Duke Power®

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August 9, 2005

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Subject: Duke Energy Company
Oconee Nuclear Station, Unit 1
Docket No. 50-269
Unit 1 EOC 22 Refueling Outage
Inservice Inspection Report
Fourth Ten-Year Inservice Inspection Interval

Please find attached a copy of the Inservice Inspection Report for Oconee Unit 1 End of Cycle 22 Refueling Outage. This report is submitted pursuant to Section XI of the ASME Boiler and Pressure Vessel Code, 1998 Edition, with 2000 addenda, Article IWA 6230.

If there are any questions you may contact R. P. Todd at (864) 885-3418.

Very truly yours,

R. A Jones,
Site Vice-President
Oconee Nuclear Station

Attachment

A047

xc wo/attachment: Mr. William D. Travers
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Mr. M. C. Shannon
NRC Senior Resident Inspector
Oconee Nuclear Station

# INSERVICE INSPECTION REPORT

## DUKE POWER COMPANY
## OCONEE NUCLEAR STATION
## UNIT 1
## TWENTY-SECOND REFUELING OUTAGE

Duke Power SM

*A Duke Energy Company*

# Owner's Report
# For
# INSERVICE INSPECTIONS

# OCONEE UNIT 1
# 2005 REFUELING OUTAGE
# EOC22 (OUTAGE 1)

Plant Location: 7800 Rochester Highway, Seneca, South Carolina 29672

NRC Docket No. 50-269

Commercial Service Date: July 15, 1973

Document Completion Date 7-1-2005

Owner: Duke Energy Corporation
526 South Church St.
Charlotte, N. C. 28201-1006

Revision 0

Prepared By: Larry C. Keith Date 6-23-05

Reviewed By: Gary Underwood Date 6-23-05

Approved By: R. Kevin Rhyne Date 6/27/05

**FORM NIS-1 OWNER'S DATA REPORT FOR INSERVICE INSPECTIONS**

**As required by the Provisions of the ASME Code Rules**

1. Owner: Duke Energy Corporation, 526 S. Church St., Charlotte, NC 28201-1006
(Name and Address of Owner)

2. Plant: Oconee Nuclear Station, 7800 Rochester Highway, Seneca, SC 29672
(Name and Address of Plant)

3. Plant Unit: 1 4. Owner Certificate of Authorization (if required) N/A

5. Commercial Service Date: July 15, 1973 6. National Board Number for Unit N/A

7. Components Inspected:

| Component or Appurtenance | Manufacturer Installer | Manufacturer Installer Serial No. | State or Province No. | National Board No. |
|---|---|---|---|---|
| | | See Section 1.1 in the Attached Report | | |

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is $8^1/_2$ in. x 11 in., (2) information in items 1 through 6 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.

Total number of pages contained in this report 319 .

## FORM NIS-1 (Back)

8. Examination Dates January 10, 2004 to May 15, 2005

9. Inspection Period Identification: First Period

10. Inspection Interval Identification: Fourth Interval

11. Applicable Edition of Section XI 1998 Addenda 2000

12. Date/Revision of Inspection Plan: October 23, 2003 / Revision 0

13. Abstract of Examinations and Tests. Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan. See Sections 2.0, 3.0 and 6.0

14. Abstract of Results of Examination and Tests. See Sections 4.0 and 6.0

15. Abstract of Corrective Measures. See Subsection 4.3

We certify that a) the statements made in this report are correct b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI, and c) corrective measures taken conform to the rules of the ASME Code, Section XI.

Certificate of Authorization No. (if applicable) NA Expiration Date NA

Date 6/27/05 Signed Duke Energy Corp. By R Kevin Rhyne
Owner

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NORTH CAROLINA employed by *The HSBI&I Co. of Connecticut have inspected the components described in this Owner's Report during the period 1-10-04 to 5-15-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and tests and taken corrective measures described in the Owner's Report in accordance with the Inspection Plan and as required by the ASME Code, Section XI.

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

Inspector's Signature Commissions NC1444 NIABC
National Board, State, Province, and Endorsements

Date 7-1-05

* The Hartford Steam Boiler Inspection & Insurance Company of Connecticut.
200 Ashford Center North
Suite 205
Atlanta, GA. 30338-4860
(800) 417-3721
www.hsbc.com

## *DISTRIBUTION LIST*

1. Duke Energy Corporation
   Nuclear Assurance Division
   Quality Assurance Technical Services

2. NRC Document Control Desk

3. Hartford Steam Boiler Inspection
   and Insurance Company of Connecticut (AIA)
   c/o ANII at Oconee

Note: The following personnel are to be notified via Lotus Notes after the Inservice Inspection Report has been stored in the Nuclear Electronic Document Library:
Nuclear GO Nuclear Assurance c/o Bruce Nardoci
Inspection and Welding Services (ISI Coordinator)

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| 1.0 | General Information | 0 |
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| 4.0 | Results of Inspections Performed | 0 |
| 5.0 | Owners Report for Repair/Replacement Activities | 0 |
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## 1.0 General Information

This report describes the Inservice Inspection of Duke Energy Corporation's Oconee Nuclear Station, Unit 1, during Outage 1/EOC 22. This is the first outage in the first inspection period of the Fourth Ten-Year Interval. ASME Section XI, 1998 Edition with the 2000 Addenda, was the governing Code for selection and performing of the ISI examinations.

Included in this report are the inspection status for each examination category, the final inservice inspection plan, the inspection results for each item examined, and corrective actions taken when reportable conditions were found. In addition, there is an Owner's Report for Repair/Replacement Section included for completed NIS-2 documentation of repairs and replacements.

### 1.1 Identification Numbers

| Item | Manufacturer or Installer | Manufacturer or Installer Serial No. | State or Province No. | National Board No. |
|---|---|---|---|---|
| Reactor Vessel | Babcock & Wilcox | 620-0003-51-52 | N/A | N-101 |
| Reactor Vessel Head (replaced head) | Babcock & Wilcox | 068S-01 | N/A | 202 |
| Steam Generator A * | Babcock & Wilcox | 006K01 | N/A | 205 |
| Steam Generator B * | Babcock & Wilcox | 006K02 | N/A | 206 |
| Pressurizer | Babcock & Wilcox | 620-0003-59 | N/A | N-102 |
| Main Steam System | Duke Power | NA | NA | NA |
| Auxiliary Steam System | Duke Power | NA | NA | NA |
| Feedwater System | Duke Power | NA | NA | NA |
| Emergency Feedwater System | Duke Power | NA | NA | NA |
| Steam Generator Flush System | Duke Power | NA | NA | NA |
| Condensate System | Duke Power | NA | NA | NA |

| Item | Manufacturer or Installer | Manufacturer or Installer Serial No. | State or Province No. | National Board No. |
|---|---|---|---|---|
| Vents and Exhaust System | Duke Power | NA | NA | NA |
| Condenser Circulating Water | Duke Power | NA | NA | NA |
| High Pressure Service Water System | Duke Power | NA | NA | NA |
| Low Pressure Service Water System | Duke Power | NA | NA | NA |
| Reactor Coolant System | Duke Power | NA | NA | NA |
| High Pressure Injection System | Duke Power | NA | NA | NA |
| Low Pressure Injection System | Duke Power | NA | NA | NA |
| Reactor Building Spray System | Duke Power | NA | NA | NA |
| Component Cooling System | Duke Power | NA | NA | NA |
| Spent Fuel Cooling System | Duke Power | NA | NA | NA |
| Vents - Reactor Building Components | Duke Power | NA | NA | NA |
| Drains - Reactor Building Components | Duke Power | NA | NA | NA |

* **Note:** In section 1.1 of the EOC-21 Inservice Inspection Report, Steam Generator A and Steam Generator B were listed with the wrong Manufacturer or Installer Serial number and the wrong National Board Number. The correct Manufacturer or Installer Serial number and National Board Number for each of the Steam Generators are listed in section 1.1 of this report.

## 1.2 *Personnel, Equipment and Material Certifications*

All personnel who performed or evaluated the results of inservice inspections during the time frame bracketed by the examination dates shown on the NIS-1 Form were certified in accordance with the requirements of 1998 Edition of ASME Section XI with the 2000 addenda including Appendix VII for ultrasonic inspections. In addition, ultrasonic examiners were qualified in accordance with ASME Section XI, Appendix VIII, and 1998 Edition with the 2000 Addenda through the Performance Demonstration Initiative (PDI) for similar metal piping welds and reactor vessel shell welds.

The appropriate certification records for each inspector, calibration records for inspection equipment, and records of materials used (i.e., NDE consumables) are on file at Oconee Nuclear Station or copies can be obtained by contacting Duke Energy's Corporate Office in Charlotte, North Carolina.

The copies of the certification records for Washington Group inspectors can be obtained by contacting Duke Energy's Corporate Office in Charlotte, North Carolina.

## 1.3 *Reference Documents*

The following reference documents apply to the inservice inspections performed during this report period. A copy may be obtained by contacting the ISI Plan Manager at Duke Energy's Corporate Office in Charlotte, North Carolina.

Code Case N-460 (Applicable to items in this report where less than 100% coverage of the required weld examination volume was achieved.) These items are identified on the Run D that is located in Section 4 of this report.

Duke Power Company Problem Investigation Process Report # O-05-02556. This PIP was written to document a problem found with Class 1 bolting.

Duke Power Company Problem Investigation Process Report # O-05-03886. This PIP was written to track the Relief Request process for limited coverage on UT examinations of welds that were inspected during EOC-22 for Unit 1.

## 1.4 Augmented and Elective Examinations

Augmented and elective examination information found within this Inservice Inspection Report is not required by the ASME Section XI Code; therefore, it is exempt from ANII review, verification, and/or record certification.

## *1.5* Responsible Inspection Agency

The Hartford Steam Boiler Inspection and Insurance Company of Connecticut is responsible for the third party inspections required by ASME Section XI.

**Authorized Nuclear Inservice Inspector(s)**

| | |
|---|---|
| Name: | Gary Brouette, Nancy Slaughter, Randy Klein and Ed Reyes |
| Employer: | The Hartford Steam Boiler Inspection & Insurance Company of Connecticut. |
| Business Address: | 200 Ashford Center North<br>Suite 205<br>Atlanta, GA 30338-4860<br>(800) 417-3721<br>www.hsbct.com |

## 2.0 *Fourth Ten Year Interval Inspection Status*

The completion status of inspections required by the 1998 ASME Code Section XI, with the 2000 Addenda, is summarized in this section. The requirements are listed by the ASME Section XI Examination Category as defined in Table IWB-2500-1 for Class 1 Inspections, Table IWC-2500-1 for Class 2 Inspections, and IWF-2500-1 for Class 1 and 2 Component Supports. Augmented inspections are also included.

### Class 1 Inspections

| Examination Category | Description | Inspections Required | Inspections Completed | Percentage Completed | * Deferral Allowed |
|---|---|---|---|---|---|
| B-A | Pressure Retaining Welds in Reactor Vessel | 13 Welds | .5 Weld | 4% | Yes |
| B-B | Pressure Retaining Welds in Vessels Other than Reactor Vessel | 10 Welds | 2 Welds | 20% | No |
| B-D | Full Penetration Welds of Nozzles in Vessels Inspection Program B | 54 Inspections | 0 Inspections | 0% | Partial |
| B-E | Pressure Retaining Partial Penetration Welds in Vessels | REFERENCE SECTION 6.0 OF THIS REPORT | | | |
| B-F | Pressure Retaining Dissimilar Metal Welds | 7 Welds | 2 Welds | 29% | No |
| B-G-1 | Pressure Retaining Bolting Greater than 2 Inches in Diameter | 125 Items | 41.33 Items | 33% | Yes |
| B-G-2 | Pressure Retaining Bolting 2 Inches and Less in Diameter | 18 Items | 4 Items | 22% | No |
| B-J | Pressure Retaining Welds in Piping | 140 Welds | 14 Welds | 10% | No |
| B-K | Welded Attachments for Vessels, Piping, Pumps and Valves | 20 | 0 | 0% | No |

* Deferral of inspection to the end of the interval as allowed by ASME Section XI Tables IWB and IWC 2500-1.

## Class 1 Inspections (Continued)

| Examination Category | Description | Inspections Required | Inspections Completed | Percentage Completed | * Deferral Allowed |
|---|---|---|---|---|---|
| B-L-1 | Pressure Retaining Welds in Pump Casings | 1 Weld | 0 Weld | 0% | Yes |
| B-L-2 | Pump Casings | 1 Casing | 0 Casing | 0% | Yes |
| B-M-1 | Pressure Retaining Welds in Valve Bodies | 1 Valve Body Weld | 0 Valve Body Weld | 0% | Yes |
| B-M-2 | Valve Bodies | 3 Valves | 0 Valves | 0% | Yes |
| B-N-1 | Interior of Reactor Vessel | 3 Inspections | 1Inspection | 33% | No |
| B-N-2 | Welded Core Support Structures and Interior Attachments to Reactor Vessels | 1 Inspection | 0 Inspections | 0% | Yes |
| B-N-3 | Removable Core Support Structures | 1 Inspection | 0 Inspections | 0% | Yes |
| B-0 | Pressure Retaining Welds in Control Rod Housings | 12 Housing Welds | 4 Housing Welds | 33% | Yes |
| B-P | All Pressure Retaining Components | REFERENCE SECTION 6.0 OF THIS REPORT | | | |
| B-Q | Steam Generator Tubing | N/A | N/A | N/A | N/A |
| F-A F1.10 & F1.040 items. | Class 1 Component Supports (Except Snubbers) | 37 Supports | 4 Supports | 11% | No |
| F-A F1.050 items | Class 1 Component Supports, Snubbers | | | | ** |

* Deferral of inspection to the end of the interval as allowed by ASME Section XI Tables IWB and IWC 2500-1.

** Inspected under Selected License Commitment 16.9.18 per Relief Request 03-006

## Class 2 Inspections

| Examination Category | Description | Inspections Required | Inspections Completed | Percentage Completed | *Deferral Allowed |
|---|---|---|---|---|---|
| C-A | Pressure Retaining Welds in Pressure Vessels | 4 Welds | 0 Welds | 0% | No |
| C-B | Pressure Retaining Nozzle Welds in Vessels | 4 Welds | 0 Welds | 0% | No |
| C-C | Integral Attachments for Vessels, Piping, Pumps and Valves | 31 Attachments | 5 Attachments | 16% | No |
| C-D | Pressure Retaining Bolting Greater Than 2 Inches in Diameter | 2 Items | 0 Items | 0% | No |
| C-F-1 | Pressure Retaining Welds in Austenitic Stainless Steel or High Alloy Piping | 171 Welds | 16.5 Welds | 10% | No |
| C-F-2 | Pressure Retaining Welds in Carbon or Low Alloy Steel Piping | 68 Welds | 13 Welds | 19% | No |
| C-G | Pressure Retaining Welds in Pumps and Valves | N/A | N/A | N/A | N/A |
| C-H | All Pressure Retaining Components | REFERENCE SECTION 6.0 OF THIS REPORT | | | |
| F-A F1.020 & F1.040 Items. | Class 2 Component Supports (Except Snubbers) | 131 Supports | 16 Supports | 12% | No |
| F-A F1.050 items | Class 2 Component Supports, Snubbers | | | | ** |

* Deferral of inspection to the end of the interval as allowed by ASME Section XI Tables IWB and IWC 2500-1.

** Inspected under Selected License Commitment 16.9.18 per Relief Request 03-006

## Augmented/Elective Inspections

Augmented and elective examination information found within this Inservice Inspection Report is not required by the ASME Section XI Code; therefore, it is exempt from ANII review, verification, and/or record certification.

| *Item Number* | *Description* | *Percentage Complete* |
|---|---|---|
| G01.001 | Reactor Coolant Pump Flywheel | None scheduled for EOC 22 |
| G02.001 | HPI Nozzle Safe End Examinations | 4 G02 items were examined during EOC-22 per Addenda ONS1-215. |
| G03.001 | Pressurizer Surge Line Examinations | None scheduled for EOC 22 |
| G04.001 | Thermal Stress Piping (NRC Bulletin 88-08) | 100% of EOC 22 Requirements |
| G11.001.001 | Reactor Pressure Vessel Head Penetration Nozzle by UT Examination per NRC Order EA-03-009. | None scheduled for EOC 22 |
| G11.001.002 | Bare Metal Visual Examination of the Reactor Pressure Vessel Head Surface per NRC Order EA-03-009. | None scheduled for EOC 22 |
| H01.001 | Pressurizer Sensing/ Sampling Nozzle Safe Ends | None scheduled for EOC 22 |
| H02.001 | Class 1 RTE Mounting Bosses | None scheduled for EOC 22 |
| H03.001 | Main Feedwater Piping in the East and West Penetration Rooms per QA-513J (ER-ONS-04-03) | 100% of EOC 22 Requirements |
| H04.001- | Main Feedwater and Main Steam Piping Supports and Attachment Welds per QA-513J (ER-ONS-04-05) | 100% of EOC 22 Requirements |

## 3.0 *Final Inservice Inspection Plan*

The final Inservice Inspection Plan shown in this section lists all ASME Section XI Class 1, Class 2, Class 3, and Augmented examinations credited for this report period.

