

RP Indap
Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264
National Board, State, Province, and Endorsements

Date: 4-5-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2JSIAUV0673
2. Item Description: A Train Suction Valve from Containment Recirc Sump
3. N-5 Data Package Number: 2SI01-7
4. W.O. Number: 2767634
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the gasket retainer bolts per EDC 2005-00031.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
BOLTS FRACTURED DUE TO STRESS CORROSION CRACKING (SCC). #4-23-05
The bolts are being replaced as precautionary measure with more SCC resistant material (410 Vs 17-4 PH)
#4-23-05

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial J.D. Date 3-24-05 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial J.D. Date 3-24-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D. Date 3-24-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D. Date 3-24-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|-----------------------|--------------|------------|----------|--------------|
| Bonnet retainer bolts | APN 00090043 | N/A | N1412 | MR 959192 |
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18. Planner J. Davis 3-24-05 Printed Name: James I. Davis
Signature Date

19. ISI R.P. Indap 3/24/05 Printed Name: R.P. Indap Log Entry - RP
Signature Date

20. ANII R.G. Houston 3-24-05 Printed Name: R.G. Houston
Signature Date

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

Date: 1-23-05

P. O. Box 53999, Phoenix Arizona 85072-2034

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

Work Order Number 2767634

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Winter 1975 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|-----------------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Valve | Posi-Seal | 143383A | N/A | 2JSIAUV0673 | 1979 | Repaired | YES |
| Gasket retainer bolts | N/A | HT# N1412 | N/A | 2JSIAUV0673 | 2005 | Replacement | NO |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Replace the gasket retainer bolting as required per EDC 2005-00031

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: Work Order 2767634 replaced the original 410 Stainless steel gasket retainer bolts with more corrosion resistant SA564, Gr 630 bolts per EDC 2005-00031 and DMWO 2760330.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

Certificate of Compliance

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: *Yusuf H. H. H.* SR. ISI ENGINEER Date: 4/23/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 3-21-05 to 4-23-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Yusuf H. H. H.
Inspectors Signature

Commissions: NB 9685 'N' 'T' AZ264
National Board, State, Province, and Endorsements

Date: 4-23-05

ASME SECTION XI – REPAIR / REPLACEMENT

Page of

1. Component ID 2JSIBUV0655
2. Item Description: B Train Suction Valve from Containment Recirc Sump
3. N-5 Data Package Number: 2SI01-7
4. W.O. Number: 2767648
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the gasket retainer bolts per EDC 2005-00031.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
The bolts are being replaced as precautionary measure with more SCC resistant material (410 Vs 17-4 PH)

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III C1 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III C1 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial J.D. Date 3-24-05 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial J.D. Date 3-24-05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D. Date 3-24-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D. Date 3-24-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|-----------------------|--------------|------------|----------|--------------|
| Bonnet retainer bolts | APN 00090043 | N/A | N1412 | MR 959197 |
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18. Planner J. I. Davis 3-24-05 Printed Name: James I. Davis
Signature Date

19. ISI R.P. Indap 3-24-05 Printed Name: R.P. INDAP Log Entry- RA
Signature Date

20. ANII R.G. Hogstrom 3-24-05 Printed Name: R.G. HOGSTROM
Signature Date

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

Date: 4-29-05

P. O. Box 53999, Phoenix Arizona 85072-2034

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

Work Order Number 2767648

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Winter 1975 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|-----------------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Valve | Posi -Seal | 143383B | N/A | 2JSIBUV0675 | 1979 | Repaired | YES |
| Gasket retainer bolts | N/A | HT# N1412 | N/A | 2JSIBUV0675 | 2005 | Replacement | NO |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Replace the gasket retainer bolting as required per EDC 2005-00034

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

Remarks: Work Order 2767648 replaced the original 410 Stainless steel gasket retainer bolts with more corrosion resistant SA564, Gr 630 bolts per EDC 2005-00034 and DMWO 2760330.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

Certificate of Compliance

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: Alan Monow Sr ISI Engineer Date: 4-29-05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 3-24-05 to 4-29-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