The information shown below is a field description for the reporting format included in this section of the report:

| | | |
|---|---|---|
| Item Number | = | ASME Section XI Tables IWB-2500-1 (Class 1), IWC-2500-1 (Class 2), IWF-2500-1 (Class 1 and Class 2 ), Augmented Requirements |
| ID Number | = | Unique Identification Number |
| Sys | = | Component System Identification |
| Iso / Dwg. Numbers | = | Location and/or Detail Drawings |
| Proc | = | Examination Procedures |
| Insp Req. | = | Examination Technique - Magnetic Particle, Dye Penetrant, etc. |
| Mat / Sch. | = | General Description of Material |
| Diam. / Thick | = | Diameter/Thickness |
| Cal Blocks | = | Calibration Block Number |
| Comments | = | General and/or Detail Description |

## CATEGORY B-A, Pressure Retaining Welds In Reactor Vessel

### Shell-to-Flange Weld

DUKE ENERGY CORPORATION
INSERVICE INSPECTION PLAN MANAGEMENT
Inservice Inspection Database Management System

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| B01.030.001A | 1-RPV-WR19 | | ISI-OCN1-001 | NDE-650 | UT | CS | 171.000 | CB-08-99 | Reactor Vessel Flange Pc. 7 to Nozzle Belt Upper Course Pc. 8. UT from Flange Surface. (manual scan) |
| | Circumferential | 50 | OM-201-1877 | | | | 12.000 | | |
| Class A | | | | | Flange to Nozzle Belt | | | | |

**Total B01.030 Items:** 1

**Total B01 Items:** 1

## CATEGORY B-B, Pressure Retaining Welds In Vessels Other Than Reactor Vessels

### Pressurizer



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| ****** Shell-to-Head; Circumferential ****** | | | | | | | | | |
| B02.011.001 | 1-PZR-WP76 | | ISI-OCN1-002 | NDE-640 | UT | CS | 84.000 | 40338 | Pressurizer Upper Shell Course Pc. 1 to Upper Head Pc. 5. Material thickness ranges from 6.50" to 4.750" due to taper of material. |
| | Circumferential | 50 | OM-201-1878 | NDE-820 | | | 6.500 | | |
| Class A | | | | | Shell to Head | | | | |
| **Total B02.011 Items:** | **1** | | | | | | | | |
| ****** Shell-to-Head; Longitudinal ****** | | | | | | | | | |
| B02.012.001 | 1-PZR-WP1-1 | | ISI-OCN1-002 | NDE-640 | UT | CS | 84.000 | 40338 | Pressurizer Upper Shell Course Pc. 1 to Upper Shell Course Pc. 1. |
| | Longitudinal | 50 | OM-201-1878 | NDE-820 | | | 6.188 | | |
| Class A | | | | | Shell to Shell | | | | |
| **Total B02.012 Items:** | **1** | | | | | | | | |
| **Total B02 Items:** | **2** | | | | | | | | |

DUKE ENERGY CORPORATION
INSERVICE INSPECTION PLAN MANAGEMENT
Inservice Inspection Database Management System



## CATEGORY B-F, Pressure Retaining Dissimilar Metal Welds In Vessel Nozzles

### Pressurizer

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Less Than NPS 4; Nozzle-to-Safe End Butt Welds **** | | | | | | | | | |
| B05.050.002 | 1-PZR-WP91-2 | | ISI-OCN1-002 | NDE-35 | PT | SS-CS | 2.500 | | Pressurizer Relief Nozzle Pc. 31 to Relief Nozzle Safe End Pc. 32. X-Y Quadrant. |
| | Circumferential | 50 | O-ISIN4-100A-1.2 | | | | 0.000 | | |
| Class A | Term end | | OM-201-1026 | | Nozzle to Safe End | | | | |
| | Dissimilar | | | | | | | | |
| B05.050.003 | 1-PZR-WP91-3 | | ISI-OCN1-002 | NDE-35 | PT | SS-CS | 2.500 | | Pressurizer Relief Nozzle Pc. 31 to Relief Nozzle Safe End Pc. 32. Z-W Quadrant. |
| | Circumferential | 50 | O-ISIN4-100A-1.2 | | | | 0.000 | | |
| Class A | Term end | | OM-201-1026 | | Nozzle to Safe End | | | | |
| | Dissimilar | | | | | | | | |

**Total B05.050 Items: 2**

**Total B05 Items: 2**

## CATEGORY B-G-1, Pressure Retaining Bolting, Greater Than 2 in. In Diameter

**Reactor Vessel**



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Closure Head Nuts **** | | | | | | | | | |
| B06.010.001 | 1-RPV-26-203-01 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.002 | 1-RPV-26-203-02 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.003 | 1-RPV-26-203-03 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.004 | 1-RPV-26-203-04 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.005 | 1-RPV-26-203-05 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.006 | 1-RPV-26-203-06 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.007 | 1-RPV-26-203-07 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.008 | 1-RPV-26-203-08 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |

## CATEGORY B-G-1, Pressure Retaining Bolting, Greater Than 2 in. In Diameter

### Reactor Vessel



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| B06.010.009 | 1-RPV-26-203-09 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.010 | 1-RPV-26-203-10 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.011 | 1-RPV-26-203-11 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.012 | 1-RPV-26-203-12 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.013 | 1-RPV-26-203-13 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.014 | 1-RPV-26-203-14 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.015 | 1-RPV-26-203-15 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.016 | 1-RPV-26-203-16 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.017 | 1-RPV-26-203-17 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |

## CATEGORY B-G-1, Pressure Retaining Bolting, Greater Than 2 in. In Diameter

### Reactor Vessel



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| B06.010.018 | 1-RPV-26-203-18 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.019 | 1-RPV-26-203-19 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |
| B06.010.020 | 1-RPV-26-203-20 | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.250<br>1.300 | | Reactor Vessel Closure Nut. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |

**Total B06.010 Items: 20**

## CATEGORY B-G-1, Pressure Retaining Bolting, Greater Than 2 in. In Diameter

### Reactor Vessel

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| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Closure Studs, when removed **** | | | | | | | | | |
| B06.030.001<br>Class A | 1-RPV-25-203-01 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.002<br>Class A | 1-RPV-25-203-02 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.003<br>Class A | 1-RPV-25-203-03 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.004<br>Class A | 1-RPV-25-203-04 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.005<br>Class A | 1-RPV-25-203-05 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.006<br>Class A | 1-RPV-25-203-06 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.007<br>Class A | 1-RPV-25-203-07 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.008<br>Class A | 1-RPV-25-203-64 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |

## CATEGORY B-G-1, Pressure Retaining Bolting, Greater Than 2 in. In Diameter

### Reactor Vessel



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| B06.030.009<br>Class A | 1-RPV-25-203-09 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.010<br>Class A | 1-RPV-25-203-10 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.011<br>Class A | 1-RPV-25-203-11 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.012<br>Class A | 1-RPV-25-203-12 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.013<br>Class A | 1-RPV-25-203-13 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.014<br>Class A | 1-RPV-25-203-14 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.015<br>Class A | 1-RPV-25-203-15 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.016<br>Class A | 1-RPV-25-203-62 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.017<br>Class A | 1-RPV-25-203-17 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |

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## CATEGORY B-G-1, Pressure Retaining Bolting, Greater Than 2 in. In Diameter

### Reactor Vessel

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| B06.030.018<br>Class A | 1-RPV-25-203-18 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.019<br>Class A | 1-RPV-25-203-19 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |
| B06.030.020<br>Class A | 1-RPV-25-203-20 | | OM-201-2271<br>B&W128723E | See Com | UT | CS | 6.500<br>0.000 | 40420 | Reactor Vessel Closure Stud - Removed. Stud Length = 63.250. Procedure # PDI-UT-5. Reference OM-201-2271 RPV Instruction Manual. |

**Total B06.030 Items: 20**

## CATEGORY B-G-1, Pressure Retaining Bolting, Greater Than 2 in. In Diameter

### Reactor Vessel



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| ****** Closure Washers, Bushings ****** | | | | | | | | | |
| B06.050.001 | 1-RPV-WASH-BUSH | | OM-201-2271<br>B&W128723E | QAL-13 | VT-1 | CS | 9.750<br>0.214 | | Reactor Vessel Closure Washers and Bushings. Stud Holes 1 - 20. Reference OM-201-2271 RPV Instruction Manual. |
| Class A | | | | | | | | | |

**Total B06.050 Items:** 1

## CATEGORY B-G-1, Pressure Retaining Bolting, Greater Than 2 in. In Diameter

### Pressurizer



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Nuts, Bushings, and Washers **** | | | | | | | | | |
| B06.080.001 | 1-PZR-MW-NUTS | | OM-201-9 | QAL-13 | VT-1 | CS | 2.750<br>0.000 | | Pressurizer Manway Nuts Pc. 68. Examination includes bushings and washers. |
| Class A | | | | | | | | | |

| | |
|---|---|
| Total B06.080 Items: | 1 |
| Total B06 Items: | 42 |

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## CATEGORY B-G-2, Pressure Retaining Bolting, 2 in. And Less In Diameter

### Steam Generators

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| ****** Bolts, Studs, and Nuts ****** | | | | | | | | | |
| B07.030.002 | 1-SGA-LMW-STUDS | | OM-201.S-0001 | QAL-13 | VT-1 | SS | 2.000 | | Steam Generator 1A Lower Head Manway Studs and Nuts. (16 Studs & Nuts) |
| | | | OM-201.S-0158 | | | | 0.000 | | Examine all studs and nuts. |
| Class A | | | OM-201.S-0171 | | | | | | Stud Length =19.63 inches. |

**Total B07.030 Items:** 1

## CATEGORY B-G-2, Pressure Retaining Bolting, 2 in. And Less In Diameter

### Piping

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Bolts, Studs, and Nuts **** | | | | | | | | | |
| B07.050.001<br>Class A | 1-PZR-RC4-STUDS | | OM-245-2012 | QAL-13 | VT-1 | CS | 1.125<br>0.000 | | Pressurizer EMO Valve RC-4 Inlet Flange Studs Pc. 19 and Nuts Pc. 20. W-Z Quadrant. Connected to Valve 1RC-66. 8 Studs, Length = 8.750. Examine all studs and nuts.<br>Inspection in outage 1 is for additional sample and does not count in the percentages.<br>The additional sample inspection in outage 1 revealed heavy rust that would not allow a thorough examination of the sections of bolting between the flanges. The nuts and portions of the stud above and below the nuts were acceptable. An engineering evaluation was performed and concluded that the bolting was acceptable for service for several more fuel cycles.<br>The examination to be performed in outage 3 (EOC-24) will be performed by disassembling the flange and cleaning the bolting so that a thorough exam can be performed prior to any continued service. |
| B07.050.002<br>Class A | 1-PZR-RC66-STUDS | | OM-201-0591 | QAL-13 | VT-1 | CS | 1.125<br>0.000 | | Pressurizer Relief Valve RC-66 Inlet Flange Bolting. W-Z Quadrant. 8 Studs and 16 Nuts, Length = 8.750. Examine all studs and nuts.<br>Inspection in outage 1 is for additional sample and does not count in the percentages. |
| B07.050.003<br>Class A | 1-PZR-RC67-STUDS | | OM-254-204<br>OM-254-205 | QAL-13 | VT-1 | CS | 1.125<br>0.000 | | Pressurizer Relief Valve RC-67 Inlet Flange Bolting. W-X Quadrant. 8 Studs and 16 Nuts, Length = 8.750. Examine all studs and nuts. |
| B07.050.004<br>Class A | 1-PZR-RC68-STUDS | | OM-254-204<br>OM-254-205 | QAL-13 | VT-1 | CS | 1.125<br>0.000 | | Pressurizer Relief Valve RC-68 Inlet Flange Bolting. X-Y Quadrant. 8 Studs and 16 Nuts, Length = 8.750. Examine all studs and nuts. |

**Total B07.050 Items:** 4

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Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1



## CATEGORY B-G-2, Pressure Retaining Bolting, 2 in. And Less In Diameter

### Pumps

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| ****** Bolts, Studs, and Nuts ****** | | | | | | | | | |
| B07.060.003 | 1-RCP-1B1-SEAL | | OM-201D-0062 | QAL-13 | VT-1 | CS | 2.000<br>0.000 | | Reactor Coolant Pump 1B1 Lower Seal Housing Bolts Pc. 117. 12 Cap Screws, Length = 8.000. Inspect lower seal housing bolting on one Reactor Coolant Pump only. |
| Class A | | | | | | | | | |

**Total B07.060 Items:** 1

**Total B07 Items:** 6

## CATEGORY B-J, Pressure Retaining Welds In Piping

**NPS 4 or Larger**



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Circumferential Welds **** | | | | | | | | | |
| B09.011.030 | 1SGA-W3 | | ISI-OCN1-007 | NDE-600 | UT | CS | 33.500 | | Steam Generator 1A Outlet Nozzle to Pump 1A1 Suction Piping. |
| | Circumferential | 50 | O-ISIN4-100A-1.1 | | | | 3.500 | | Weld W3 is listed on OM 201.S--0033.001 but drawing ISI-OCN1-007 is listed as the iso to show where the weld is located on the 1A1 Suction Piping Loop. |
| Class A | Term end | | OM 201.S--0033.001 | | Nozzle to Pipe | | | | |
| B09.011.030A | 1SGA-W3 | | ISI-OCN1-007 | NDE-25 | MT | CS | 33.500 | | Steam Generator 1A Outlet Nozzle to Pump 1A1 Suction Piping. |
| | Circumferential | 50 | O-ISIN4-100A-1.1 | | | | 3.500 | | Weld W3 is listed on OM 201.S--0033.001 but drawing ISI-OCN1-007 is listed as the iso to show where the weld is located on the 1A1 Suction Piping Loop. |
| Class A | Term end | | OM 201.S--0033.001 | | Nozzle to Pipe | | | | |
| B09.011.031 | 1-PIA1-7 | | ISI-OCN1-007 | See Com | UT | SS-CS | 33.500 | 40350 | Reactor Coolant Pump 1A1 Suction Piping. |
| | Circumferential | 50 | O-ISIN4-100A-1.1 | | | | 2.330 | 40397 | Transition Pc. 210 to Salvaged Pipe Pc. 215. |
| Class A | Stress weld Dissimilar | | OM-201-1845 | | Transition Piece to Pipe | | | | Procedure PDI-UT-10 |
| B09.011.031A | 1-PIA1-7 | | ISI-OCN1-007 | NDE-35 | PT | SS-CS | 33.500 | | Reactor Coolant Pump 1A1 Suction Piping. |
| | Circumferential | 50 | O-ISIN4-100A-1.1 | | | | 2.330 | | Transition Pc. 210 to Salvaged Pipe Pc. 215. |
| Class A | Stress weld Dissimilar | | OM-201-1845 | | Transition Piece to Pipe | | | | |
| B09.011.032 | 1-PIA1-9 | | ISI-OCN1-007 | NDE-600 | UT | SS | 36.500 | 40397 | Reactor Coolant Pump 1A1 Inlet Nozzle to Safe End Pc. 211. |
| | Circumferential | 50 | O-ISIN4-100A-1.1 | | | | 2.330 | | Procedure PDI-UT-2 may be used. |
| Class A | Term end | | OM-201-1846 | | Nozzle to Safe End | | | | |
| B09.011.032A | 1-PIA1-9 | | ISI-OCN1-007 | NDE-35 | PT | SS | 36.500 | | Reactor Coolant Pump 1A1 Inlet Nozzle to Safe End Pc. 211. |
| | Circumferential | 50 | O-ISIN4-100A-1.1 | | | | 2.330 | | |
| Class A | Term end | | OM-201-1846 | | Nozzle to Safe End | | | | |
| B09.011.054 | 1-PIA1-4 | | ISI-OCN1-007 | NDE-600 | UT | CS | 33.500 | 40350 | Procedure PDI-UT-1 may be used. |
| | Circumferential | 50 | B&W 131914E6 | | | | 2.330 | | |
| Class A | Stress weld | | | | Pipe to Elbow | | | | |

## CATEGORY B-J, Pressure Retaining Welds In Piping

### NPS 4 or Larger



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| B09.011.054A | 1-PIA1-4 | | ISI-OCN1-007 | NDE-25 | MT | CS | 33.500 | | |
| | Circumferential | 50 | B&W 131914E6 | | | | 2.330 | | |
| Class A | Stress weld | | | | Pipe to Elbow | | | | |
| B09.011.055 | 1RC-289-7V | | ISI-OCN1-007 | NDE-600 | UT | CS | 33.500 | | Weld 7V is listed on weld iso 1RC-289 but drawing ISI-OCN1-007 is listed as the iso to show where the weld is located on the 1A1 Suction Piping Loop. |
| | Circumferential | 50 | 1RC-289 | | | | 3.500 | | |
| Class A | Stress weld | | | | Pipe to Elbow | | | | |
| B09.011.055A | 1RC-289-7V | | ISI-OCN1-007 | NDE-25 | MT | CS | 33.500 | | Weld 7V is listed on weld iso 1RC-289 but drawing ISI-OCN1-007 is listed as the iso to show where the weld is located on the 1A1 Suction Piping Loop. |
| | Circumferential | 50 | 1RC-289 | | | | 3.500 | | |
| Class A | Stress weld | | | | Pipe to Elbow | | | | |

**Total B09.011 Items:** 10

## CATEGORY B-J, Pressure Retaining Welds In Piping

### Less Than NPS 4



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Circumferential Welds **** | | | | | | | | | |
| B09.021.002 | 1-50-01-34 | | 1-50-01(1) | NDE-35 | PT | SS-Inconel | 1.500 | | Reactor Coolant Pump 1A1 |
| | Circumferential | 50 | O-ISIN4-100A-1.1 | | | | 0.281 | | Suction Piping. Safe End Pc. 65 to Elbow. |
| Class A | Stress weld | | ISI-OCN1-007 | | Safe End to | | | | |
| | Dissimilar | | | | Elbow | | | | |
| B09.021.003 | 1-51A-04-11C | | 1-51A-04 | NDE-35 | PT | SS | 2.500 | | |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.375 | | |
| Class A | | | | | Pipe to | | | | |
| | | | | | Elbow | | | | |
| B09.021.004 | 1-51A-04-14C | | 1-51A-04 | NDE-35 | PT | SS | 2.500 | | |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.375 | | |
| Class A | | | | | Elbow to | | | | |
| | | | | | Pipe | | | | |
| B09.021.020 | 1-PDA1-11 | | ISI-OCN1-011 | NDE-35 | PT | SS-CS | 3.500 | | Reactor Coolant Pump 1A1 Discharge Piping. |
| | Circumferential | 50 | O-ISIN4-100A-1.1 | | | | 0.750 | | Pressure Injection Nozzle Pc. 46 to Safe End Pc. |
| Class A | Stress weld | | OM-201-1845 | | Nozzle to | | | | 47. |
| | Dissimilar | | | | Safe End | | | | |
| B09.021.024 | 1-PIA1-11 | | ISI-OCN1-007 | NDE-35 | PT | CS-Inconel | 3.500 | | Reactor Coolant Pump 1A1 Suction Piping. Drain |
| | Circumferential | 50 | O-ISIN4-100A-1.1 | | | | 0.816 | | Nozzle Pc. 64 to Safe End Pc. 65. |
| Class A | Stress weld | | OM-201-1870 | | Nozzle to | | | | |
| | Dissimilar | | | | Safe End | | | | |
| B09.021.037 | 1HP-190-16 | | 1HP-190 | NDE-35 | PT | SS | 2.500 | | |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.375 | | |
| Class A | Stress weld | | | | Pipe to | | | | |
| | | | | | Valve 1HP-488 | | | | |
| B09.021.042 | 1HP-278-23C | | 1HP-278 | NDE-35 | PT | SS | 2.500 | | This weld was listed previously as 1-51A-04-23C |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.375 | | until iso 1-51A-04 was redrawn. |
| Class A | | | | | Elbow to | | | | |
| | | | | | Pipe | | | | |
| B09.021.043 | 1HP-278-24 | | 1HP-278 | NDE-35 | PT | SS | 2.500 | | This item number was inspected in outage 1 of the |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.375 | | third interval and was with weld # 1-51A-04-25C . |
| Class A | Stress weld | | | | Pipe to | | | | The weld 1-51A-04-25C was deleted in outage 2 of |
| | | | | | Valve 1HP-487 | | | | the third interval so we assigned a new weld number |
| | | | | | | | | | to this item number (weld 1HP-278-24). This weld is |
| | | | | | | | | | not to be examined in the third interval. |

## CATEGORY B-J, Pressure Retaining Welds In Piping

### Less Than NPS 4



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| B09.021.059 | 1RC-261-266 | | 1RC-261 | NDE-35 | PT | SS-Inconel | 1.500 | | Reactor Coolant Pump 1B2 |
| | Circumferential | 50 | O-ISIN4-100A-1.1 | | | | 0.281 | | Suction Piping. Safe End Pc. 65 to Elbow. |
| Class A | Stress weld | | ISI-OCN1-010 | | Safe End to | | | | |
| | Dissimilar | | | | Elbow | | | | |

**Total B09.021 Items:** 9

**Total B09 Items:** 19

## CATEGORY B-N-1, Interior Of Reactor Vessel



### Reactor Vessel

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Vessel Interior **** | | | | | | | | | |
| B13.010.001 | 1-RPV-INT-SURFACE | | OM-201-1008 | QAL-14 | VT-3 | SS | 0.000 | | Reactor Vessel Interior. Areas to be examined shall include the spaces above and below the reactor core that are made accessible for examination by removal of components during normal refueling outages. Reference Framatome Procedure 54-ISI-364. |
| | | 50 | ISI-OCN1-001 | See Com | | | 0.000 | | |
| Class A | | | | | | | | | |

**Total B13.010 Items:** 1

**Total B13 Items:** 1

## CATEGORY B-O, Pressure Retaining Welds In Control Rod Housings

### Reactor Vessel



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Welds in CRD Housing **** | | | | | | | | | |
| B14.010.002 | 1-RPV-CRD-57WH9 | | OM-201-2186 | NDE-35 | PT | SS-Inconel | 4.025 | | CRDM #57 Housing Body to Adapter. |
| | | 50 | O-ISIN4-100A-1.1 | | | | 0.650 | | |
| Class A | | | OM-201-1059 | | Housing Body to Adapter | | | | |
| | Dissimilar | | | | | | | | |
| B14.010.005 | 1-RPV-CRD-57W60 | | OM-2201-1085 | NDE-35 | PT | SS-CS | 5.000 | | CRDM #57 Base to Motor Tube. |
| | | 50 | O-ISIN4-100A-1.1 | | | | 0.500 | | |
| Class A | | | | | Base to Motor Tube | | | | |
| B14.010.008 | 1-RPV-CRD-57 | | OM-2201-1085 | NDE-35 | PT | SS-CS | 4.300 | | CRDM #57 Motor Tube to Extension. |
| | | 50 | O-ISIN4-100A-1.1 | | | | 0.400 | | |
| Class A | | | | | Motor Tube to Extension | | | | |
| B14.010.011 | 1-RPV-CRD-57W61 | | OM-2201-1085 | NDE-35 | PT | SS | 4.190 | | CRDM #57 Extension to Cap. |
| | | 50 | O-ISIN4-100A-1.1 | | | | 0.380 | | |
| Class A | | | | | Extension to Cap | | | | |

**Total B14.010 Items:** 4

**Total B14 Items:** 4

## CATEGORY C-C, Welded Attachments For Vessels, Piping, Pumps, And Valves

### Piping



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Welded Attachments **** | | | | | | | | | |
| C03.020.004 | 1-01A-0-480A-H10A | | 1-01-07/sht.1 | NDE-25 | MT | NA | 0.000 | | Calculation No. OSC-1296-06. |
| | Constant Support | 01A | O-ISIN4-122A-1.1 | | | | 1.500 | | |
| Class B | | | | | | | | | |
| C03.020.031 | 1-14-0-479A-H20D | | 1-14-17/sht.1 | NDE-25 | MT | NA | 0.000 | | Calculation No. OSC-1306-06, page 6(5)-43. Inspect with F01.020.023. |
| | Rigid Support | 14 | O-ISIN4-124B-1.2 | | | | 1.000 | | |
| Class B | | | | | | | | | |
| C03.020.042 | 1-14B-0-479A-H5F | | 1-14-12 | NDE-25 | MT | NA | 0.000 | | Calculation No. OSC-1306-06, page 6(3)-42. Inspect with F01.020.031. |
| | Rigid Support | 14B | O-ISIN4-124B-1.2 | | | | 0.500 | | |
| Class B | | | | | | | | | |
| C03.020.056 | 1-51A-0-439C-H91 | | 1-51-04/sht.3 | NDE-35 | PT | NA | 0.000 | | Calculation No. OSC-1639, page 32.2. High Pressure Injection. |
| | Rigid Restraint | 51A | O-ISIN4-101A-1.4 | | | | 0.750 | | |
| Class B | | | O-1AB-15104-03 | | | | | | |
| C03.020.093 | 1-53B-2-0-436E-H1 | | 1-53-01/sht.2 | NDE-35 | PT | NA | 0.000 | | Calculation No. OSC-407, page 105.1. Inspect with F01.020.094. |
| | Rigid Support | 53B | O-ISIN4-102A-1.1 | | | | 0.216 | | |
| Class B | | | O-1AB-15301-02 | | | | | | |

| | |
|---|---|
| **Total C03.020 Items:** | **5** |
| **Total C03 Items:** | **5** |

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## CATEGORY C-F-1, Pressure Retaining Welds In Austenitic SS Or High Alloy Piping

Piping Welds >= 3/8 in. Nominal Wall Thickness for Piping > NPS 4

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Circumferential Weld **** | | | | | | | | | |
| C05.011.003 | 1-53A-01-30L | | 1-53A-01(3) | NDE-600 | UT | SS | 10.000 | 40399 | Procedure PDI-UT-2 may be used. |
| | Circumferential | 53A | O-ISIN4-102A-1.2 | | | | 1.125 | | |
| Class B | | | | | Valve 1LP-48 to Pipe | | | | |
| C05.011.003A | 1-53A-01-30L | | 1-53A-01(3) | NDE-35 | PT | SS | 10.000 | | |
| | Circumferential | 53A | O-ISIN4-102A-1.2 | | | | 1.125 | | |
| Class B | | | | | Valve 1LP-48 to Pipe | | | | |

Total C05.011 Items: 2

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## CATEGORY C-F-1, Pressure Retaining Welds In Austenitic SS Or High Alloy Piping

Piping Welds > 1/5 In. Nom Wall for Piping >= NPS 2 and <= NPS 4

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Circumferential Weld **** | | | | | | | | | |
| C05.021.001 | 1-51A-01-79A | | 1-51A-01(3) | NDE-600 | UT | SS | 4.000 | 40406 | Procedure PDI-UT-2 may be used. |
| | Circumferential | 51A | O-ISIN4-101A-1.3 | | | | 0.531 | | |
| Class B | | | | | Elbow to Valve 1HP-148 | | | | |
| C05.021.001A | 1-51A-01-79A | | 1-51A-01(3) | NDE-35 | PT | SS | 4.000 | | |
| | Circumferential | 51A | O-ISIN4-101A-1.3 | | | | 0.531 | | |
| Class B | | | | | Elbow to Valve 1HP-148 | | | | |
| C05.021.002 | 1-51A-02-15B | | 1-51A-02 | NDE-600 | UT | SS | 4.000 | 40406 | Procedure PDI-UT-2 may be used. |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.531 | | |
| Class B | | | | | Pipe to Tee | | | | |
| C05.021.002A | 1-51A-02-15B | | 1-51A-02 | NDE-35 | PT | SS | 4.000 | | |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.531 | | |
| Class B | | | | | Pipe to Tee | | | | |
| C05.021.024 | 1HP-178-12 | | 1HP-178 | NDE-600 | UT | SS | 4.000 | 40406 | Procedure PDI-UT-2 may be used. |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.531 | | |
| Class B | | | | | Pipe to Elbow | | | | |
| C05.021.024A | 1HP-178-12 | | 1HP-178 | NDE-35 | PT | SS | 4.000 | | |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.531 | | |
| Class B | | | | | Elbow to Pipe | | | | |
| C05.021.030 | 1-51A-127-4 | | 1-51A-127 | NDE-600 | UT | SS | 4.000 | 40406 | Procedure PDI-UT-2 may be used. |
| | Circumferential | 51A | O-ISIN4-101A-1.3 | | | | 0.531 | | |
| Class B | | | | | Elbow to Pipe | | | | |
| C05.021.030A | 1-51A-127-4 | | 1-51A-127 | NDE-35 | PT | SS | 4.000 | | |
| | Circumferential | 51A | O-ISIN4-101A-1.3 | | | | 0.531 | | |
| Class B | | | | | Elbow to Pipe | | | | |

## CATEGORY C-F-1, Pressure Retaining Welds In Austenitic SS Or High Alloy Piping

**Piping Welds > 1/5 in. Nom Wall for Piping >= NPS 2 and <= NPS 4**



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| C05.021.038 | 1HP-367-19 | | 1HP-367 | NDE-600 | UT | SS | 3.000 | TBD | Procedure PDI-UT-2 may be used. |
| | Circumferential | 51B | O-ISIN4-101A-1.1 | | | | 0.216 | | |
| Class B | | | | | Tee to Pipe | | | | |
| C05.021.038A | 1HP-367-19 | | 1HP-367 | NDE-35 | PT | SS | 3.000 | | |
| | Circumferential | 51B | O-ISIN4-101A-1.1 | | | | 0.216 | | |
| Class B | | | | | Tee to Pipe | | | | |
| C05.021.045 | 1-51A-01-89A | | 1-51A-01(4) | NDE-600 | UT | SS | 4.000 | 40406 | Procedure PDI-UT-2 may be used. |
| | Circumferential | 51A | O-ISIN4-101A-1.3 | | | | 0.531 | | |
| Class B | | | | | Tee to Tee | | | | |
| C05.021.045A | 1-51A-01-89A | | 1-51A-01(4) | NDE-35 | PT | SS | 4.000 | | |
| | Circumferential | 51A | O-ISIN4-101A-1.3 | | | | 0.531 | | |
| Class B | | | | | Tee to Tee | | | | |
| C05.021.051 | 1-51A-02-16BA | | 1-51A-02 | NDE-600 | UT | SS | 4.000 | 40406 | Procedure PDI-UT-2 may be used. |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.531 | | |
| Class B | | | | | Pipe to Elbow | | | | |
| C05.021.051A | 1-51A-02-16BA | | 1-51A-02 | NDE-35 | PT | SS | 4.000 | | |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.531 | | |
| Class B | | | | | Pipe to Elbow | | | | |
| C05.021.082 | 1-51A-01-106A | | 1-51A-01(4) | NDE-600 | UT | SS | 4.000 | 40406 | Procedure PDI-UT-2 may be used. |
| | Circumferential | 51A | O-ISIN4-101A-1.3 | | | | 0.531 | | |
| Class B | | | | | Pipe to Valve 1HP-115 | | | | |
| C05.021.082A | 1-51A-01-106A | | 1-51A-01(4) | NDE-35 | PT | SS | 4.000 | | |
| | Circumferential | 51A | O-ISIN4-101A-1.3 | | | | 0.531 | | |
| Class B | | | | | Pipe to Valve 1HP-115 | | | | |
| C05.021.094 | 1-51A-02-7B | | 1-51A-02 | NDE-600 | UT | SS | 4.000 | 40406 | Procedure PDI-UT-2 may be used. |
| | Circumferential | 51A | O-ISIN4-101A-1.3 | | | | 0.531 | | |
| Class B | | | | | Elbow to Elbow | | | | |

## CATEGORY C-F-1, Pressure Retaining Welds In Austenitic SS Or High Alloy Piping

**Piping Welds > 1/5 in. Nom Wall for Piping >= NPS 2 and <= NPS 4**



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| C05.021.094A | 1-51A-02-7B | | 1-51A-02 | NDE-35 | PT | SS | 4.000 | | |
| | Circumferential | 51A | O-ISIN4-101A-1.3 | | | | 0.531 | | |
| Class B | | | | | Elbow to Elbow | | | | |
| C05.021.103A | 1-RCP-FTR1A-SH-1 | | 1-51A-02 | NDE-35 | PT | SS | 4.000 | | Reactor Coolant Pump Seal Supply Filter 1A Pc. 10 to Pc. 1 Outlet End. |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.531 | | |
| Class B | Term end | | OM-201-0473 | | Filter Hub to Filter Housing | | | | |
| C05.021.104A | 1-RCP-FTR1A-SH-2 | | 1-51A-02 | NDE-35 | PT | SS | 4.000 | | Reactor Coolant Pump Seal Supply Filter 1A Pc. 10 to Pc. 1 Inlet End. |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.531 | | |
| Class B | Term end | | OM-201-0473 | | Filter Hub to Filter Housing | | | | |

**Total C05.021 Items:** 20

## CATEGORY C-F-1, Pressure Retaining Welds In Austenitic SS Or High Alloy Piping

### Socket Welds

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| C05.030.001 | 1-51B-66-9 | | 1-51B-66 | NDE-35 | PT | SS | 2.000 | | |
| | Socket | 51B | O-ISIN4-101A-1.2 | | | | 0.154 | | |
| Class B | | | | | Pipe to Elbow | | | | |
| C05.030.007 | 1HP-367-26 | | 1HP-367 | NDE-35 | PT | SS | 4.000 | | |
| | Socket | 51B | O-ISIN4-101A-1.1 | | | | 0.237 | | |
| Class B | | | | | Pipe to Full Coupling | | | | |

**Total C05.030 Items:** 2

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## CATEGORY C-F-1, Pressure Retaining Welds In Austenitic SS Or High Alloy Piping

Pipe Branch Connections of Branch Piping >= NPS 2

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Circumferential Weld **** | | | | | | | | | |
| C05.041.001 | 1-53B-01-87B | | 1-53B-01(2) | NDE-35 | PT | SS | 8.000 | | |
| | Branch | 53B | O-ISIN4-102A-1.2 | | | | 0.250 | | |
| Class B | | | | | Pipe to Pipe | | | | |
| C05.041.002 | 1-53B-01-87BA | | 1-53B-01(2) | NDE-35 | PT | SS | 8.000 | | Reinforcing collar at weld 87B. |
| | Branch | 53B | O-ISIN4-102A-1.2 | | | | 0.250 | | |
| Class B | | | | | Reinforcing collar to Pipe | | | | |
| C05.041.011 | 1-53B-06-21KA | | 1-53B-06(1) | NDE-35 | PT | SS | 8.000 | | |
| | Branch | 53B | O-ISIN4-102A-1.2 | | | | 0.148 | | |
| Class B | | | | | Pipe to Pipe | | | | |
| C05.041.012 | 1-53B-06-21KB | | 1-53B-06(1) | NDE-35 | PT | SS | 10.000 | | Reinforcing collar for weld 21KA. |
| | Branch | 53B | O-ISIN4-102A-1.2 | | | | 0.165 | | |
| Class B | | | | | Reinforcing collar to Pipe | | | | |

Total C05.041 Items: 4

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## CATEGORY C-F-2, Pressure Retaining Welds In Carbon Or Low Alloy Steel Piping

Piping Welds >= 3/8 in. Nominal Wall Thickness for Piping > NPS 4

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Circumferential Weld **** | | | | | | | | | |
| C05.051.006 Class B | 1-MS17B-A Circumferential | 01A | 1MS-001 | NDE-600 | UT Elbow to Pipe | CS | 34.000 1.164 | | Grinnell subassembly MS-17B. Note : This weld sub assembly was on iso 1-01A-1(1) prior to the iso being redrawn. Procedure PDI-UT-1 may be used. If procedure PDI-UT-1 is used, calibration block PDI-UT-1-O shall be used. |
| C05.051.006A Class B | 1-MS17B-A Circumferential | 01A | 1MS-001 | NDE-25 | MT Elbow to Pipe | CS | 34.000 1.164 | | Grinnell Subassembly MS-17B Note : This weld sub assembly was on iso 1-01A-1(1) prior to the iso being redrawn. |
| C05.051.009 Class B | 1MS-064-9 Circumferential | 01A | 1MS-064 O-ISIN4-122A-1.1 | NDE-600 | UT Pipe to Elbow | CS | 12.000 0.562 | | This weld was previously listed as 1-01A-01-29C before the Iso was redrawn. Procedure PDI-UT-1 may be used. If procedure PDI-UT-1 is used, calibration block PDI-UT-1-O shall be used. |
| C05.051.009A Class B | 1MS-064-9 Circumferential | 01A | 1MS-064 O-ISIN4-122A-1.1 | NDE-25 | MT Pipe to Elbow | CS | 12.000 0.562 | | This weld was previously listed as 1-01A-01-29C before the Iso was redrawn. |
| C05.051.012 Class B | 1MS-076-12V Circumferential Term end | 01A | 1MS-076 O-ISIN4-122A-1.1 | NDE-600 | UT Reducer to Nozzle SG 1A | CS | 24.000 0.969 | | This weld was previously listed as 1-01A-02-11BA before the Iso was redrawn. Procedure PDI-UT-1 may be used. If procedure PDI-UT-1 is used, calibration block PDI-UT-1-O shall be used. |
| C05.051.012A Class B | 1MS-076-12V Circumferential Term end | 01A | 1MS-076 O-ISIN4-122A-1.1 | NDE-25 | MT Reducer to Nozzle SG 1A | CS | 24.000 0.969 | | This weld was previously listed as 1-01A-02-11BA before the Iso was redrawn. |
| C05.051.017 Class B | 1MS-063-26 Circumferential | 01A | 1MS-063 O-ISIN4-122A-1.3 | NDE-600 | UT Elbow to Pipe | CS | 8.000 0.500 | | This weld was previously listed as 1-01A-1-99 before the Iso was redrawn. Procedure PDI-UT-1 may be used. If procedure PDI-UT-1 is used, calibration block PDI-UT-1-O shall be used. |

## CATEGORY C-F-2, Pressure Retaining Welds In Carbon Or Low Alloy Steel Piping

**Piping Welds >= 3/8 in. Nominal Wall Thickness for Piping > NPS 4**

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| C05.051.017A<br>Class B | 1MS-063-26<br>Circumferential | 01A | 1MS-063<br>O-ISIN4-122A-1.3 | NDE-25 | MT<br>Elbow to Pipe | CS | 8.000<br>0.500 | | This weld was previously listed as 1-01A-1-99 before the Iso was redrawn. |
| C05.051.030<br>Class B | 1-FWD88-C<br>Circumferential | 03 | 1FDW-249 | NDE-600 | UT<br>Elbow to Pipe | CS | 14.000<br>0.750 | | Grinnell subassembly FWD-88.<br>Procedure PDI-UT-1 may be used. If procedure PDI-UT-1 is used, calibration block PDI-UT-1-O shall be used.<br>This weld was shown previously on iso 1-03-3(1) until it was transferred to iso 1FDW-249. |
| C05.051.030A<br>Class B | 1-FWD88-C<br>Circumferential | 03 | 1FDW-249 | NDE-35 | PT<br>Elbow to Pipe | CS | 14.000<br>0.750 | | Grinnell subassembly FWD-88.<br>This weld was shown previously on iso 1-03-3(1) until it was transferred to iso 1FDW-249.<br>The surface exam was changed to PT because of the limited access to the weld. |
| C05.051.033<br>Class B | 1-20B-21-16-2<br>Circumferential | 20B | 1-20B-21-16<br>O-ISIN4-116A-1.1 | NDE-600 | UT<br>Valve 1PRV-1 to Pipe | CS | 48.000<br>0.500 | | Procedure PDI-UT-1 may be used. If procedure PDI-UT-1 is used, calibration block PDI-UT-1-O shall be used. |
| C05.051.033A<br>Class B | 1-20B-21-16-2<br>Circumferential | 20B | 1-20B-21-16<br>O-ISIN4-116A-1.1 | NDE-25 | MT<br>Valve 1PRV-1 to Pipe | CS | 48.000<br>0.500 | | |
| C05.051.036<br>Class B | 1-LPSW-344-21<br>Circumferential | 14B | 1-LPSW-344<br>O-ISIN4-124B-1.2 | NDE-600 | UT<br>Pipe to Elbow | CS | 8.000<br>0.500 | | Procedure PDI-UT-1 may be used. If procedure PDI-UT-1 is used, calibration block PDI-UT-1-O shall be used. |
| C05.051.036A<br>Class B | 1-LPSW-344-21<br>Circumferential | 14B | 1-LPSW-344<br>O-ISIN4-124B-1.2 | NDE-25 | MT<br>Pipe to Elbow | CS | 8.000<br>0.500 | | |
| C05.051.040<br>Class B | 1LPSW-345-17<br>Circumferential | 14B | 1LPSW-345<br>O-ISIN4-124B-1.2 | NDE-600 | UT<br>Flange to Pipe | CS | 8.000<br>0.500 | | This weld was listed previously as 1-LPSW-345-17 until iso 1-LPSW-345 was redrawn. This weld was listed previously as 1-LPS-345-17 until iso 1-LPS-345 was deleted.<br>Procedure PDI-UT-1 may be used. If procedure PDI-UT-1 is used, calibration block PDI-UT-1-O |