RS Lytle
Inspectors Signature

Commissions: NB 9685 "N" "T" AZ264
National Board, State, Province, and Endorsements

Date: 4-29-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page of

1. Component ID 2JSIAUV0637
2. Item Description: HPSI HEADER A TO RC LOOP 1A VALVE
3. N-5 Data Package Number: 2S109-2
4. W.O. Number: 2770722
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: REWORK VALVE SEATING AREA TO ELIMINATE LEAK THROUGH
8. ☐ ISI Flaw NDE Method of Flaw Detection: _____
Report Number: _____

9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

N/A Work is to fix seat leakage. No failure in the ASME pressure boundary RPD 4/11/05

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III C1 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III C1 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial gco Date 4/7/05 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial gco Date 4/7/05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial gco Date 4/7/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial gco Date 4/7/05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
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18. Planner G. Osmundson 4/7/05 Printed Name: G. OSMUNDSON
Signature Date

19. ISI RP Indap 4/11/05 Printed Name: R.P. INDAP Log Entry RPD
Signature Date

20. ANII RL Hogstrom 4-11-05 Printed Name: RL HOGSTROM
Signature Date

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al. Date: 05/13/05
P. O. Box 53999, Phoenix Arizona 85072-2034 Sheet: 1 of 2
2. Plant: Palo Verde Nuclear Generating Station Unit: 2
5801 South Wintersburg Road., Tonopah, Arizona 85354-7529 Work Order Number 2770722
3. Work Performed by: Arizona Public Service Co. Type of Code Stamp None
5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529 Authorization No. N/A
Expiration Date N/A

4. Identification of System: SP

5. (a) Applicable Construction Code 1974 Edition, Addenda, Code Case
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|------------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| HPSI Globe Valve | Borg Warner | 51731 | N/A | 2JSIAUV0637 | 1979 | Repaired | Yes |
| | | | | | | | |
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7. Description of Work: Seat repair and Body to Bonnet Seal Weld

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐
Other ☐ Pressure psi Test Temperature °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9.

WO 2770722: Lapped valve seat and disc, reassembled valve and reinstalled bonnet seal weld.

Pre-Pressure Test W.O. Review : ISI N/A

ANII N/A

Certificate of Compliance

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: R. P. Indap, Consulting Metallurgical Engineer Date: 5/13/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-11-05 to 5-13-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

William E. Huber

Inspectors Signature

Commissions: NB8098 ANI

National Board, State, Province, and Endorsements

Date: 5-13-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2PSIEV133
- 2.. Item Description: HPSI Injection Header Containment Penetration Check Valve
3. N-5 Data Package Number: 2RC01-3B
4. W.O. Number: 2786797
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the disc to correct leakage past the seat
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

*This is not a failure of the ASME pressure boundary.
Routine maintenance to correct seat leakage.*

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III CI 2, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III CI 2, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial N/A Date _____ If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial N/A Date _____ If required, include a step in the W.O. for ISI & ANII Inspection.

Initial J.D Date 4-22-05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial J.D Date 4-22-05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|------------------------|--------------|------------|----------|--------------|
| Disc and stud assembly | APN 45020876 | 7 | N/A | MR 914209 |
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| | | | | |
| | | | | |

18. Planner *[Signature]* Date 4-22-05 Printed Name: James I. Davis

19. ISI *[Signature]* Date 4/22/05 Printed Name: Alan Morrow Log Entry am

20. ANII *[Signature]* Date 4-22-05 Printed Name: RG HOGSTROM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

Date: _____

P. O. Box 53999, Phoenix Arizona 85072-2034

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

Work Order Number 2786797

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Safety Injection

5. (a) Applicable Construction Code ASME Section III NC, Class 2 1974 Edition, Winter 1975 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Valve | Borg -Warner | 51291 | N/A | 2PSIEV133 | 1979 | Repaired | YES |
| Disc/stud Assembly | Borg -Warner | 7 | N/A | 2PSIEV133 | 2005 | Replacement | NO |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Replace the valve disc to correct seat leakage

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: Work Order 2786797 replaced the valve disc and stud assembly to correct leakage past the seat.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