## CATEGORY C-F-2, Pressure Retaining Welds In Carbon Or Low Alloy Steel Piping

**Piping Welds >= 3/8 in. Nominal Wall Thickness for Piping > NPS 4**

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | shall be used. |
| C05.051.040A<br>Class B | 1LPSW-345-17<br>Circumferential | 14B | 1LPSW-345<br>O-ISIN4-124B-1.2 | NDE-25 | MT<br>Flange to Pipe | CS | 8.000<br>0.500 | | This weld was listed previously as 1-LPSW-345-17 until iso 1-LPSW-345 was redrawn. This weld was listed previously as 1-LPS-345-17 until iso 1-LPS-345 was deleted. |
| C05.051.049<br>Class B | 1-LPSW-346-21<br>Circumferential | 14B | 1-LPSW-346<br>O-ISIN4-124B-1.2 | NDE-600 | UT<br>Elbow to Pipe | CS | 8.000<br>0.500 | | Procedure PDI-UT-1 may be used. If procedure PDI-UT-1 is used, calibration block PDI-UT-1-O shall be used. |
| C05.051.049A<br>Class B | 1-LPSW-346-21<br>Circumferential | 14B | 1-LPSW-346<br>O-ISIN4-124B-1.2 | NDE-25 | MT<br>Elbow to Pipe | CS | 8.000<br>0.500 | | |
| C05.051.060<br>Class B | 1-14-230-1<br>Circumferential | 14B | 1-14-230<br>O-ISIN4-121D-1.1 | NDE-600 | UT<br>Tee to Reducer | CS | 6.000<br>0.432 | | Procedure PDI-UT-1 may be used. If procedure PDI-UT-1 is used, calibration block PDI-UT-1-O shall be used. |
| C05.051.060A<br>Class B | 1-14-230-1<br>Circumferential | 14B | 1-14-230<br>O-ISIN4-121D-1.1 | NDE-25 | MT<br>Tee to Reducer | CS | 6.000<br>0.432 | | |

**Total C05.051 Items:** 20

DUKE ENERGY CORPORATION
INSERVICE INSPECTION PLAN MANAGEMENT
Inservice Inspection Database Management System

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1



## CATEGORY C-F-2, Pressure Retaining Welds In Carbon Or Low Alloy Steel Piping

### Socket Welds

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| C05.070.001 | 1FDW-305-3E | | 1FDW-305 | NDE-35 | PT | CS | 2.000 | | This weld was listed previously as 1-03A-4-03E on iso 1-03A-4(2) until it was transferred to iso 1FDW-305. |
| | Socket | 03A | O-ISIN4-121D-1.1 | | | | 0.218 | | |
| Class B | | | | | Half Coupling to Pipe | | | | |

**Total C05.070 Items:** 1

DUKE ENERGY CORPORATION
INSERVICE INSPECTION PLAN MANAGEMENT
Inservice Inspection Database Management System



## CATEGORY C-F-2, Pressure Retaining Welds In Carbon Or Low Alloy Steel Piping

Pipe Branch Connections of Branch Piping >= NPS 2

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Circumferential Weld **** | | | | | | | | | |
| C05.081.004 | 1-MS17B-B | | 1MS-001 | NDE-25 | MT | CS | 12.000 | | Grinnell Subassembly MS-17B. |
| | Branch | 01A | O-ISIN4-122A-1.1 | | | | 0.562 | | |
| Class B | | | | | Pipe to Pipe | | | | |
| C05.081.005 | 1-FWD67-A | | 1FDW-250 | NDE-25 | MT | CS | 20.000 | | Grinnell subassembly FWD-67. |
| | Branch | 03 | | | | | 1.031 | | This Grinnell Subassembly weld was listed previously on iso 1-03(1) until it was transferred to iso 1FDW-250. |
| Class B | | | | | Pipe to Pipe | | | | |

**Total C05.081 Items:** 2

**Total C05 Items:** 51

## CATEGORY D-A, Welded Attachments For Vessels, Piping, Pumps, And Valves

**Piping**



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| ****** Welded Attachments ****** | | | | | | | | | |
| D01.020.011 | 1-03-0-439A-H63 | | 1-03-01/sht.1 | QAL-13 | VT-1 | NA | 24.000 | | Calculation No. OSC-336, page 45a.1. Inspect with F01.032.017. |
| | Spring Hgr | 03 | O-ISIN4-121B-1.3 | | | | 0.187 | | |
| Class C | | | | | | | | | |
| D01.020.028 | 1-03A-1-0-439A-SR39 | | 1-03A-06/sht.1 | QAL-13 | VT-1 | NA | 6.000 | | Calculation No. OSC-340, page 88. Inspect with F01.030.044. |
| | Rigid Support | 03A | O-ISIN4-121D-1.1 | | | | 1.000 | | |
| Class C | | | | | | | | | |
| D01.020.029 | 1-03A-1-0-439B-H28 | | 1-03A-06/sht.1 | QAL-13 | VT-1 | NA | 6.000 | | Calculation No. OSC-340, page 88. Inspect with F01.030.045. |
| | Rigid Support | 03A | O-ISIN4-121D-1.1 | | | | 0.216 | | |
| Class C | | | | | | | | | |
| D01.020.036 | 1-04A-2-0-439B-R12 | | 1-04A-06 | QAL-13 | VT-1 | NA | 6.000 | | Calculaton No. OSC-1404, page 77. Inspect with F01.032.041. |
| | Constant Support | 04A | O-ISIN4-121B-1.5 | | | | 0.437 | | |
| Class C | | | | | | | | | |
| D01.020.061 | 1-14B-0-400B-SR35 | | 1-14-06/sht.2 | QAL-13 | VT-1 | NA | 24.000 | | Calculation No. OSC-1541, page 101. Inspect with F01.031.073. |
| | Rigid Restraint | 14B | O-ISIN4-124A-1.1 | | | | 3.500 | | |
| Class C | | | | | | | | | |
| D01.020.083 | 1-56-4-0-443-H65 | | 4-56-02/sht.2 | QAL-13 | VT-1 | NA | 8.000 | | Calculation No. OSC-421, page 94 |
| | Rigid Support | 56 | O-ISIN4-104A-1.1 | | | | 1.000 | | |
| Class C | | | | | | | | | |
| D01.020.091 | 1-57-0-481A-H1 | | 1-57-01/sht.1 | QAL-13 | VT-1 | NA | 12.000 | | Calculaton No. OSC-1313-06, page 41.1. Inspect with F01.030.141. |
| | Rigid Support | 57 | O-ISIN4-100A-1.2 | | - | | 0.750 | | |
| Class C | | | 0-491C-2A(S) | | | | | | |

**Total D01.020 Items:** 7

**Total D01 Items:** 7

## CATEGORY F-A, Supports



### Class 1 Piping Supports

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Category A, One-Directional **** | | | | | | | | | |
| F01.010.005 | 1-51A-0-478A-H6228 | | 1-55-03/sht.1 | QAL-14 | VT-3 | NA | 2.500 | | Calculation No. OSC-1660-11, page 65 |
| | Rigid Support | 51A | O-ISIN4-101A-1.1 | | | | 0.000 | | High Pressure Injection. |
| Class A | | | | | | | | | |
| Total F01.010 Items: | 1 | | | | | | | | |
| **** Category C, Thermal Movement **** | | | | | | | | | |
| F01.012.002 | 1-50-0-479A-H2A | | | QAL-14 | VT-3 | NA | 10.000 | | Pressurizer Surge Lines. No Calculation Number. |
| | Hyd Snubber | 50 | O-ISIN4-100A-1.1 | | | | 0.000 | | Inspect with F01.050.014. |
| Class A | | | | | | | | | |
| F01.012.008 | 1-53A-0-479A-H6200 | | 1-53-07/sht.1 | QAL-14 | VT-3 | NA | 3.000 | | Calculation No. OSC-1301-06, page 91. |
| | Spring Hgr | 53A | O-ISIN4-102A-1.1 | | | | 0.000 | | |
| Class A | | | | | | | | | |
| F01.012.011 | 1-50-0-481A-NPS-H13-A | | 1-57-01/sht.1 | QAL-14 | VT-3 | NA | 4.000 | | Calculation No. OS-1313-06, page 44.1. |
| | Hyd Snubber | 57 | O-ISIN4-100A-1.2 | | | | 0.000 | | Inspect with F01.050.015. |
| Class A | | | | | | | | | |
| Total F01.012 Items: | 3 | | | | | | | | |

## Class 2 Piping Supports

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Category A, One-Directional **** | | | | | | | | | |
| F01.020.004 | 1-01A-0-481A-H2B | | 1-01-08/sht.1 | QAL-14 | VT-3 | NA | 24.250 | | Calculation No. OSC-1296-06. |
| | Rigid Support | 01A | O-ISIN4-122A-1.1 | | | | 0.500 | | |
| Class B | | | | | | | | | |
| F01.020.023 | 1-14-0-479A-H20D | | 1-14-17/sht.1 | QAL-14 | VT-3 | NA | 8.000 | | Calculation No. OSC-1306-06, page 6(5)-43. |
| | Rigid Support | 14 | O-ISIN4-124B-1.2 | | | | 1.000 | | Inspect with C03.020.031. |
| Class B | | | | | | | | | |
| F01.020.031 | 1-14B-0-479A-H5F | | 1-14-12 | QAL-14 | VT-3 | NA | 8.000 | | Calculation No. OSC-1306-06, page 6(3)-42. |
| | Rigid Support | 14B | O-ISIN4-124B-1.2 | | | | 0.500 | | Inspect with C03.020.042. |
| Class B | | | | | | | | | |
| F01.020.032 | 1-14B-0-479A-H18 | | 1-14-15/sht.1 | QAL-14 | VT-3 | NA | 8.000 | | Calculation No. OSC-1409. |
| | Rigid Support | 14B | O-ISIN4-124B-1.2 | | | | 0.000 | | |
| Class B | | | O-1RB-11415-01 | | | | | | |
| F01.020.061 | 1-51A-0-439A-H100 | | 1-51-04/sht.3 | QAL-14 | VT-3 | NA | 4.000 | | Calculation No. OSC-1639, page 32.2. High |
| | Rigid Support | 51A | O-ISIN4-101A-1.4 | | | | 0.000 | | Pressure Injection. |
| Class B | | | O-1AB-15104-03 | | | | | | |
| F01.020.071 | 1-51B-2-0-437A-DE051 | | 1-51-07/sht.4 | QAL-14 | VT-3 | NA | 4.000 | | Calculation No. OSC-1539, page 73. |
| | Rigid Support | 51B | O-ISIN4-101A-1.4 | | | | 0.000 | | |
| Class B | | | | | | | | | |
| F01.020.094 | 1-53B-2-0-436E-H1 | | 1-53-01/sht.2 | QAL-14 | VT-3 | NA | 14.000 | | Calculation No. OSC-407, page 105.1. Inspect with |
| | Rigid Support | 53B | O-ISIN4-102A-1.1 | | | | 0.216 | | C03.020.093. |
| Class B | | | O-1AB-15301-02 | | | | | | |
| F01.020.113 | 1-54A-3-0-439A-H23 | | 1-54-03/sht.1 | QAL-14 | VT-3 | NA | 8.000 | | Calculation No. OSC-416, page 58.1. |
| | Rigid Support | 54A | O-ISIN4-103A-1.1 | | | | 0.000 | | |
| Class B | | | | | | | | | |

**Total F01.020 Items: 8**

**** Category B, Multi-Directional ****

## CATEGORY F-A, Supports

### Class 2 Piping Supports

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| F01.021.042 | 1-14B-0-479A-H6 | | 1-14-15/sht.1 | QAL-14 | VT-3 | NA | 6.000 | | Calculation No. OSC-1409. |
| | Rigid Restraint | 14B | O-ISIN4-124B-1.2 | | | | 0.216 | | |
| Class B | | | | | | | | | |
| F01.021.063 | 1-51A-0-439C-H91 | | 1-51-04/sht.3 | QAL-14 | VT-3 | NA | 4.000 | | Calculation No. OSC-1639, page 32.2. High Pressure Injection. |
| | Rigid Restraint | 51A | O-ISIN4-101A-1.4 | | | | 0.750 | | |
| Class B | | | O-1AB-15104-03 | | | | | | |
| F01.021.072 | 1-51B-436H-H5176 | | 1-51-01/sht.3 | QAL-14 | VT-3 | NA | 2.500 | | Calculation No. OSC-400, page 52. |
| | Rigid Restraint | 51B | O-ISIN4-101A-1.2 | | | | 0.000 | | |
| Class B | | | O-1AB-15101-03 | | | | | | |
| F01.021.121 | 1-56-439C-DE001 | | 4-56-02/sht.1 | QAL-14 | VT-3 | NA | 8.000 | | Calculation No. OSC-421, page 93. |
| | Rigid Restraint | 56 | O-ISIN4-104A-1.1 | | | | 0.000 | | |
| Class B | | | | | | | | | |

**Total F01.021 Items:** 4

****** Category C, Thermal Movement ******

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| F01.022.062 | 1-51A-1-0-444-H3 | | 1-51-05/sht.2 | QAL-14 | VT-3 | NA | 4.000 | | Calculation No. OSC-1537, page 56.1. High Pressure Injection. |
| | Spring Hgr | 51A | O-ISIN4-101A-1.3 | | | | 0.500 | | |
| Class B | | | | | | | | | |
| F01.022.102 | 1-53B-3-0-444-H1 | | 1-53-01/sht.2 | QAL-14 | VT-3 | NA | 12.000 | | Calculation No. OSC-407, page 105.1. |
| | Spring Hgr | 53B | O-ISIN4-102A-1.1 | | | | 1.000 | | |
| Class B | | | O-1AB-15301-02 | | | | | | |
| F01.022.103 | 1-53B-4-0-435B-H10 | | 1-53-01/sht.1 | QAL-14 | VT-3 | NA | 14.000 | | Calculation No. OSC-407, page 104. |
| | Spring Hgr | 53B | O-ISIN4-102A-1.1 | | | | 0.237 | | |
| Class B | | | O-1AB-15301-01 | | | | | | |
| F01.022.113 | 1-54A-3-0-435B-R5 | | 1-54-01/sht.1 | QAL-14 | VT-3 | NA | 8.000 | | Calculation No. OSC-1628, page 60. Inspect with F01.050.057. |
| | Hyd Snubber | 54A | O-ISIN4-103A-1.1 | | | | 0.000 | | |
| Class B | | | | | | | | | |

**Total F01.022 Items:** 4

## CATEGORY F-A, Supports

DUKE ENERGY CORPORATION
INSERVICE INSPECTION PLAN MANAGEMENT
Inservice Inspection Database Management System



### Class 3 Piping Supports

Oconee 1
Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Category A, One-Directional **** | | | | | | | | | |
| F01.030.042 | 1-03A-401A-DE003 | | 1-03A-05/sht.1 | QAL-14 | VT-3 | NA | 6.000 | | Calculation No. OSC-339, page 79. |
| | Rigid Support | 03A | O-ISIN4-121D-1.1 | | | | 0.000 | | |
| Class C | | | | | | | | | |
| F01.030.043 | 1-03A-1-0-437A-H67 | | 1-03A-05/sht.4 | QAL-14 | VT-3 | NA | 6.000 | | Calculation No. OSC-339, page 82. |
| | Rigid Support | 03A | O-ISIN4-121D-1.1 | | | | 0.500 | | |
| Class C | | | | | | | | | |
| F01.030.044 | 1-03A-1-0-439A-SR39 | | 1-03A-06/sht.1 | QAL-14 | VT-3 | NA | 6.000 | | Calculation No. OSC-340, page 88. |
| | Rigid Support | 03A | O-ISIN4-121D-1.1 | | | | 1.000 | | |
| Class C | | | | | | | | | |
| F01.030.045 | 1-03A-1-0-439B-H28 | | 1-03A-06/sht.1 | QAL-14 | VT-3 | NA | 6.000 | | Calculation No. OSC-340, page 88. Inspect with D01.020.029. |
| | Rigid Support | 03A | O-ISIN4-121D-1.1 | | | | 0.216 | | |
| Class C | | | | | | | | | |
| F01.030.056 | 1-04A-2-0-439B-H17 | | 1-04A-06 | QAL-14 | VT-3 | NA | 6.000 | | Calculation No. OSC-1404, page 77. |
| | Rigid Support | 04A | O-ISIN4-121B-1.5 | | | | 0.000 | | |
| Class C | | | | | | | | | |
| F01.030.057 | 1-04A-2-0-439B-H16 | | 1-04A-06 | QAL-14 | VT-3 | NA | 6.000 | | Calculation No. OSC-1404, page 77. |
| | Rigid Support | 04A | O-ISIN4-121B-1.5 | | | | 0.000 | | |
| Class C | | | | | | | | | |
| F01.030.063 | 1-07A-400B-GTE-1901 | | 1-07A-02/sht.2 | QAL-14 | VT-3 | NA | 8.000 | | Calculation No. OSC-362, page 56. |
| | Rigid Support | 07A | O-ISIN4-121A-1.8 | | | | 0.000 | | |
| Class C | | | | | | | | | |
| F01.030.064 | 1-07A-400B-SR8 | | 1-07A-02/sht.1 | QAL-14 | VT-3 | NA | 8.000 | | Calculation No. OSC-362, page 55. |
| | Rigid Support | 07A | O-ISIN4-121A-1.8 | | | | 0.000 | | |
| Class C | | | | | | | | | |

## Class 3 Piping Supports

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| F01.030.071 | 1-08-400A-H4050 | | 1-08-01/sht.2 | QAL-14 | VT-3 | NA | 10.000 | | Calculation No. OSC-1902. |
| | Rigid Support | 08 | O-ISIN4-122A-1.4 | | | | 0.000 | | |
| Class C | | | | | | | | | |
| F01.030.102 | 1-14B-0-439A-SR57 | | 1-14-06/sht.1 | QAL-14 | VT-3 | NA | 14.000 | | Calculation No. OSC-1541, page 100 |
| | Rigid Support | 14B | O-ISIN4-124B-1.2 | | | | 0.000 | | |
| Class C | | | | | | | | | |
| F01.030.131 | 1-56-438C-DE009 | | 4-56-02/sht.2 | QAL-14 | VT-3 | NA | 8.000 | | Calculation No. OSC-421, page 94. |
| | Rigid Support | 56 | O-ISIN4-104A-1.1 | | | | 0.000 | | |
| Class C | | | | | | | | | |
| F01.030.132 | 1-56-5-0-437B-H17 | | 4-56-07/sht.1 | QAL-14 | VT-3 | NA | 8.000 | | Calculation No. OSC-1359-02, page 28. |
| | Rigid Support | 56 | O-ISIN4-104A-1.1 | | | | 0.000 | | |
| Class C | | | | | | | | | |
| F01.030.136 | 1-56-4-0-443-H65 | | 4-56-02/sht.2 | QAL-14 | VT-3 | NA | 8.000 | | Calculation No. OSC-421, page 94. |
| | Rigid Support | 56 | O-ISIN4-104A-1.1 | | | | 1.000 | | |
| Class C | | | | | | | | | |
| F01.030.141 | 1-57-0-481A-H1 | | 1-57-01/sht.1 | QAL-14 | VT-3 | NA | 12.000 | | Calculation No. OSC-1313-06, page 41.1. Inspect with F01.030.141. |
| | Rigid Support | 57 | O-ISIN4-100A-1.2 | | | | 0.750 | | |
| Class C | | | 0-491C-2A(S) | | | | | | |

**Total F01.030 Items: 14**

****** Category B, Multi-Directional ******

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| F01.031.011 | 1-03-480A-H6175 | | 1-03A-14/sht.1 | QAL-14 | VT-3 | NA | 6.000 | | Calculation No. OSC-1224-16, page 41. |
| | Rigid Restraint | 03 | O-ISIN4-121D-1.1 | | | | 0.000 | | |
| Class C | | | | | | | | | |
| F01.031.035 | 1-04A-2-0-439B-R5 | | 1-04A-06 | QAL-14 | VT-3 | NA | 6.000 | | Calculation No. OSC-1404, page 77. |
| | Rigid Restraint | 04A | O-ISIN4-121B-1.5 | | | | 1.000 | | |
| Class C | | | | | | | | | |

## CATEGORY F-A, Supports



### Class 3 Piping Supports

Oconee 1
Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| F01.031.036 | 1-04A-2-0-439B-R6 | | 1-04A-06 | QAL-14 | VT-3 | NA | 6.000 | | Calculation No. OSC-1404, page 77. |
| | Rigid Restraint | 04A | O-ISIN4-121B-1.5 | | | | 0.375 | | |
| Class C | | | | | | | | | |
| F01.031.042 | 1-07A-400B-SR22 | | 1-07A-01/sht.4 | QAL-14 | VT-3 | NA | 30.000 | | Calculation No. OSC-361, page 88.1. |
| | Rigid Restraint | 07A | O-ISIN4-121A-1.7 | | | | 0.000 | | |
| Class C | | | | | | | | | |
| F01.031.051 | 1-08-400A-H4055 | | 1-08-01/sht.2 | QAL-14 | VT-3 | NA | 10.000 | | Calculation No. OSC-1902, page 39. |
| | Rigid Restraint | 08 | O-ISIN4-122A-1.4 | | | | 0.000 | | |
| Class C | | | | | | | | | |
| F01.031.073 | 1-14B-0-400B-SR35 | | 1-14-06/sht.2 | QAL-14 | VT-3 | NA | 24.000 | | Calculation No. OSC-1541, page 101. Inspect with F01.031.073. |
| | Rigid Restraint | 14B | O-ISIN4-124A-1.1 | | | | 3.500 | | |
| Class C | | | | | | | | | |
| F01.031.074 | 1-14B-0-437A-SR51 | | 1-14-06/sht.2 | QAL-14 | VT-3 | NA | 14.000 | | Calculation No. OSC-1541, page 101. |
| | Rigid Restraint | 14B | O-ISIN4-124B-1.1 | | | | 1.625 | | |
| Class C | | | | | | | | | |

**Total F01.031 Items: 7**

****** Category C, Thermal Movement ******

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| F01.032.017 | 1-03-0-439A-H63 | | 1-03-01/sht.1 | QAL-14 | VT-3 | NA | 24.000 | | Calculation No. OSC-336, page 45a.1. Inspect with D01.020.011 and H04.001.012. |
| | Spring Hgr | 03 | O-ISIN4-121B-1.3 | | | | 0.187 | | |
| Class C | | | | | | | | | |
| F01.032.018 | 1-03-479F-H6068 | | 1-03A-14/sht.2 | QAL-14 | VT-3 | NA | 6.000 | | Calculation No. OSC-1224-16, page 42. Inspect with F01.050.099. |
| | Mech Snubber | 03 | O-ISIN4-121D-1.1 | | | | 0.000 | | |
| Class C | | | | | | | | | |
| F01.032.041 | 1-04A-2-0-439B-R12 | | 1-04A-06 | QAL-14 | VT-3 | NA | 6.000 | | Calculation No. OSC-1404, page 77. Inspect with D01.020.036. |
| | Constant Support | 04A | O-ISIN4-121B-1.5 | | | | 0.437 | | |
| Class C | | | | | | | | | |

## CATEGORY F-A, Supports



### Class 3 Piping Supports

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| F01.032.052 | 1-07A-6-0-400A-H41 | | 1-07A-01/sht.1 | QAL-14 | VT-3 | NA | 24.000 | | Calculation No. OSC-361, page 85.1. Inspect with F01.050.102. |
| | Mech Snubber | 07A | O-ISIN4-121A-1.8 | | | | 0.000 | | |
| Class C | | | | | | | | | |

**Total F01.032 Items:** 4

## CATEGORY F-A, Supports



### Supports Other Than Piping Supports

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **** Class 1, 2, and 3 **** | | | | | | | | | |
| F01.040.006 | 1-DHRC-A-SUPPORT | | OM 201-286 | QAL-14 | VT-3 | NA | 0.000 | | Decay Heat Removal Cooler 1A. Support located on Class C side of HX. |
| | | 14B | O-ISIN4-102A-1.2 | | | | 0.000 | | |
| Class C | | | | | | | | | |

| | |
|---|---|
| Total F01.040 Items: | 1 |
| Total F01 Items: | 46 |

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| G02.001.011A<br>Class A | 1A1-THERM SLEEVE<br>Circumferential | 51A | ISI OCN1-011<br>O-ISIN4-100A-1.1 | NDE-105 | RT | SS | 3.500<br>0.750 | | Make-Up Nozzle 1A1. Perform RT between the nozzle to safe end and safe end to pipe weld in the thermal sleeve expansion area as described in procedure NDE-105. This schedule cannot be changed. Reference Section 7 of the ISI Plan, General Requirements. |
| G02.001.011B<br>Class A | 1A2-THERM SLEEVE<br>Circumferential | 51A | ISI OCN1-012<br>O-ISIN4-100A-1.1 | NDE-105 | RT | SS | 3.500<br>0.750 | | Make-Up Nozzle 1A2. Perform RT between the nozzle to safe end and safe end to pipe weld in the thermal sleeve expansion area as described in procedure NDE-105. This schedule cannot be changed. Reference Section 7 of the ISI Plan, General Requirements. |
| G02.001.011C<br>Class A | 1B1-THERM SLEEVE<br>Circumferential | 51A | ISI OCN1-013<br>O-ISIN4-100A-1.1 | NDE-105 | RT | SS | 3.500<br>0.750 | | HPI Nozzle 1B1. Perform RT between the nozzle to safe end and safe end to pipe weld in the thermal sleeve expansion area as described in procedure NDE-105. This schedule cannot be changed. Reference Section 7 of the ISI Plan, General Requirements. |
| G02.001.011D<br>Class A | 1B2-THERM SLEEVE<br>Circumferential | 51A | ISI OCN1-014<br>O-ISIN4-100A-1.1 | NDE-105 | RT | SS | 3.500<br>0.750 | | HPI Nozzle 1B2. Perform RT between the nozzle to safe end and safe end to pipe weld in the thermal sleeve expansion area as described in procedure NDE-105. This schedule cannot be changed. Reference Section 7 of the ISI Plan, General Requirements. |

**Total G02.001 Items:** 4

**Total G02 Items:** 4

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| G04.001.007 Class A | 1HP-255-6 Circumferential | 51A | 1HP-255 O-ISIN4-101A-1.4 | NDE-995 | UT Elbow to Pipe | SS | 2.500 0.375 | | Inspect 100% of weld & 1" of base material (axial & circumferential). This weld was 1-51A-10-6 until iso 1-51A-10 was deleted and welds were transferred to iso 1HP-255. Reference Section 7 of the ISI Plan, General Requirements. |
| G04.001.012 Class A | 1HP-190-12 Circumferential | 51A | 1HP-190 | NDE-995 | UT Pipe to Elbow | SS | 2.500 0.375 | | Inspect 100% of weld & 1" of base material (axial & circumferential). This weld was 1-51A-5-77C until iso 1-51A-5 was deleted and welds transferred to iso 1HP-190. Reference Section 7 of the ISI Plan, General Requirements. |
| G04.001.015 Class A | 1HP-190-16 Circumferential | 51A | 1HP-190 O-ISIN4-101A-1.4 | NDE-995 | UT Pipe to Valve 1HP-488 | SS | 2.500 0.375 | | Inspect 100% of weld & 1" of base material (axial & circumferential). Reference Section 7 of the ISI Plan, Volume 1. |
| G04.001.016 Class A | 1HP-190-13 Circumferential | 51A | 1HP-190 O-ISIN4-101A-1.4 | NDE-995 | UT Elbow to Pipe | SS | 2.500 0.375 | | Inspect 100% of weld & 1" of base material (axial & circumferential). Reference Section 7 of the ISI Plan, General Requirements. |
| G04.001.017 Class A | 1HP-279-4 Circumferential | 51A | 1HP-279 O-ISIN4-101A-1.4 | NDE-995 | UT Elbow to Pipe | SS | 2.500 0.375 | | Inspect 100% of weld & 1" of base material (axial & circumferential). This weld was 1-51A-10-4 until iso 1-51A-10 was deleted and welds tranferred to iso 1HP-279. Reference Section 7 of the ISI Plan, General Requirements. |
| G04.001.018 Class A | 1HP-279-3 Circumferential | 51A | 1HP-279 O-ISIN4-101A-1.4 | NDE-995 | UT Elbow to Pipe | SS | 2.500 0.375 | | Inspect 100% of weld & 1" of base material (axial & circumferential). This weld was 1-51A-10-3 until iso 1-51A-10 was deleted and welds tranferred to iso 1HP-279. Reference Section 7 of the ISI Plan, General Requirements. |
| G04.001.019 Class A | 1HP-279-24 Circumferential | 51A | 1HP-279 O-ISIN4-101A-1.4 | NDE-995 | UT Pipe to Valve 1HP-489 | SS | 2.500 0.375 | | Inspect 100% of weld & 1" of base material (axial & circumferential). Reference Section 7 of the ISI Plan, General Requirements. |

## CATEGORY AUG, Augmented Inspections



Oconee 1

### Inservice Inspection Plan for Interval 4 Outage 1

| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| G04.001.021 | 1HP-277-42C | | 1HP-277 | NDE-995 | UT | SS | 2.500 | | Inspect 100% of weld & 1" of base material (axial & circumferential). This weld was 1-51A-04-42C until iso 1-51A-04 was deleted and welds transferred to iso 1HP-277. Reference Section 7 of the ISI Plan, General Requirements. |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.375 | | |
| Class A | | | | | Pipe to Elbow | | | | |
| G04.001.022 | 1HP-277-43C | | 1HP-277 | NDE-995 | UT | SS | 2.500 | | Inspect 100% of weld & 1" of base material (axial & circumferential). This weld was 1-51A-04-43C until iso 1-51A-04 was deleted and welds tranferred to iso 1-HP-277. Reference Section 7 of the ISI Plan, General Requirements. |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.375 | | |
| Class A | | | | | Elbow to Pipe | | | | |
| G04.001.023 | 1HP-277-52 | | 1HP-277 | NDE-995 | UT | SS | 2.500 | | Inspect 100% of weld & 1" of base material (axial & circumferential). Reference Section 7 of the ISI Plan, General Requirements. |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.375 | | |
| Class A | | | | | Pipe to Valve 1HP-486 | | | | |
| G04.001.025 | 1HP-278-22C | | 1HP-278 | NDE-995 | UT | SS | 2.500 | | Inspect 100% of weld & 1" of base material (axial & circumferential). This weld was 1-51A-04-22C until iso 1-51A-04 was deleted welds tranferred to 1-HP-278. Reference Section 7 of the ISI Plan, General Requirements. |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.375 | | |
| Class A | | | | | Pipe to Elbow | | | | |
| G04.001.026 | 1HP-278-23C | | 1HP-278 | NDE-995 | UT | SS | 2.500 | | Inspect 100% of weld & 1" of base material (axial & circumferential). This weld was 1-51A-04-23C until iso 1-51A-04 was deleted and welds transferred to iso 1-HP-278. Reference Section 7 of the ISI Plan, General Requirements. |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.375 | | |
| Class A | | | | | Elbow to Pipe | | | | |
| G04.001.027 | 1HP-278-24 | | 1HP-278 | NDE-995 | UT | SS | 2.500 | | Inspect 100% of weld & 1" of base material (axial & circumferential). Reference Section 7 of the ISI Plan, General Requirements. |
| | Circumferential | 51A | O-ISIN4-101A-1.4 | | | | 0.375 | | |
| Class A | | | | | Pipe to Valve 1HP-487 | | | | |

**Total G04.001 Items:** 13

**Total G04 Items:** 13

## CATEGORY ELC, Elective Inspections

DUKE ENERGY CORPORATION
INSERVICE INSPECTION PLAN MANAGEMENT
Inservice Inspection Database Management System

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| H03.001.001 | 1-03-3-3X4 | | 1-03-3(1) | NDE-600 | UT | CS | 24.000 | | Procedure NDE-600 should be used for angle beam inspection and Procedure NDE-940 should be used for thickness measurements on this weld. Inspection results should be forwarded to Timothy D. Brown of the Oconee Design Basis Group. |
| | Circumferential | 03 | O-ISIN4-121B-1.3 | NDE-940 | | | 1.219 | | |
| Class B | | | | | Pipe to Pipe | | | | |
| H03.001.002 | 1-FWD64-C | | 1-03-3(1) | NDE-600 | UT | CS | 24.000 | | Weld 1-03-3-3x4 is a Pipe to Pipe weld located on Iso 1-03-3(1). Weld 1-FWD64-C is a Grinnell Subassembly (pipe to elbow) weld located immediately down stream from weld 1-03-3-3x4. Procedure NDE-600 should be used for angle beam inspection and Procedure NDE-940 should be used for thickness measurements on this weld. Inspection results should be forwarded to Timothy D. Brown of the Oconee Design Basis Group. |
| | Circumferential | 03 | O-ISIN4-121B-1.3 | NDE-940 | | | 1.219 | | |
| Class B | | | | | Pipe to Elbow | | | | |

**Total H03.001 Items:** 2

**Total H03 Items:** 2

## CATEGORY ELC, Elective Inspections

DUKE ENERGY CORPORATION
INSERVICE INSPECTION PLAN MANAGEMENT
Inservice Inspection Database Management System

Oconee 1

Inservice Inspection Plan for Interval 4 Outage 1



| ITEM NUMBER | ID NUMBER | SYS | ISO/DWG NUMBERS | PROC | INSP REQ | MAT/SCH | DIA/THK | CAL BLOCKS | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| H04.001.012 | 1-03-0-439A-H63 | | 1-03-01/sht.1 | QAL-14 | VT-3 | NA | 24.000 | | Calculation No. OSC-336, page 45a.1. Inspect with D01.020.011, F01.032.017, and H04.001.012A. |
| | Spring Hgr | 03 | O-ISIN4-121B-1.3 | | | | 0.187 | | |
| Class C | | | | | | | | | |
| H04.001.012A | 1-03-0-439A-H63 | | 1-03-01/sht.1 | NDE-25 | MT | NA | 24.000 | | Calculation No. OSC-336, page 45a.1. Inspect with H04.001.012 and F01.032.017. Perform a Surface exam on the attachment welds. Note: Liquid Penetrant examinations (with the use of procedure NDE-35) may be performed on carbon steel material in lieu of or in conjunction with Magnetic Particle examinations. |
| | Spring Hgr | 03 | O-ISIN4-121B-1.3 | | | | 0.187 | | |
| Class C | | | | | | | | | |

| | |
|---|---|
| **Total H04.001 Items:** | **2** |
| **Total H04 Items:** | **2** |

## 4.0 *Results Of Inspections Performed*

The results of each examination shown in the final Inservice Inspection Plan (Section 3 of this report) are included in this section. The completion date and status for each examination are shown. All examinations revealing reportable indications and any corrective action required as a result are described in further detail in Subsections 4.1 and 4.2. Corrective measures performed and limited examinations are described in further detail in Subsections 4.3 and 4.4.

The information shown below is a field description for the reporting format included in this section of the report:

| | | |
|---|---|---|
| Item Number | = | ASME Section XI Tables IWB-2500-1 (Class 1), IWC-2500-1 (Class 2), IWF-2500-1 (Class 1 and Class 2), Augmented Requirements |
| ID Number | = | Unique Identification Number |
| Sys | = | Component System Identification |
| Insp Date | = | Date of Examination |
| Insp Status | = | CLR Clear<br>REC Recordable<br>REP Reportable |
| Insp Limited | = | Indicates inspection was limited. Coverage obtained is listed |
| Geo. Ref.<br>(Geometric Reflector applies only to UT) | = | Y Yes<br>N No |
| RFR (Relief Request) | = | Y Yes<br>N No |
| Comments | = | General and/or Detail Description |

## 4.1 Reportable Indications

EOC 22 (Outage 1) had one reportable item during this report period. See Paragraph 4.2 for corrective actions associated with Item Number B07.050.003.

## 4.2 Corrective Action

Corrective action is action taken to resolve flaws and relevant conditions, including supplemental examinations, analytical evaluations, repair / replacement activities, and corrective measures.

PIP O-05-2556 was written to document a problem found during a VT-1 examination on bolting for a Pressurizer Relief Valve (Item Number B07.050.003).The indications found during the VT-1 examination were reviewed by civil engineering and the bolting was found to be unacceptable for continued service. Plan Addenda ONS1-022 was written to schedule two additional sample examinations as required per Paragraph IWB-2430(a) of the 1998 Section XI Code with the 2000 Addenda. The two additional sample examinations were scheduled and performed during EOC-22. There will not be any surveillance inspections required per IWB-2420(b) because the bolting that had the unacceptable indications was replaced.

## 4.3 Corrective Measures

Corrective measures are actions (such as maintenance) taken to resolve relevant conditions, but not including supplemental examinations, analytical evaluations, and repair / replacement activities. Any corrective measures performed for examinations associated with this report period will be shown on the examination data sheets which are on file at the Duke Energy Corporate Office in Charlotte, North Carolina.

## *4.4* Limited Examinations

Limited examinations (i.e., less than or equal to 90% of the required examination coverage obtained) identified during EOC 22 (Outage 1) are shown in the table below.