Certificate of Compliance

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: R. P. Indap, Consulting Metallurgical Engineer Date: 5/4/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-22-05 to 5-5-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

R. P. Indap

Inspectors Signature

Commissions: NB 9685 'N' 'T' AZ264
National Board, State, Province, and Endorsements

Date: 5-5-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2MRCEX02
- 2.. Item Description: Reactor Coolant System Pressurizer
3. N-5 Data Package Number: 2RC01-1A 4. W.O. Number: 2787285
5. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Remove failed presurizer heaters 2MRCEA10, 2MRCEB10 and 2MRCEB11. Install Pressurizer sleeve plugs into the Pressurizer sleeves IAW DFWO 2785731
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Electrical portion of the heaters have failed. No failure of the code boundry.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1971 Edition 1973 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial N/A Date _____ If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☒ YES ☐ NO

Initial [Signature] Date 4/12/05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial N/A Date _____ 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial N/A Date _____ 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|--|--------------|------------|------------|--------------|
| Shop fabricated Plug - Heater sleeve RCEA10 | APN 00076370 | N/A | 9R0094-LAD | MR 00964548 |
| Shop fabricated Plug - Heater sleeve RCEB10 | APN 00076370 | N/A | 9R0094-LAD | MR 00964548 |
| Shop fabricated Plug - Heater sleeve RCEB10 II | APN 00076370 | N/A | 9R0094-LAD | MR00964548 |
| | | | | |
| | | | | |

18. Planner [Signature] 4/12/05 Printed Name: Herbert Green

19. ISI [Signature] 4/12/05 Printed Name: Ramakant Indap Log Entry [Signature]

20. ANII [Signature] 4-12-05 Printed Name: Robert Hogstrom

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

Date: 04/09/2005

P. O. Box 53999, Phoenix Arizona 85072-2034

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

Work Order Number 2787285

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: Reactor Coolant - RC - ASME Section III, Class 1

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1971 Edition, Winter 1973 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|--------------|------------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Pressurizer | Combustion Engineering | 79373 | N/A | 2MRCEX02 | 1979 | Repaired | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Remove failed presurizer heaters 2MRCEA10, 2MRCEB10 and 2MRCEB11. Install Pressurizer sleeve plugs into the Pressurizer sleeves IAW DFWO 2785731

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: Work Order 2787285. Plug failed Pressurizer Heater Sleeves with shop fabricated plugs per DFWO 2785731 disposition. Heaters 2MRCEA10, 2MRCEB10, & 2MRCEB11.

Pre-Pressured Test WO Review - ISI RPhidap 5/14/05

ANII 221 fpm

Certificate of Compliance

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: Alan Monow ISI Engineer Date: 5/16/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-2-05 to 5-16-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

W. Allen

Inspectors Signature

Commissions: NB 8098 AIF WPH
NB 9685 "N" "T" AZ2645-11-05
National Board, State, Province, and Endorsements

Date: 5-16-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2SG033H017 & 2SG036H011
- 2.. Item Description: PIPE HANGERS
3. N-5 Data Package Number: 2SG01-1A
4. W.O. Number: 2789760
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Repair Failed/Damaged Pipe Hangers per DFWO 2788864 Disposition
8. ☒ ISI Flaw
NDE Method of Flaw Detection: VT-3
Report Number: VT-05-521
VT-05-530
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

The Failed pipe supports are being replaced with a better design as per DFWO 2788864.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: 4/27/05 ☐ YES ☒ NO

Initial W/H Date 4/15/05 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial KVS Date 4/15/05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial KVS Date 4/15/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial KVS Date 4/15/05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|----------------------|----------|--------------------|----------|--------------|
| 2" BEAM ATTACHMENT | 00090383 | 2005-18 2005-19 | | 968953 |
| 2" ROD | 00090366 | HT-240151 | | 965681 |
| 125" BEAM ATTACHMENT | 00090384 | | | 968958 |
| | | | | |
| | | | | |
| | | | | |

18. Planner Karl V. Savage 4/15/05 Printed Name: Karl V. Savage
Signature Date
19. ISI Alan Morrow 4/27/05 Printed Name: Alan Morrow Log Entry am
Signature Date Ramakant Indap am 4/27/05
20. ANII Robert G. Hogstrom 4-27-05 Printed Name: Robert G. Hogstrom
Signature Date

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

Date: 04/15/2005

P. O. Box 53999, Phoenix Arizona 85072-2034

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

Work Order Number 2789760

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG

5. (a) Applicable Construction Code ASME Section III NF, Class 2 1974 Edition, Winter 1975 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|------------------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Pipe Support | Pullman Power | 2SG033H017 | N/A | 2SG033H017 | 1979 | Repaired | Yes |
| Pipe Support | Pullman Power | 2SG036H011 | N/A | 2SG036H011 | 1979 | Repaired | Yes |
| Welded Beam Attachment | Anvil | 2005-18 | N/A | 2SG036H011 | 2005 | Replacement | Yes |
| Welded Beam Attachment | Anvil | 2005-19 | N/A | 2SG036H011 | 2005 | Replacement | Yes |
| Welded Beam Attachment | Anvil | N/A | N/A | 2SG033H017 | 2005 | Replacement | No |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Rework Pipe Support 2-SG-033-H017 and 2-SG-036-H011 per DFWO 2788864

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

Other ☐

Pressure _____ psi

Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 X 11

FORM NIS-2 (Back)

9. Remarks: Work Order 2789760 - Repaired Failed/Damaged Pipe Supports 2-SG-033-H-017 & 2-SG-036-H-011 per EDC# 2005-00277 - DFWO 2788864 Disposition.

Pre-Pressured Test WO Review - ISI N/A
ANII N/A

Certificate of Compliance

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: Alan Monow ISI Engineer Date: 5/10/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-27-05 to 5-10-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

RB Linton

Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264
National Board, State, Province, and Endorsements

Date: 5-10-05

FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of 2

1. Manufactured by Anvil International, Inc. - 160 Frenchtown Rd. No. Kingstown, RI 02852
(name and address of NPT Certificate Holder)

2. Manufactured for Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address of Purchaser)

3. Location of installation Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address)

4. Type: C.S.S. DRS 66 REV.9 2005
(describe) (Design Report or Load Capacity Data Sheet) (year built)

5. ASME Code, Section III, Division 1: * 1974 * Winter 1975 2 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Identification

| | (a) Component Support ID. No. | (b) Material Specification No. | (c) Canadian Registration No. | (d) Applicable Drawings With Last Rev. & Date | (e) National Board No. |
|------|--|---|--|--|---------------------------------|
| (1) | 2005- 18 | SA36 | N/A | 066-10025/F 3/20/00 | N/A |
| (2) | 2005- 19 | SA36 | N/A | 066-10025/F 3/20/00 | N/A |
| (3) | 2005- 20 | SA36 | N/A | 066-10025/F 3/20/00 | N/A |
| (4) | 2005- 21 | SA36 | N/A | 066-10025/F 3/20/00 | N/A |
| (5) | | | | | |
| (6) | | | | | |
| (7) | | | | | |
| (8) | | | | | |
| (9) | | | | | |
| (10) | | | | | |

7. Remarks:

: * Corrected Document

* Note: We further certify that the material "SA36" meets the requirements of ASME II 1992 Edition with the 1993 Addenda
 The material "SA36" does not meet ASME III 1974 Edition, Winter 1975 Addenda, required bend tests not performed.

PO#: 503285454

SO#: 41-69414

*Supplemental information in the form of data, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in items 1 through 4 on this Data Report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/88)

This form (E00075) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM NF-1 (Back - Pg. 2 of 2)

Component Support I.D. Nos. 2005-18 through 2005-21

CERTIFICATE OF DESIGN

Design Specification certified by H. R. Sonderegger P.E. State R.I. Reg. no 3537
Design Report certified by Frank J. Birch P.E. State R.I. Reg. no 4149