A Request for Relief will be submitted to seek NRC acceptance of the limited coverage for the items listed in the table below.

| *Item Number* | *Description of Limitation* |
|---|---|
| B09.011.032 | Coverage limitation (37.50%) |
| C05.021.001 | Coverage limitation (37.50%) |
| C05.021.082 | Coverage limitation (37.50%) |

DUKE ENERGY CORPORATION
QUALITY ASSURANCE TECHNICAL SERVICES
In-Service Inspection Database Management System
Oconee 1 Inservice Inspection Listing
Interval 4 Outage 1



| ITEM NUMBER | ID NUMBER | SYSTEM | INSP DATE | INSP STATUS | INSP LIMITED | GEO REF | RFR | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| B01.030.001A | 1-RPV-WR19 | 50 | 04/13/2005 | CLR | --- | N | N | Inspected By JHR, JAE and WCL on 4-13-2005. |
| B02.011.001 | 1-PZR-WP76 | 50 | 04/18/2005 | CLR | --- | N | N | |
| B02.012.001 | 1-PZR-WP1-1 | 50 | 04/18/2005 | CLR | --- | N | N | Inspected by JAE and LEM on 4-18-2005. |
| B05.050.002 | 1-PZR-WP91-2 | 50 | 04/17/2005 | CLR | --- | N | N | |
| B05.050.003 | 1-PZR-WP91-3 | 50 | 04/17/2005 | CLR | --- | N | N | |
| B06.010.001 | 1-RPV-26-203-01 | | 04/15/2005 | CLR | --- | N | N | |
| B06.010.002 | 1-RPV-26-203-02 | | 04/15/2005 | CLR | --- | N | N | |
| B06.010.003 | 1-RPV-26-203-03 | | 04/15/2005 | CLR | --- | N | N | |
| B06.010.004 | 1-RPV-26-203-04 | | 04/15/2005 | CLR | --- | N | N | |
| B06.010.005 | 1-RPV-26-203-05 | | 04/15/2005 | CLR | --- | N | N | |
| B06.010.006 | 1-RPV-26-203-06 | | 04/15/2005 | CLR | --- | N | N | |
| B06.010.007 | 1-RPV-26-203-07 | | 04/15/2005 | CLR | --- | N | N | |
| B06.010.008 | 1-RPV-26-203-08 | | 04/15/2005 | CLR | --- | N | N | |
| B06.010.009 | 1-RPV-26-203-09 | | 04/15/2005 | CLR | --- | N | N | |
| B06.010.010 | 1-RPV-26-203-10 | | 04/15/2005 | CLR | --- | N | N | |
| B06.010.011 | 1-RPV-26-203-11 | | 04/15/2005 | CLR | --- | N | N | |
| B06.010.012 | 1-RPV-26-203-12 | | 04/15/2005 | CLR | --- | N | N | |
| B06.010.013 | 1-RPV-26-203-13 | | 04/16/2005 | CLR | --- | N | N | |
| B06.010.014 | 1-RPV-26-203-14 | | 04/16/2005 | CLR | --- | N | N | |
| B06.010.015 | 1-RPV-26-203-15 | | 04/16/2005 | CLR | --- | N | N | |
| B06.010.016 | 1-RPV-26-203-16 | | 04/16/2005 | CLR | --- | N | N | |
| B06.010.017 | 1-RPV-26-203-17 | | 04/16/2005 | CLR | --- | N | N | |
| B06.010.018 | 1-RPV-26-203-18 | | 04/16/2005 | CLR | --- | N | N | |
| B06.010.019 | 1-RPV-26-203-19 | | 04/16/2005 | CLR | --- | N | N | |
| B06.010.020 | 1-RPV-26-203-20 | | 04/16/2005 | CLR | --- | N | N | |
| B06.030.001 | 1-RPV-25-203-01 | | 04/15/2005 | CLR | --- | N | N | |
| B06.030.002 | 1-RPV-25-203-02 | | 04/15/2005 | CLR | --- | N | N | |
| B06.030.003 | 1-RPV-25-203-03 | | 04/15/2005 | CLR | --- | N | N | |
| B06.030.004 | 1-RPV-25-203-04 | | 04/15/2005 | CLR | --- | N | N | |
| B06.030.005 | 1-RPV-25-203-05 | | 04/15/2005 | CLR | --- | N | N | |
| B06.030.006 | 1-RPV-25-203-06 | | 04/15/2005 | CLR | --- | N | N | |
| B06.030.007 | 1-RPV-25-203-07 | | 04/15/2005 | CLR | --- | N | N | |
| B06.030.008 | 1-RPV-25-203-64 | | 04/15/2005 | CLR | --- | N | N | |
| B06.030.009 | 1-RPV-25-203-09 | | 04/15/2005 | CLR | --- | N | N | |
| B06.030.010 | 1-RPV-25-203-10 | | 04/15/2005 | CLR | --- | N | N | |
| B06.030.011 | 1-RPV-25-203-11 | | 04/15/2005 | CLR | --- | N | N | |

| ITEM NUMBER | ID NUMBER | SYSTEM | INSP DATE | INSP STATUS | INSP LIMITED | GEO REF | RFR | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| B06.030.012 | 1-RPV-25-203-12 | | 04/15/2005 | CLR | --- | N | N | |
| B06.030.013 | 1-RPV-25-203-13 | | 04/16/2005 | CLR | --- | N | N | |
| B06.030.014 | 1-RPV-25-203-14 | | 04/16/2005 | CLR | --- | N | N | |
| B06.030.015 | 1-RPV-25-203-15 | | 04/16/2005 | CLR | --- | N | N | |
| B06.030.016 | 1-RPV-25-203-62 | | 04/16/2005 | CLR | --- | N | N | |
| B06.030.017 | 1-RPV-25-203-17 | | 04/16/2005 | CLR | --- | N | N | |
| B06.030.018 | 1-RPV-25-203-18 | | 04/16/2005 | CLR | --- | N | N | |
| B06.030.019 | 1-RPV-25-203-19 | | 04/16/2005 | CLR | --- | N | N | |
| B06.030.020 | 1-RPV-25-203-20 | | 04/16/2005 | CLR | --- | N | N | |
| B06.050.001 | 1-RPV-WASH-BUSH | | 04/16/2005 | CLR | --- | N | N | Bushings/Washers for stud holes 1 thru 12 inspected by PSE on 4-15-2005. Bushings/Washers for stud holes 13 thru 20 inspected by JWH on 4-16-2005. |
| B06.080.001 | 1-PZR-MW-NUTS | | 04/13/2005 | CLR | --- | N | N | |
| B07.030.002 | 1-SGA-LMW-STUDS | | 04/13/2005 | CLR | --- | N | N | |
| B07.050.001 | 1-PZR-RC4-STUDS | | 04/15/2005 | REC | --- | N | N | The additional sample inspection in outage 1 revealed heavy rust that would not allow a thorough examination of the sections of bolting between the flanges. The nuts and portions of the stud above and below the nuts were acceptable. An engineering evaluation was performed and concluded that the bolting was acceptable for service for several more fuel cyles.<br>The examination to be performed in outage 3 (EOC-24) will be performed by disassembling the flange and cleaning the bolting so that a thorough exam can be performed prior to any continued service. |
| B07.050.002 | 1-PZR-RC66-STUDS | | 04/15/2005 | CLR | --- | N | N | |
| B07.050.003 | 1-PZR-RC67-STUDS | | 04/13/2005 | REP | --- | N | N | There were 2 studs that were examined and found to have flattened threads within the thread engagement zone. The damaged threads were reviewed by engineering and determined to be unacceptable for service. Per IWB-2430(a) two additional exams were scheduled and performed. There will be no surveillance exams required per IWB2420(b) because the bolting with the damaged threads was replaced. PIP O-05-02556 was written to document the problem associated with the inspection of item B07.050.003. |
| B07.050.004 | 1-PZR-RC68-STUDS | | 04/13/2005 | CLR | --- | N | N | |
| B07.060.003 | 1-RCP-1B1-SEAL | | 04/13/2005 | CLR | --- | N | N | |
| B09.011.030 | 1SGA-W3 | 50 | 04/15/2005 | CLR | --- | N | N | |

| ITEM NUMBER | ID NUMBER | SYSTEM | INSP DATE | INSP STATUS | INSP LIMITED | GEO REF | RFR | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| B09.011.030A | 1SGA-W3 | 50 | 04/14/2005 | CLR | --- | N | N | |
| B09.011.031 | 1-PIA1-7 | 50 | 04/17/2005 | CLR | --- | N | N | |
| B09.011.031A | 1-PIA1-7 | 50 | 04/13/2005 | CLR | --- | N | N | |
| B09.011.032 | 1-PIA1-9 | 50 | 04/14/2005 | CLR | 37.50% | N | Y | Relief Request will be filed for the limitation. |
| B09.011.032A | 1-PIA1-9 | 50 | 04/13/2005 | CLR | --- | N | N | |
| B09.011.054 | 1-PIA1-4 | 50 | 04/15/2005 | CLR | --- | N | N | |
| B09.011.054A | 1-PIA1-4 | 50 | 04/14/2005 | CLR | --- | N | N | |
| B09.011.055 | 1RC-289-7V | 50 | 04/15/2005 | CLR | --- | N | N | |
| B09.011.055A | 1RC-289-7V | 50 | 04/14/2005 | CLR | --- | N | N | |
| B09.021.002 | 1-50-01-34 | 50 | 04/12/2005 | CLR | --- | N | N | |
| B09.021.003 | 1-51A-04-11C | 51A | 04/21/2005 | CLR | --- | N | N | |
| B09.021.004 | 1-51A-04-14C | 51A | 04/21/2005 | CLR | --- | N | N | |
| B09.021.020 | 1-PDA1-11 | 50 | 04/18/2005 | CLR | --- | N | N | |
| B09.021.024 | 1-PIA1-11 | 50 | 04/12/2005 | CLR | --- | N | N | |
| B09.021.037 | 1HP-190-16 | 51A | 04/12/2005 | CLR | --- | N | N | |
| B09.021.042 | 1HP-278-23C | 51A | 04/15/2005 | CLR | --- | N | N | |
| B09.021.043 | 1HP-278-24 | 51A | 04/15/2005 | CLR | --- | N | N | |
| B09.021.059 | 1RC-261-266 | 50 | 04/12/2005 | CLR | --- | N | N | |
| B13.010.001 | 1-RPV-INT-SURFACE | 50 | 04/14/2005 | CLR | --- | N | N | |
| B14.010.002 | 1-RPV-CRD-57WH9 | 50 | 04/15/2005 | CLR | --- | N | N | |
| B14.010.005 | 1-RPV-CRD-57W60 | 50 | 04/15/2005 | CLR | --- | N | N | |
| B14.010.008 | 1-RPV-CRD-57 | 50 | 04/15/2005 | CLR | --- | N | N | |
| B14.010.011 | 1-RPV-CRD-57W61 | 50 | 04/15/2005 | CLR | --- | N | N | |
| C03.020.004 | 1-01A-0-480A-H10A | 01A | 04/14/2005 | CLR | --- | N | N | |
| C03.020.031 | 1-14-0-479A-H20D | 14 | 04/24/2005 | CLR | --- | N | N | |
| C03.020.042 | 1-14B-0-479A-H5F | 14B | 04/24/2005 | CLR | --- | N | N | |
| C03.020.056 | 1-51A-0-439C-H91 | 51A | 01/31/2005 | CLR | --- | N | N | |
| C03.020.093 | 1-53B-2-0-436E-H1 | 53B | 02/01/2005 | CLR | --- | N | N | |
| C05.011.003 | 1-53A-01-30L | 53A | 04/19/2005 | CLR | 92.93% | Y | N | There was 1 indication that was determined to be a geometric reflector coming from the weld root configuration. |
| C05.011.003A | 1-53A-01-30L | 53A | 04/19/2005 | CLR | --- | N | N | |
| C05.021.001 | 1-51A-01-79A | 51A | 02/02/2005 | CLR | 37.50% | N | Y | Relief Request will be filed for the limitation. |
| C05.021.001A | 1-51A-01-79A | 51A | 02/01/2005 | CLR | --- | N | N | |
| C05.021.002 | 1-51A-02-15B | 51A | 04/21/2005 | CLR | --- | N | N | |
| C05.021.002A | 1-51A-02-15B | 51A | 04/21/2005 | CLR | --- | N | N | |
| C05.021.024 | 1HP-178-12 | 51A | 02/01/2005 | CLR | --- | N | N | |
| C05.021.024A | 1HP-178-12 | 51A | 02/01/2005 | CLR | --- | N | N | |

DUKE ENERGY CORPORATION
QUALITY ASSURANCE & TECHNICAL SERVICES
In-Service Inspection Database Management System
Oconee 1 Inservice Inspection Listing
Interval 4 Outage 1



| ITEM NUMBER | ID NUMBER | SYSTEM | INSP DATE | INSP STATUS | INSP LIMITED | GEO REF | RFR | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| C05.021.030 | 1-51A-127-4 | 51A | 02/02/2005 | CLR | --- | N | N | |
| C05.021.030A | 1-51A-127-4 | 51A | 02/01/2005 | CLR | --- | N | N | |
| C05.021.038 | 1HP-367-19 | 51B | 02/03/2005 | CLR | --- | N | N | |
| C05.021.038A | 1HP-367-19 | 51B | 02/02/2005 | CLR | --- | N | N | |
| C05.021.045 | 1-51A-01-89A | 51A | 02/02/2005 | CLR | --- | N | N | |
| C05.021.045A | 1-51A-01-89A | 51A | 02/01/2005 | CLR | --- | N | N | |
| C05.021.051 | 1-51A-02-16BA | 51A | 04/21/2005 | CLR | --- | N | N | |
| C05.021.051A | 1-51A-02-16BA | 51A | 04/21/2005 | CLR | --- | N | N | |
| C05.021.082 | 1-51A-01-106A | 51A | 02/02/2005 | CLR | 37.50% | N | Y | Relief Request will be filed for the limitation. |
| C05.021.082A | 1-51A-01-106A | 51A | 02/01/2005 | CLR | --- | N | N | |
| C05.021.094 | 1-51A-02-7B | 51A | 04/22/2005 | CLR | --- | N | N | |
| C05.021.094A | 1-51A-02-7B | 51A | 04/22/2005 | CLR | --- | N | N | |
| C05.021.103A | 1-RCP-FTR1A-SH-1 | 51A | 04/21/2005 | CLR | --- | N | N | |
| C05.021.104A | 1-RCP-FTR1A-SH-2 | 51A | 04/21/2005 | CLR | --- | N | N | |
| C05.030.001 | 1-51B-66-9 | 51B | 02/01/2005 | CLR | --- | N | N | |
| C05.030.007 | 1HP-367-26 | 51B | 02/02/2005 | CLR | --- | N | N | |
| C05.041.001 | 1-53B-01-87B | 53B | 02/01/2005 | CLR | --- | N | N | |
| C05.041.002 | 1-53B-01-87BA | 53B | 02/01/2005 | CLR | --- | N | N | |
| C05.041.011 | 1-53B-06-21KA | 53B | 02/03/2005 | CLR | --- | N | N | |
| C05.041.012 | 1-53B-06-21KB | 53B | 02/03/2005 | CLR | --- | N | N | |
| C05.051.006 | 1-MS17B-A | 01A | 04/26/2005 | CLR | --- | Y | N | There were 2 indications that were determined to be geometrical reflectors due to backing ring configurations. |
| C05.051.006A | 1-MS17B-A | 01A | 04/26/2005 | CLR | --- | N | N | |
| C05.051.009 | 1MS-064-9 | 01A | 04/22/2005 | CLR | --- | Y | N | There were 2 indications that were determined to be geometric reflectors due to weld root and backing ring configurations. |
| C05.051.009A | 1MS-064-9 | 01A | 04/22/2005 | CLR | --- | N | N | |
| C05.051.012 | 1MS-076-12V | 01A | 04/15/2005 | CLR | --- | Y | N | There was 1 indication that was determined to be a geometric reflector due to ID taper. |
| C05.051.012A | 1MS-076-12V | 01A | 04/15/2005 | CLR | --- | N | N | |
| C05.051.017 | 1MS-063-26 | 01A | 04/22/2005 | CLR | --- | Y | N | There was 1 indication that was determined to be a geometrical reflector due to backing ring. |
| C05.051.017A | 1MS-063-26 | 01A | 04/22/2005 | CLR | --- | N | N | |
| C05.051.030 | 1-FWD88-C | 03 | 04/20/2005 | CLR | --- | Y | N | There were 4 indications that were determined to be geometrical reflectors due to backing ring. |
| C05.051.030A | 1-FWD88-C | 03 | 04/19/2005 | CLR | --- | N | N | |
| C05.051.033 | 1-20B-21-16-2 | 20B | 04/25/2005 | CLR | --- | N | N | |
| C05.051.033A | 1-20B-21-16-2 | 20B | 04/25/2005 | CLR | --- | N | N | |

| ITEM NUMBER | ID NUMBER | SYSTEM | INSP DATE | INSP STATUS | INSP LIMITED | GEO REF | RFR | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| C05.051.036 | 1-LPSW-344-21 | 14B | 01/31/2005 | CLR | --- | N | N | |
| C05.051.036A | 1-LPSW-344-21 | 14B | 01/31/2005 | CLR | --- | N | N | |
| C05.051.040 | 1LPSW-345-17 | 14B | 01/31/2005 | CLR | --- | N | N | |
| C05.051.040A | 1LPSW-345-17 | 14B | 01/31/2005 | CLR | --- | N | N | |
| C05.051.049 | 1-LPSW-346-21 | 14B | 01/31/2005 | CLR | --- | N | N | |
| C05.051.049A | 1-LPSW-346-21 | 14B | 01/31/2005 | CLR | --- | N | N | |
| C05.051.060 | 1-14-230-1 | 14B | 04/21/2005 | CLR | --- | Y | N | There were 2 indications that were determined to be geometrical reflectors due to the counterbore and weld root configuration. |
| C05.051.060A | 1-14-230-1 | 14B | 04/21/2005 | CLR | --- | N | N | |
| C05.070.001 | 1FDW-305-3E | 03A | 04/22/2005 | CLR | --- | N | N | |
| C05.081.004 | 1-MS17B-B | 01A | 04/26/2005 | CLR | --- | N | N | |
| C05.081.005 | 1-FWD67-A | 03 | 04/14/2005 | CLR | --- | N | N | |
| D01.020.011 | 1-03-0-439A-H63 | 03 | 02/03/2005 | CLR | --- | N | N | |
| D01.020.028 | 1-03A-1-0-439A-SR39 | 03A | 02/23/2005 | CLR | --- | N | N | |
| D01.020.029 | 1-03A-1-0-439B-H28 | 03A | 02/23/2005 | CLR | --- | N | N | |
| D01.020.036 | 1-04A-2-0-439B-R12 | 04A | 03/02/2005 | CLR | --- | N | N | |
| D01.020.061 | 1-14B-0-400B-SR35 | 14B | 03/09/2005 | CLR | --- | N | N | |
| D01.020.083 | 1-56-4-0-443-H65 | 56 | 02/23/2005 | CLR | --- | N | N | |
| D01.020.091 | 1-57-0-481A-H1 | 57 | 04/20/2005 | CLR | --- | N | N | |
| F01.010.005 | 1-51A-0-478A-H6228 | 51A | 04/22/2005 | CLR | --- | N | N | |
| F01.012.002 | 1-50-0-479A-H2A | 50 | 04/14/2005 | CLR | --- | N | N | |
| F01.012.008 | 1-53A-0-479A-H6200 | 53A | 04/16/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. Work Order # 98344211 was written to correct problem. |
| F01.012.011 | 1-50-0-481A-NPS-H13- | 57 | 04/28/2005 | CLR | --- | N | N | |
| F01.020.004 | 1-01A-0-481A-H2B | 01A | 04/13/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. Work Order # 98723624 was written to correct problems. |
| F01.020.023 | 1-14-0-479A-H20D | 14 | 04/14/2005 | CLR | --- | N | N | |
| F01.020.031 | 1-14B-0-479A-H5F | 14B | 04/14/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineeing and the support was found to be acceptable for service. |
| F01.020.032 | 1-14B-0-479A-H18 | 14B | 04/20/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. |
| F01.020.061 | 1-51A-0-439A-H100 | 51A | 02/23/2005 | CLR | --- | N | N | |
| F01.020.071 | 1-51B-2-0-437A-DE051 | 51B | 03/09/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil |