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2902 Expires 9/29/2007

Date 4-26-05 Name Anvil International, Inc. Signed [Signature]
(NPT Certificate Holder)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Rhode Island and employed by H.S.B. C.T. of Hartford, C.T. have inspected the component supports described in this Data Report on 4/20/05 and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 4/26/05 Signed [Signature] Commission RI 862 AN
(Authorized Inspection) (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2SG045H017 & 2SG042H011
- 2.. Item Description: PIPE HANGERS
3. N-5 Data Package Number: 2SG02-1A 4. W.O. Number: 2790467
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Repair Failed/Damaged Pipe Hangers per DFWO 2788864 Disposition
8. ☒ ISI Flaw REWORK NDE Method of Flaw Detection: VT-3 RLB
4/27/05 Report Number: 4/27/05

9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

The failed pipe supports are being replaced with a better design as per DFWO 2788864.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III NF Cl 2, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda

14. Preservice Inspection Required: ☒ YES ☒ NO 4/27/05
- Initial KVS Date 4/15/05 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☐ YES ☒ NO
- Initial KVS Date 4/15/05 If required, include a step in the W.O. for ISI & ANII Inspection.

- Initial KVS Date 4/15/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

- Initial KVS Date 4/15/05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|---------------------------|----------|--------------------|----------|--------------|
| 2" THREADED ROD | 00090366 | | 240151 | 966340 |
| 2" WELDED BEAM ATTACHMENT | 00090383 | 2005-20 2005-21 | | 968956 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

18. Planner Karl V. Savage 4/15/05 Printed Name: Karl V. Savage
19. ISI Alan Morrow 4/27/05 Printed Name: Alan Morrow Log Entry am
4/27/05
20. ANII Robert G. Hogstrom 4-27-05 Printed Name: Robert G. Hogstrom

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

Date: 04/15/2005

P. O. Box 53999, Phoenix Arizona 85072-2034

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

Work Order Number 2790467

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Authorization No. N/A

Expiration Date N/A

4. Identification of System: SG

5. (a) Applicable Construction Code ASME Section III NF, Class 2 1974 Edition, Winter 1975 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|------------------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Pipe Support | Pullman Power | 2SG045H017 | N/A | 2SG045H017 | 1979 | Repaired | Yes |
| Pipe Support | Pullman Power | 2SG042H011 | N/A | 2SG042H011 | 1979 | Repaired | Yes |
| Welded Beam Attachment | Anvil | 2005-20 | N/A | 2SG042H011 | 2005 | Replacement | Yes |
| Welded Beam Attachment | Anvil | 2005-21 | N/A | 2SG042H011 | 2005 | Replacement | Yes |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: Rework Pipe Support 2-SG-045-H017 and 2-SG-042-H011 per DFWO 2788864

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

Other ☐

Pressure _____ psi

Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered

FORM NIS-2 (Back)

9. W.O. 2790467 – Reworked pipe supports 2-SG-042-H011 and 2-SG-045-H017 per EDC# 2005-00280 – DFWO 2788864 disposition.

Certificate of Compliance

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: Alan Morrow ISI Engineer Date: 5/10/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-27-05 to 5-11-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

RS [Signature]
Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264
National Board, State, Province, and Endorsements

Date: 5-11-05

FORM NF-1 CERTIFICATE HOLDERS' DATA REPORT FOR COMPONENT SUPPORTS*
As Required by the Provisions of the ASME Code, Section III, Division 1 Pg. 1 of 2

1. Manufactured by Anvil International, Inc. - 160 Frenchtown Rd. No. Kingstown, NJ 02852
(name and address of NPT Certificate Holder)

2. Manufactured for Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address of Purchaser)

3. Location of Installation Arizona Public Service Co. Palo Verde 5801 South Wintersburg Road Tonopah, AZ 85354
(name and address)

4. Type: C.S.S. DRS 66 REV.9 2005
(describe) (Design Report or Load Capacity Data Sheet) (year built)

5. ASME Code, Section III, Division 1: * 1974 * Winter 1975 2 N/A
(edition) (addenda date) (class) (Code Case no.)

6. Identification

| | (a) Component Support I.D. No. | (b) Material Specification No. | (c) Canadian Registration No. | (d) Applicable Drawings With Last Rev. & Date | (e) National Board No. |
|------|---|---|--|--|---------------------------------|
| (1) | 2005- 18 | SA36 | N/A | 065-10025/F 3/20/00 | N/A |
| (2) | 2005- 18 | SA36 | N/A | 065-10025/F 3/20/00 | N/A |
| (3) | 2005- 20 | SA36 | N/A | 065-10025/F 3/20/00 | N/A |
| (4) | 2005- 21 | SA36 | N/A | 065-10025/F 3/20/00 | N/A |
| (5) | | | | | |
| (6) | | | | | |
| (7) | | | | | |
| (8) | | | | | |
| (9) | | | | | |
| (10) | | | | | |

7. Remarks:

: * Corrected Document

* Note: We further certify that the material "SA36" meets the requirements of ASME II 1992 Edition with the 1993 Addenda
 The material "SA36" does not meet ASME III 1974 Edition, Winter 1975 Addenda, required bend tests not performed.

PO#: E00285454

SO#: 41-69414

*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 x 11, (2) information in Items 1 through 4 on this Data Report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

(12/89)

This form (E00076) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

FORM NF-1 (Back - Pg. 2 of 2)

Component Support I.D. Nos. 2005-18 through 2005-21

CERTIFICATE OF DESIGN

Design Specification certified by H. R. Sonderegger P.E. State R.I. Reg. no 3537
Design Report certified by Frank J. Birch P.E. State R.I. Reg. no 4149

CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that these component supports conform to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-2802 Expires 9/29/2007

Date 4-26-05 Name Anvil International, Inc. Signed [Signature]
(NPT Certificate Holder)

CERTIFICATE OF INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Rhode Island and employed by H.S.B. C.T. of Hartford, C.T. have inspected the component supports described in this Data Report on 4/20/05, and state that to the best of my knowledge and belief, the Certificate Holder has constructed these component supports in accordance with the ASME Code, Section III, Division 1.

By signing this certificate, neither the inspector nor his employer makes any warranty, expressed or implied, concerning the component supports described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 4/26/05 Signed [Signature] Commission RI 862 AIN
(Authorized Inspection) (Nat'l Bd. (incl. endorsements) and state or prov. and no.)

ASME SECTION XI - REPAIR / REPLACEMENT

Page _____ of _____

1. Component ID 2CH147H009
- 2.. Item Description: Pipe support, 1/4 kip snubber
3. N-5 Data Package Number: 2PC01-1
4. W.O. Number: 2790927
5. Original Construction Code Edition: 1974 Edition, Winter 1975 Addenda
6. Original Installation Code Edition: 1974 Edition, Winter 1975 Addenda
7. Work Description: Replace the snubber for precautionary measures.
8. ☐ ISI Flaw NDE Method of Flaw Detection:
Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

This is not a failure of an ASME Pressure retaining boundry.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III NF Cl 3, 1974 Edition Winter 1975 Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III NF Cl 3, 1974 Edition Winter 1975 Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial DWS Date 04/18/05 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial DWS Date 04/18/05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial DWS Date 04/18/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial DWS Date 04/18/05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|------------|--------------|------------|----------|--------------|
| 2CH147H009 | APN 45350024 | 17973 | N/A | MR 967163 |
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18. Planner David Shaffer 4/18/05 Printed Name: David Shaffer

19. ISI Alan Morrow 4/18/05 Printed Name: Alan Morrow Log Entry am

20. ANII R.G. Holstrom 4-19-05 Printed Name: R.G. HOLSTROM

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

Date: 04/18/2005

P. O. Box 53999, Phoenix Arizona 85072-2034

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

Work Order Number 2790927

3. Work Performed by: Arizona Public Service

Type of Code Stamp None

Authorization No. N/A

Expiration Date N/A

4. Identification of System: CH: Chemical and Volumn Control System

5. (a) Applicable Construction Code ASME Section III NF, Class 3 1974 Edition, Winter 1975 Addenda, _____ Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or No) |
|-----------------|---------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| 1/4 Kip Snubber | PSA | 17973 | n/a | 2CH147H009 | 1981 | Replacement | YES |
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7. Description of Work: Replace snubber for precautionary reasons.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒

N-416-2 ☐ Other Pressure _____ psi

Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: WO #2790927, Replace the snubber for precautionary reasons.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