| ITEM NUMBER | ID NUMBER | SYSTEM | INSP DATE | INSP STATUS | INSP LIMITED | GEO REF | RFR | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | engineeing and the support was found to be acceptable for service. |
| F01.020.094 | 1-53B-2-0-436E-H1 | 53B | 02/03/2005 | CLR | --- | N | N | |
| F01.020.113 | 1-54A-3-0-439A-H23 | 54A | 02/23/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. Work Order # 98339817 was written to correct problems. |
| F01.021.042 | 1-14B-0-479A-H6 | 14B | 04/15/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. Work Order # 98344422 was written to correct problems. |
| F01.021.063 | 1-51A-0-439C-H91 | 51A | 02/03/2005 | CLR | --- | N | N | |
| F01.021.072 | 1-51B-436H-H5176 | 51B | 04/13/2005 | CLR | --- | N | N | |
| F01.021.121 | 1-56-439C-DE001 | 56 | 02/23/2005 | CLR | --- | N | N | |
| F01.022.062 | 1-51A-1-0-444-H3 | 51A | 03/09/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineeing and the support was found to be acceptable for service. |
| F01.022.102 | 1-53B-3-0-444-H1 | 53B | 03/09/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineeing and the support was found to be acceptable for service.Work Order # 98341270 and 98721388 were written to correct problems. |
| F01.022.103 | 1-53B-4-0-435B-H10 | 53B | 03/09/2005 | CLR | --- | N | N | |
| F01.022.113 | 1-54A-3-0-435B-R5 | 54A | 03/02/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. Work Order # 98703185 was written to correct problems |
| F01.030.042 | 1-03A-401A-DE003 | 03A | 03/02/2005 | CLR | --- | N | N | |
| F01.030.043 | 1-03A-1-0-437A-H67 | 03A | 03/09/2005 | CLR | --- | N | N | |
| F01.030.044 | 1-03A-1-0-439A-SR39 | 03A | 02/23/2005 | CLR | --- | N | N | |
| F01.030.045 | 1-03A-1-0-439B-H28 | 03A | 02/23/2005 | CLR | --- | N | N | |
| F01.030.056 | 1-04A-2-0-439B-H17 | 04A | 02/23/2005 | CLR | --- | N | N | |
| F01.030.057 | 1-04A-2-0-439B-H16 | 04A | 02/23/2005 | CLR | --- | N | N | |
| F01.030.063 | 1-07A-400B-GTE-1901 | 07A | 03/02/2005 | CLR | --- | N | N | |
| F01.030.064 | 1-07A-400B-SR8 | 07A | 03/02/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. |
| F01.030.071 | 1-08-400A-H4050 | 08 | 03/02/2005 | CLR | --- | N | N | |
| F01.030.102 | 1-14B-0-439A-SR57 | 14B | 02/23/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. Work Order # 98340376 was written to correct problems |

| ITEM NUMBER | ID NUMBER | SYSTEM | INSP DATE | INSP STATUS | INSP LIMITED | GEO REF | RFR | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| F01.030.131 | 1-56-438C-DE009 | 56 | 03/02/2005 | CLR | --- | N | N | |
| F01.030.132 | 1-56-5-0-437B-H17 | 56 | 03/09/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. |
| F01.030.136 | 1-56-4-0-443-H65 | 56 | 02/23/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. |
| F01.030.141 | 1-57-0-481A-H1 | 57 | 04/20/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. Work Order # 98724851 was written to correct problems. |
| F01.031.011 | 1-03-480A-H6175 | 03 | 04/14/2005 | CLR | --- | N | N | |
| F01.031.035 | 1-04A-2-0-439B-R5 | 04A | 02/23/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. |
| F01.031.036 | 1-04A-2-0-439B-R6 | 04A | 03/02/2005 | CLR | --- | N | N | |
| F01.031.042 | 1-07A-400B-SR22 | 07A | 03/02/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. |
| F01.031.051 | 1-08-400A-H4055 | 08 | 03/02/2005 | CLR | --- | N | N | |
| F01.031.073 | 1-14B-0-400B-SR35 | 14B | 03/09/2005 | CLR | --- | N | N | |
| F01.031.074 | 1-14B-0-437A-SR51 | 14B | 04/16/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. Work Order # 98343955 was written to correct problems. |
| F01.032.017 | 1-03-0-439A-H63 | 03 | 02/03/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. Work Order # 98717379 was written to correct problems. |
| F01.032.018 | 1-03-479F-H6068 | 03 | 04/13/2005 | CLR | --- | N | N | |
| F01.032.041 | 1-04A-2-0-439B-R12 | 04A | 03/02/2005 | CLR | --- | N | N | |
| F01.032.052 | 1-07A-6-0-400A-H41 | 07A | 03/02/2005 | CLR | --- | N | N | |
| F01.040.006 | 1-DHRC-A-SUPPORT | 14B | 03/02/2005 | CLR | --- | N | N | |
| G02.001.011A | 1A1-THERM SLEEVE | 51A | 04/19/2005 | CLR | --- | N | N | |
| G02.001.011B | 1A2-THERM SLEEVE | 51A | 04/15/2005 | CLR | --- | N | N | |
| G02.001.011C | 1B1-THERM SLEEVE | 51A | 04/16/2005 | CLR | --- | N | N | |
| G02.001.011D | 1B2-THERM SLEEVE | 51A | 04/16/2005 | CLR | --- | N | N | |
| G04.001.007 | 1HP-255-6 | 51A | 04/18/2005 | CLR | --- | N | N | |
| G04.001.012 | 1HP-190-12 | 51A | 04/12/2005 | CLR | --- | N | N | |
| G04.001.015 | 1HP-190-16 | 51A | 04/12/2005 | CLR | --- | N | N | |

| ITEM NUMBER | ID NUMBER | SYSTEM | INSP DATE | INSP STATUS | INSP LIMITED | GEO REF | RFR | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| G04.001.016 | 1HP-190-13 | 51A | 04/12/2005 | CLR | --- | N | N | |
| G04.001.017 | 1HP-279-4 | 51A | 04/18/2005 | CLR | --- | N | N | |
| G04.001.018 | 1HP-279-3 | 51A | 04/18/2005 | CLR | --- | N | N | |
| G04.001.019 | 1HP-279-24 | 51A | 04/18/2005 | CLR | --- | N | N | |
| G04.001.021 | 1HP-277-42C | 51A | 04/16/2005 | CLR | --- | N | N | |
| G04.001.022 | 1HP-277-43C | 51A | 04/16/2005 | CLR | --- | N | N | |
| G04.001.023 | 1HP-277-52 | 51A | 04/16/2005 | CLR | --- | N | N | |
| G04.001.025 | 1HP-278-22C | 51A | 04/16/2005 | CLR | --- | N | N | |
| G04.001.026 | 1HP-278-23C | 51A | 04/16/2005 | CLR | --- | N | N | |
| G04.001.027 | 1HP-278-24 | 51A | 04/16/2005 | CLR | --- | N | N | |
| H03.001.001 | 1-03-3-3X4 | 03 | 04/23/2005 | CLR | --- | Y | N | There were 2 indications that were determined to be geometric reflectors due to backing ring. |
| H03.001.002 | 1-FWD64-C | 03 | 04/23/2005 | CLR | --- | Y | N | There were 2 indications that were determined to be geometric reflectors due to backing ring. |
| H04.001.012 | 1-03-0-439A-H63 | 03 | 02/03/2005 | REC | --- | N | N | The discrepancies that were found were reviewed by civil engineering and the support was found to be acceptable for service. Work Order # 98717379 was written to correct problems |
| H04.001.012A | 1-03-0-439A-H63 | 03 | 01/31/2005 | CLR | --- | N | N | |

## 5.0 Owner's Report for Repair and Replacement Activities

As required by the applicable code, records of Class 1 and Class 2 Repair and Replacement work is included on NIS-2 forms in this section.

Due to station processing and approval time frames, three categories of repair and replacement documentation exist for: 1) work performed during a prior refueling cycle; 2) work performed during the current refueling cycle; and 3) work completed but documentation not yet reviewed and approved.

There were 23 work orders for category 1 repair and replacement documentation for this reporting period. Work Orders 98514515, 98514532, 98514529, 98514536, 98513935, 98514007, 98513924, 98513925, 98513884, 98513915, 98513919, 98513922, 98514043, 98514046, 98514051, 98514054, 98514761, 98514080, 98514083, 98514564, 98535912, 98514558 and 98616048-01 had work completed prior to 1-10-2004 and copies of the NIS-2 forms are included in this report. Twenty-two of the work orders are associated with the Steam Generator Replacements and the NIS-2 forms associated with this work are the first 118 pages that immediately follow this page. The NIS-2 forms associated with work order 98616048-01 consist of 2 pages that follow the 118 pages from the steam generator replacement NIS-2 forms. PIP O-04-01493 was written at the end of the Unit 1 EOC-21 refueling outage to document the late submittal for the NIS-2 forms associated with the 23 work orders listed previously in this paragraph.

Category 2 had 55 NIS-2 forms for work orders completed during this reporting period. Copies of the NIS-2 forms are included in this section of the report.

There were no items for Category 3 during this reporting period.

The individual work request documents and manufacturers' data reports are on file at Oconee Nuclear Station.

## 5.1 Class 1 and 2 Preservice Examinations

As required by the applicable code, Preservice Inspection (PSI) Examinations were performed on ISI Class 1 and ISI Class 2 items during this report period. There are two list for PSI exams that were performed and both list are located behind the NIS-2 forms in this section. The first list has three pages and is titled "Steam Generator Preservice Weld Examination". The second list has one page and is titled "Preservice Examinations of Class 1 & 2 Welds". PSI examination data for items on the two list previously mentioned, are on file in the Oconee Nuclear Station QA Vault.

FORM NIS-2 OWNER'S REF OR REPAIRS OR REPLACEMENTS
As Required By The Pro. ions Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/20/04

Sheet 1 of 28

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3a. Work Order # 98514515, 98514532, 98514529, 98514536
Repair Organization Job #

3b. NSM or MM # ON-13086 AS6 WP 12570A, 13040A, 12570B, 13040B, 13065A, 13065B

4. Identification of System Reactor Coolant System Class 1

5. (a) Applicable Construction Code ASME III 1989 Edition N/A Addenda, No Addenda /Code Cases N-20-4, N-474-2, 2142-1, 2143-1
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Steam Generator | Babcock & Wilcox Co. Barberton, Ohio | 620-0003-55 #1 | N-103 | SG 1A | 1969 | ☐ Repaired ☑ Replaced ☐ Replacement | ☐ No ☑ Yes |
| B | Steam Generator | Babcock & Wilcox of Canada, Cambridge, Ontario | 006K01 | 205 | SG 1A | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☐ No ☑ Yes |
| C | Steam Generator | Babcock & Wilcox Co. Barberton, Ohio | 620-0003-55 #2 | N-104 | SG 1B | 1969 | ☐ Repaired ☑ Replaced ☐ Replacement | ☐ No ☑ Yes |
| D | Steam Generator | Babcock & Wilcox of Canada, Cambridge, Ontario | 006K02 | 206 | SG 1B | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☐ No ☑ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

Form NIS-2 (Back)



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

7. Description of Work Replaced Unit 1 A & B Steam Generators

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Removed Unit 1 steam generators 1A (620-0003-55 #1) and 1B (620-0003-55 #2) made by B&W of Barberton, Ohio and replaced with 1A (006K01) and 1B (006K02) made by B&W Canada of Cambridge, Ontario. Applied Code Case 416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A SGRH SENIOR ENGINEER Expiration Date N/A

Signed [signature] Date 9/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 6-2-03 to 9-20-04; 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 NC853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-28-04

Steam Generator #1 FORM N-1 MANUFACTURERS' DATA REPORT FOR NUCLEAR VESSELS
620-0003-55 #1 As required by the Provisions of the ASME Code Rules

1. Manufactured by The Babcock & Wilcox Company Barberton, Ohio
(Name and address of Manufacturer)

2. Manufactured for Duke Power Company, Courtnay, South Carolina
(Name and address of Purchaser)

3. Type Vert. (Horiz. or Vert.) Kind Heat Exch. (Tank, Jacketed, Heat Ex.) Vessel No. ( N-103 ) (Mfrs. Serial No.) ( ) (State & State No.) Nat'l Bd. No. N-103 Yr. Built 1969

Items 4–8 incl. to be completed for single-wall vessels, jackets of jacketed vessels, or shells of heat-exchangers.

Secondary

4. Shell: Material SA-212 B (Kind & Spec. No.) T.S. FB 70000 (Min. of range specified) Thickness Min. 4.1875" 6.625 Corrosion Allowance 1/16" Diam. ft. 11 ID 5 7/8" Length 61 ft. OH 7 7/16"

5. Seams: Long Butt Welded H.T.[1] Yes X.R. Yes Efficiency % (If Class B)

Girth Butt Welded H.T.[1] Yes X.R. Yes No. of Courses 7

6. Heads (a) Material T.S. (b) Material T.S.

| | Location (Top, bottom, ends) | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Convex or Concave) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | | | | | | | | | |
| (b) | | | | | | | | | |

If removable, bolts used (Material, Spec. No., T.S., Size, Number) Other fastening (Describe or attach sketch)

7. Jacket Closure (Describe as ogee & weld, bar, etc. If bar give dimensions, describe or sketch)

8. Constructed for operating press.[2] 1050 psi at Max. temp 600 °F Charpy Impact 20 ft-lb at temp. of 40 °F. ~~Pneumatic~~ Hydrostatic or ~~Combination~~ Test Pressure 1312 psi

Items 9 and 10 to be completed for tube sections.

9. Tube Sheets: Stationary. Material SA508-64 CL-2 (Kind & Spec. No.) Diam. 158 1/2 (Subject to press.) OD in. Thickness 24 in. Attachment Butt Welded (Welded, Bolted)

Floating. Material (Kind & Spec. No.) Diam. in. Thickness in. Attachment

10. Tubes: Material SB-163 (Kind & Spec. No.) O.D. .625 in. Thickness .034 inches or gage Number 15531 Type Straight (Straight or U)

Items 11 to 14 incl. to be completed for inner chambers of jacketed vessels, or channels of heat exchangers.

Primary Heads & Nozzles Cladd Internally 1/8 Min. Thk. Tube Sheet Cladd 5/16" Min. Thk.

11. Shell: Material With Austenitic Stainless Steel (Kind & Spec. No.) (Min. of range specified) Corrosion Allowance in. Diam. ft. in. Length ft. in.

12. Seams: Long (Welded, Dbl., Single) H.T.[1] (Yes or No) X.R. Efficiency % (If Class B)

Girth H.T.[1] X.R. No. of Courses

13. Heads: (a) Material SA-302 T.S. 80000 (b) Material SA-302B T.S. 80000 (c) Material T.S.

| | Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Press. (Convex or Concave) |
|---|---|---|---|---|---|---|---|---|---|
| (a) | Top, bottom, ends | Top 8" | | | | | 59 17/32 | | Concave |
| (b) | Channel | Bot 8" | | | | | 59 17/32 | | Concave |
| (c) | Floating | | | | | | | | |

If removable, bolts used (a) (b) (c) (Material, Spec. No., T.S., Size, Number) Other fastening (Describe or attach sketch)

14. Constructed for specified operating press.[2] 2500 psi at Max. temp 650 °F Charpy Impact 30 ft-lb at temp. of 40 °F ~~Pneumatic~~ Hydrostatic or ~~Combination~~ Test Pressure 3125 psi

[1] If Postweld Heat-Treated

[2] List other internal or external pressures with coincident temperature when applicable.

620-0003-55 #1
Steam Generator #1

FORM N-1 (back)

Items below to be completed for all vessels where applicable.

15. Safety Valve Outlets: Number _____ Size _____ Location _____

16. Nozzles:

| Purpose (Inlet, Outlet, Drain) | Number | Diam. or Size | Type | Material | Thickness | Reinforcement Material | How Attached |
|---|---|---|---|---|---|---|---|
| Pri. Inlet | 1 | 42 3/8"OD | Weld | SA508-64CL1 | 3 1/8" | Integral | Welded |
| Pri. Outlet | 2 | 33 5/16"OD | Weld | SA508-64CL1 | 2 7/16" | Integral | Welded |
| Pri. Drain | 1 | 1.315"OD | Weld | SB-166 | .157" | | Welded |

17. Inspection Manholes, No. 4 Size 16 Location One Each Head 2 Shell
Openings: Handholes, No. 9 Size 5 Location One Each Head 7 Shell
Threaded, No. _____ Size _____ Location _____

18. Supports: Skirt Yes (Yes or No) Lugs _____ (Number) Legs _____ (Number) Other _____ (Describe) Attached Welded To Bottom Head (Where & How)

19.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Steam Outlet | 2 | 31 5/16" | Weld | SA508-64CL1 | 4 1/2 | Integral | Welded |
| Drain | 2 | 1.900" OD | Weld | SA-106 B | .175 | | Welded |
| Drain | 10 | 1.315" OD | Weld | SA-106 B | .157 | | Welded |
| Vert. & Drain | 5 | 2.875" OD | Weld | SA508-64CL1 | 1/2" | Integral | Welded |

Class A Vessel Once Through Steam Generator
(Brief description of service for which vessel was designed)

## CERTIFICATION OF DESIGN

Design information on file at The Babcock & Wilcox Company Barberton, Ohio
Stress analysis report on file at The Babcock & Wilcox Company Barberton, Ohio
Design specifications certified by J. T. Walton Prof. Eng. _____ State Va Reg. No. 4671
Stress analysis report certified by J. P. Butti Prof. Eng. _____ State Ohio Reg. No. E29810

We certify that the statements made in this report are correct and that all details of material, design, construction, and workmanship of this pressure vessel conform to the ASME Code for Nuclear Vessels.