Certificate of Compliance

We certify that the statements made in the report are correct and this replacement conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: Alan Morrow FSI Engineer Date: 4/22/05
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-19-05 to 4-22-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

RS Hyston
Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264
National Board, State, Province, and Endorsements

Date: 4-22-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2PRCEL028/2JRCEFO0724
- 2.. Item Description: Pressurizer Surge Line Sample Flow Limiting Orifice
3. N-5 Data Package Number: 2RC01-2 ¹⁹⁷⁴ W.O. Number: 2792023
5. Original Construction Code Edition: 1977 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1977 Edition, Winter 1973 Addenda ¹⁹⁷⁵ RPT 5/4/05
7. Work Description: Perform 2 X 1 Build-up of existing Fillet Welds.
8. ☐ ISI Flaw NDE Method of Flaw Detection: N/A
Report Number: N/A
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:

No Failure of the Code Boundry WELD SIZE BEING CHANGED TO
PREVENT ANY FAILURE DUE TO VIBRATION.
REF: EDC # 2005-00223 HP 4/26/05

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda
14. Preservice Inspection Required: ☐ YES ☒ NO

Initial N/A Date 4/25/05 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial N/A Date 4/25/05 If required, include a step in the W.O. for ISI & ANII Inspection.

Initial AEH Date 4/25/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

Initial N/A Date 4/25/05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
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18. Planner Karl V. Savage ^{4/26/05} Printed Name: Karl V. Savage
Signature Date

19. ISI Wiley Ahlstrom ⁴⁻²⁶⁻⁰⁵ Printed Name: WILEY AHLSTROM Log Entry
Signature Date

20. ANII RG Hougstrom ⁴⁻²⁶⁻⁰⁵ Printed Name: RG Hougstrom
Signature Date

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

Date: 04/25/2005

P. O. Box 53999, Phoenix Arizona 85072-2034

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

Work Order Number 2792023

3. Work Performed by: Arizona Public Service Co.

Type of Code Stamp None

5801 S. Wintersburg Rd., Tonopah, Arizona, 85354-7529

Authorization No. N/A

Expiration Date N/A

4. Identification of System: 2RC01-2

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|------------------------|------------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Pressurizer Surge Line | Pullman Power Products | 2RC028S004 | N/A | 2JRCEFO0724 | 1979 | Repaired | Yes |
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7. Description of Work: Performed 2 x 1 build-up of existing fillet welds on Pressurizer Surge sample line.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

Other ☐

Pressure _____ psi

Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. Remarks: Work Order 2792023, Performed 2X1 Build-up of Existing fillet welds on Pressurizer Surge Sample line Flow Limiting Orifice to minimize potential vibration induced failure.

Pre-Pressured Test WO Review – ISI N/A

ANII N/A

Certificate of Compliance

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A Expiration Date: N/A

Signed: R. P. Pindap, Consulting Metallurgical Engineer Date: 5/4/2005
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-26-05 to 5-6-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

R. P. Pindap
Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264
National Board, State, Province, and Endorsements

Date: 5-6-05

ASME SECTION XI - REPAIR / REPLACEMENT

Page 1 of 1

1. Component ID 2MRCEX01
2. Item Description: RX Head vent line
3. N-5 Data Package Number: 2RC01-1A
4. W.O. Number: 2793841
5. Original Construction Code Edition: 1971 Edition, Winter 1973 Addenda
6. Original Installation Code Edition: 1971 Edition, Winter 1973 Addenda
7. Work Description: Remove axial indications utilizing a flapper wheel or other suitable method per the disposition of ENG-DF02 #2793837.
8. ☒ ~~ISI Flaw~~ ISI Flaw - No NDE Method of Flaw Detection: ET RPP 5/12/05
RPP 5/12/05 Report Number:
9. Evaluation of the suitability of this work as per the requirements of IWA - 4150:
Blending and/or removal of axial indications to meet code exceptance criteria.

10. Repair/Replacement Work Organization: Arizona Public Service
11. Replacement Items Construction or reconciled Code/Edition: Sec. III Cl 1, 1971 Edition 1973 Winter Addenda
12. Repair/Replacement Activity Construction Code/Edition: Sec. III Cl 1, 1974 Edition 1975 Winter Addenda
13. ASME Section XI Code/Edition: 1992 Edition and 1992 Addenda, IWA-2220, IWA-4422.1 of 1998 Edition
14. Preservice Inspection Required: ☐ YES ☒ NO, Per Alan Morrow RPP 5/11/05

Initial DWS Date 04/24/05 If required, include a step in the W.O. to perform Preservice Inspection

15. ASME Section XI Pressure Test Required: ☐ YES ☒ NO

Initial DWS Date 04/24/05 If required, include a step in the W.O. for ISI & ANII Inspection.

- Initial DWS Date 04/24/05 16. Include a step in the W.O. to complete NIS-2 Form prior to releasing the component.

- Initial DWS Date 04/24/05 17. Include a step in the W.O. to record below all applicable numbers for repaired or replacement items.

| Item ID | Part No. | Serial No. | Heat No. | MR/PO/WO No. |
|----------|----------------|------------|----------|--------------|
| 2MRCEX01 | Head Vent line | 79173 | N/A | WO 2793841 |
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18. Planner David Shaffer 4/24/05 Printed Name: David Shaffer
 Signature Date

19. ISI Alan Morrow 4/24/05 Printed Name: Alan Morrow Log Entry an
 Signature Date

20. ANII Robert Hogstrom 4/24/05 Printed Name: Robert Hogstrom
 Signature Alan Morrow 09:34 Date

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS

As Required by the Provisions of the ASME Code Section XI

1. Owner: Arizona Public Service Company, et. al.

Date: 02/24/2005

P. O. Box 53999, Phoenix Arizona 85072-2034

Sheet: 1 of 2

2. Plant: Palo Verde Nuclear Generating Station

Unit: 2

5801 South Wintersburg Road., Tonopah, Arizona 85354-7529

Work Order Number 2793841

3. Work Performed by: Westinghouse Electric Company

Type of Code Stamp None

20 International Drive

Authorization No. N/A

Windsor, Connecticut, 06095

Expiration Date N/A

4. Identification of System: RC – Reactor Coolant

5. (a) Applicable Construction Code ASME Section III NB, Class 1 1974 Edition, Winter 1975 Addenda, N/A Code Case

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements: 1992 Edition, 1992 Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Item | Name of Manufacture | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired or Replacement | ASME Code Stamped (Yes or NO) |
|--------------------------|------------------------|-------------------------|--------------------|----------------------|------------|-------------------------|-------------------------------|
| Reactor Vessel Head Vent | Combustion Engineering | N/A | N/A | 2MRCEX01 | 1979 | Repaired | Yes |
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7. Description of Work: Repair axial indications on the inside of the Rx Head Vent line per DFWO 2793837 disposition.

8. Test Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ N-416-2 ☐

Other ☐ Pressure _____ psi

Test Temperature _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8 1/2 X 11 inches, (2) information in items 1 thru 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the to of this form.

FORM NIS-2 (Back)

9. W.O. 2793841. Repair per DFWO 2793837 by reaming and flapper wheel, approximate depth of repair 36 MILS. Nominal wall thickness prior to reaming and flapping 0.154". Minimum wall remaining following reaming and flapping 0.118". NDE/ET per ASME Section XI 1998 no Addenda, used with NRC approval letter dated 5-9-05.

Certificate of Compliance

We certify that the statements made in the report are correct and this repair conforms to the rules of the ASME Code, Section XI.

Type Code Symbol Stamp _____ N/A _____

Certificate of Authorization No. _____ N/A _____ Expiration Date: _____ N/A _____

Signed: R. Pindap, Consulting Metallurgical Engineer Date: 5-12-2005
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of boiler and Pressure Vessel Inspectors and the State or Province of Arizona and employed by HSB CT of Hartford, Connecticut, have inspected the components described in this Owner's report during the period of 4-29-05 to 5-12-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

R. Pindap
Inspectors Signature

Commissions: NB 9685 "N" "I" AZ264
National Board, State, Province, and Endorsements

Date: 5-12-05