Date April 22, 1970 Signed The Babcock & Wilcox Co. (Manufacturer) By R E Lowe

Certificate of Authorization Expires December 31, 1970

## CERTIFICATE OF SHOP INSPECTION

VESSEL MADE BY The Babcock & Wilcox Company at Barberton, Ohio

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of _____ and employed by The Hartford S.B.I. & I. Co. of Hartford, Connecticut have inspected the pressure vessel described in this manufacturer's data report on July 8, 1969, and state that to the best of my knowledge and belief, the manufacturer has constructed this pressure vessel in accordance with the ASME Code for Nuclear Vessels.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this manufacturer's 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 Nov 20 1969

H J Betts
Inspector's Signature

Commissions NBC # 1994
National Board or State and No.

## CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of _____ and employed by _____ of _____ have compared the statements in this manufacturer's data report with the described pressure vessel and state that parts referred to as data items _____; not included in the certificate of shop inspection have been inspected by me and that to the best of my knowledge and belief the manufacturer has constructed and assembled this pressure vessel in accordance with the ASME Code for Nuclear Vessels. The described vessel was inspected and subjected to a hydrostatic test of _____ psi.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this manufacturer's 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 _____ 19____

Inspector's Signature

Commissions _____
National Board or State and No.

# FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
## As Required by the Provisions of the ASME Code, Section III, Division 1

1. Manufactured and certified by: Babcock & Wilcox Canada, 581 Coronation Boulevard, Cambridge, Ontario N1R 5V3 (name and address of N Certificate Holder)

2. Manufactured for: Duke Power Company, P.O. Box 1006, Charlotte, North Carolina, 28201-1006 (name and address of Purchaser)

3. Location of installation: Oconee 1, Seneca, South Carolina (name and address)

4. Type: Vert. (horiz. or vert.) | Heat Ex. (tank, jacketed, heat ex.) | 006K01 (Cert. Holder's serial no.) | — (CRN) | 006KE001 Rev. 3 & E002 Rev. 01 (drawing no.) | 205 (Nat'l Bd. No.) | 2003 (year built)

5. ASME Code, Section III, Division 1: 1989 (edition) | None (addenda date) | 1 (class) | List #1 Att. (Code Case no.)

**Items 6 – 10 inclusive to be completed for single wall vessels, jackets of jacked vessels, or shells of heat exchangers.**

6. Shell: SA-508 Cl. 3a (mat'l spec. no.) | 90 ksi (tensile strength) | List #2 Att. [nom. Thickness (in.)] | List #2 Att. [min. design thickness (in.)] | List #2 Att. [dia. ID (ft. & in.)] | List #2 Att. [length (overall) (ft. & in.)]

7. Seams: List #3 Att. (long.) | List #3 Att. (HT[1]) | List #3 Att. (RT) | List #3 Att. (eff. %) | List #3 Att. (girth) | List #3 Att. (HT[1]) | List #3 Att. (RT) | 4 (no. of courses)

8. Heads: — [(a) mat'l spec. no.] | — (tensile strength) | — [(b) mat'l spec. no.] | — (tensile strength)

| | Location (top bottom, ends | Thickness | Corrosion Allowance | Crown Radius | Knuckle Radius | Elliptical Radius | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Pressure (convex or concave) |
|---|---|---|---|---|---|---|---|---|---|---|
| (a) | — | — | — | — | — | — | — | — | — | — |
| (b) | — | — | — | — | — | — | — | — | — | — |

If removable bolts used: — (mat'l spec. no., size, quantity) Other fastening — (describe or attach sketch)

9. Jacket Closure: — (Describe as edge & weld, bar, etc. if bar, give dimensions, describe, or sketch)

10. Design pressure[2] 1150 (psi) At max. temp. 600 (°F) Min. pressure test temp 70 (°F) Pneu., hydro., or combined test 1500 (psi)

**Items 11 and 12 to be completed for tube sections.**

11. Tubesheets: SA-508 Cl. 3a (stationary, mat'l. spec. no.) | 137 7/8 [dia. in. (subject to pressure)] | 22-3/16 [thickness (in.)] | welded [attachment(welded, bolted)]
— (floating, mat'l. spec.) | — [dia.(in.)] | — [thickness (in.)] | — (attachment)

12. Tubes: SB-163 UNS N06690 (mat'l. spec. no.) | 5/8 [OD(in)] | 0.038 Thickness (inches or gauge) | 15631 (no.) | straight [type (straight or U)]

**Items 13 to 16 inclusive to be completed for inner chambers of jacketed vessels or channels of heat exchangers.**

13. Shell: — (mat'l. spec. no.) | — (tensile strength) | — [nom. Thickness (in.)] | — [min. design thickness (in.)] | — [dia. (ft & in.)] | — [length (overall)(ft. & in.)]

14. Seams: — [long(welded, dbl., single)] | — [HT[1] (yes or no)] | — (RT) | — (eff. %) | Single (girth) | Yes (HT[1]) | Full (RT) | 1 (no. of courses)

15. Heads: — [(a) mat'l spec.] | — (tensile strength) | SA-508 Cl. 3a [(b) mat'l. spec. no.] | 90 ksi (tensile strength) | — [(c)mat'l. spec. no.] | — (tensile strength)

| Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Pressure (convex or concave) |
|---|---|---|---|---|---|---|---|---|
| (a) Top, bottom, ends | — | — | — | — | — | — | — | — |
| (b) Channel – top | 6 3/8" | — | — | 1:1 | — | 59-17/32" | — | concave |
| Channel – bottom | 6 3/8" | — | — | 1:1 | — | 59-17/32" | — | concave |
| (c) Floating | — | — | — | — | — | — | — | — |

If bolts used — (mat'l. spec. no., size, quantity) Other fastening — (describe or attach sheet)

16. Design pressure[2] 2500 (psi) at 650 (°F) Min. pressure-test temp. 70 (°F) Pneu., hydro., or comb. Test pressure 3125 (psi)

[1] If post weld heat treated. [2] List other internal or external pressure with coincident temperature when applicable.
*Supplemental information in the form of lists, sketches, or drawings may be used provided (1) size is 8 ½ 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 on the top of this form.

FORM N-1(back Pg. 2 of 6 )

Certificate Holder's Serial No. 00EK01

17. Nozzles, inspection and safety valve openings.

| Purpose (inlet, outlet, drain, etc.) | Quantity | Dia. or size | Type | How attached | Mat'l. | Thickness | Reinforcement Material | Location |
|---|---|---|---|---|---|---|---|---|
| See List #4 | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

18. Supports: Skirt See List #5 (yes or no) Lugs See List #5 (quantity) Legs — (quantity) Other — (describe) Attached See List #5 (where and how)

19. Remarks:

## CERTIFICATION OF DESIGN

Design specification certified by See List #6 P.E. State/Province See List #6 Reg. No. See List #6

Design report* certified by J. T. Boyd P.E. State Ont. Reg. No. 04801502

## CERTIFICATE OF SHOP COMPLIANCE

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

N Certificate of Authorization No. N-2789 Expires January 23, 2004

Date August 21, 2003 Name Babcock & Wilcox Canada (N Certificate Holder) Signed (authorized representative)

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Ontario and employed by Technical Standards and Safety Authority of Ontario have inspected the component described in this Data Report on July 24/03, and state that to the b[illegible]y knowledge and belief, the Certificate Holder has constructed this component 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 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 Aug. 21/03 Signed (Authorized Inspector) Commissions NB# 8112-B-N. (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

## CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements on this report are correct and that the field assembly construction of all parts of this nuclear vessel conforms to the rules of construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. Expires

Date Name (N Certificate Holder) Signed (authorized representative)

## CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of and employed by of have compared the statements in this Data Report with the described component and state that parts referred to as data items , not included in the certificate of shop inspection, have been inspected by me on and that to the best of my knowledge and belief the Certificate Holder has constructed and assembled this component 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 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 Signed (Authorized Inspector) Commissions (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

REVIEWED AUG 27 2003

Attachment to FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS
As Required by the Provisions of the ASME Code, Section III, Division 1



1. Manufactured and certified by Babcock & Wilcox Canada, 581 Coronation Boulevard, Cambridge, Ontario N1R 5V3
(name and address of N Certificate Holder)

2. Manufactured for Duke Power Company, P.O. Box 1006, North Carolina, 28201-1006
(name and address of Purchaser)

3. Location of installation Oconee 1, Seneca, South Carolina
(name and address)

| 4. Type: | Vertical | Heat Exchanger | 006K01 | — | 006KE001 Rev. 3 & 006KE002 Rev. 1 | 205 | 2003 |
|---|---|---|---|---|---|---|---|
| | (horiz. or vert.) | (tank, jacketed, heat ex.) | (Cert. Holder's serial no.) | (CRN) | (drawing no.) | (Nat'l Bd. No.) | (year built) |

**List #1**

N-20-4
N-474-2
2142-1
2143-1

**List #2**

| | Nominal Thickness | Min. Design Thickness | Inner Diameter | Length (per section thickness) | Length Overall |
|---|---|---|---|---|---|
| Shell can below upper T/S (thick shell, adjacent to T/S, taper to thin shell) | 5⅛"<br>3⅛" | 5"<br>3" | 137⅞"<br>137⅞" | 52¾"<br>79 1/16" | 131 13/16" |
| Thin Shell to Thick to Thin | 3⅛"<br>5⅛"<br>3⅛" | 3"<br>5"<br>3" | 137⅞"<br>137⅞"<br>137⅞" | 19¼"<br>112¾"<br>27½" | 159⅛" |
| Thin Shell | 3⅛" | 3" | 137⅞" | — | 173¾" |
| Shell Can Above Lower T/S (thin shell taper to thick shell, adjacent to T/S) | 3⅛"<br>5⅛" | 3"<br>5" | 137⅞"<br>137⅞" | 106 7/16"<br>52½" | 159 3/16" |

Attachment to FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS
As Required by the Provisions of the ASME Code, Section III, Division 1



1. Manufactured and certified by Babcock & Wilcox Canada, 581 Coronation Boulevard, Cambridge, Ontario N1R 5V3
(name and address of N Certificate Holder)

2. Manufactured for Duke Power Company, P.O. Box 1006, North Carolina, 28201-1006
(name and address of Purchaser)

3. Location of installation Oconee 1, Seneca, South Carolina
(name and address)

4. Type: Vertical (horiz. or vert.) | Heat Exchanger (tank, jacketed, heat ex.) | 006K01 (Cert. Holder's serial no.) | — (CRN) | 006KE001 Rev. 3 & 006KE002 Rev. 1 (drawing no.) | 205 (Nat'l Bd. No.) | 2003 (year built)

List #3

| Seam | Longitudinal Joint Type | HT | RT | eff (%) | Girth Joint Type | HT | RT |
|---|---|---|---|---|---|---|---|
| Tubesheet (Forging) | N/A | N/A | N/A | N/A | Double | Yes | Full |
| Shell Can #1 | None | Yes | Full | 100 | Double | Yes | Full |
| Shell Can #2 | None | Yes | Full | 100 | Double | Yes | Full |
| Shell Can #3 | None | Yes | Full | 100 | Double | Yes | Full |
| Shell Can #4 | None | Yes | Full | 100 | Double | Yes | Full |
| Tubesheet (Forging) | N/A | N/A | N/A | N/A | | | |

Attachment to FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS
As Required by the Provisions of the ASME Code, Section III, Division 1



1. Manufactured and certified by Babcock & Wilcox Canada, 581 Coronation Boulevard, Cambridge, Ontario N1R 5V3
(name and address of N Certificate Holder)

2. Manufactured for Duke Power Company, P.O. Box 1006, North Carolina, 28201-1006
(name and address of Purchaser)

3. Location of installation Oconee 1, Seneca, South Carolina
(name and address)

| 4. Type: | Vertical | Heat Exchanger | 006K01 | — | 006KE001 Rev. 3 & 006KE002 Rev. 1 | 205 | 2003 |
|---|---|---|---|---|---|---|---|
| | (horiz. or vert.) | (tank, jacketed, heat ex.) | (Cert. Holder's serial no.) | (CRN) | (drawing no.) | (Nat'l Bd. No.) | (year built) |

## List #4

| Purpose (Inlet, outlet, drain, etc.) | Qty. | (ID) Dia. or Size | Type | How Attached | Material | (min.) Thickness | Reinforcement Material | Location |
|---|---|---|---|---|---|---|---|---|
| Primary Nozzles Inlet | 1 | 35" | I | Integral | SA-508 Cl. 3a | 3" | N/A | Upper Chan. Head |
| Primary Nozzles Outlet | 2 | 28" | F | Welded | SA-508 Cl. 3a | 3¼" | N/A | Lower Chan. Head |
| Primary Manway | 2 | 16" | I | Integral | SA-508 CL. 3a | 8" | SA-508 CL. 3a | Chan. Heads |
| Primary Manway Cover | 2 | 28½" | — | Bolted | SA-533 Typ. B CL. 1 | 5½" | N/A | Chan. Heads |
| Primary Handhole | 1 | 6" | I | Integral | SA-508 Cl. 3a | 3¼" | N/A | Upper Chan. Head |
| Primary Handhole Cover | 1 | 12¾" | — | Bolted | SA-533 Typ. B CL. 1 | 2½" | N/A | Upper Chan. Head |
| Secondary Handholes | 5 | 6" | I | Integral | SA-508 CL. 3a | * | N/A | Shell |
| Handhole Covers | 5 | 12¾" | — | Bolted | SA-533 Typ. B CL. 1 | 2½" | N/A | Shell |
| Inspection Ports | 30 | 3" | I | Integral | SA-508 Cl. 3a | * | N/A | Shell |
| Inspection Port Covers | 30 | 8¼" | — | Bolted | SA-533 Typ. B CL. 1 | 1.46" | N/A | Shell |
| Feedwater Nozzles fed by external header | 32 | 4" | — | Welded/ Bolted | SA-182 Gr. F22 | 0.602" | N/A | Shell |
| Auxiliary Feedwater Nozzles fed by external header | 6 | 4" | — | Welded/ Bolted | SA-182 Gr. F22 | 0.602" | N/A | Shell |
| Secondary Manway | 2 | 16" | I | Integral | SA-508 CL. 3a | * | N/A | Shell |
| Secondary Manway Cover | 2 | 25¼" | — | Bolted | SA-533 Typ. B CL. 1 | 3" | N/A | Shell |
| Steam Nozzle | 2 | 22.265" | F | Welded | SA-508 CL. 3a | 3½" | SA-508 CL. 3a | Shell |
| Instrument Nozzles | 7 | 1½" | F | Welded | SFA 5.5 E7018 A1 | 0.41" | N/A | Shell |
| Instrument Nozzles | 12 | 1" | F | Welded | SFA 5.5 E7018 A1 | 0.45" | N/A | Shell |
| MFW Inspection Plugs | 8 | ¾" | F | Welded | SA-105 | 0.30" | SA-105 | Shell |
| Downcomer Temp Sensor | 3 | ½" NPT fitting | P | Welded | SA-479 Type 316L | 0.565" | N/A | Shell |

* n/a – no protruding shell penetration
F = full penetration weld
I = integrally forged
P=partial penetration weld

Attachment to FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS
As Required by the Provisions of the ASME Code, Section III, Division 1



1. Manufactured and certified by Babcock & Wilcox Canada, 581 Coronation Boulevard, Cambridge, Ontario N1R 5V3
(name and address of N Certificate Holder)

2. Manufactured for Duke Power Company, P.O. Box 1006, North Carolina, 28201-1006
(name and address of Purchaser)

3. Location of installation Oconee 1, Seneca, South Carolina
(name and address)

| 4. Type: | | | | | | |
|---|---|---|---|---|---|---|
| Vertical | Heat Exchanger | 006K01 | — | 006KE001 Rev. 3 & 006KE002 Rev. 1 | 205 | 2003 |
| (horiz. or vert.) | (tank, jacketed, heat ex.) | (Cert. Holder's serial no.) | (CRN) | (drawing no.) | (Nat'l Bd. No.) | (year built) |

## List #5

| Description | Skirt (yes or no) | Lugs (qty.) | Legs (qty.) | Attached (where & how) |
|---|---|---|---|---|
| Lower Shroud Lugs | No | 12 | — | shell/welded |
| Upper Shroud Lug | Yes | — | — | shell/integral |
| Orifice Ring Lug | Yes | — | — | shell/integral |
| Lower Primary Head Base Support | Yes | — | — | channel head/integral |

## List #6

| Name | State | Reg. No. |
|---|---|---|
| M. C. Keck | N.C. | 18367 |
| J. C. Herrin | N.C. | 14504 |

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

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



1. Manufactured and certified by The Japan Steel Works, Ltd., Muroran Plant/4-chatsu-machi,Muroran,Hokkaido,051-8505 Japan
(name and address of NPT Certificate Holder)

2. Manufactured for Babcock & Wilcox, 581 Coronation Blvd., Cambridge, Ontario, N1R 5V3, Canada
(name and address of purchaser)

3. Location of installation Oconee Nuclear Power Plant Unit 1, 2 & 3 Oconee, South Carolina
(name and address)

4. Type N148344W, Rev. 1 (drawing no.) | SA-508, Cl. 3a (mat'l. spec. no.) | Min. 90ksi (tensile strength) | - (CRN) | 2001 (year built)

5. ASME Code, Section III, Division 1: 1989 (edition) | No addenda (addenda date) | 1 (class) | - (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) - (no.) Revision - Date -

7. Remarks: * Eydrostatic test is not performed in The Japan Steel Works, Ltd.
Cladding thickness is min. 0.20" from base metal.
Cladding materials are SFA-5.4, AWS Cl. E309L-16 + E308L-16 and SFA-5.9 ER309L + ER308L.

8. Nom. thickness (in.) 6-3/8" Min. design thickness (in.) 6-1/4" Dia. ID (ft & in.) 9'-11.75" Length overall (ft & in.) 5'-2.59"

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) | 1053 | 431 | (26) | | |
| (2) | | | (27) | | |
| (3) | | | (28) | | |
| (4) | | | (29) | | |
| (5) | | | (30) | | |
| (6) | | | (31) | | |
| (7) | | | (32) | | |
| (8) | | | (33) | | |
| (9) | | | (34) | | |
| (10) | | | (35) | | |
| (11) | | | (36) | | |
| (12) | | | (37) | | |
| (13) | | | (38) | | |
| (14) | | | (39) | | |
| (15) | | | (40) | | |
| (16) | | | (41) | | |
| (17) | | | (42) | | |
| (18) | | | (43) | | |
| (19) | | | (44) | | |
| (20) | | | (45) | | |
| (21) | | | (46) | | |
| (22) | | | (47) | | |
| (23) | | | (48) | | |
| (24) | | | (49) | | |
| (25) | | | (50) | | |

BWC INCOMING INSPECTION AUG 22 2001 Q.C. 16 APPROVED

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

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

(7/98) This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

E00040

* P.O. No. : CM3313634 JSW Job No. : FN9-4304
Heat No. : 00D246-1-1 JSW PC. No. : 2

FORM N-2 (Back — Pg 2 of 2)

Certificate Holder's Serial Nos. 1053 through -

## CERTIFICATION OF DESIGN

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

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

## CERTIFICATE OF COMPLIANCE

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

NPT Certificate of Authorization No. N-2725 Expires July 21, 2001

Date June 27, 2001 Name The Japan Steel Works, Ltd. Muroran Plant (NPT Certificate Holder)* Signed for (authorized representative) J. Taira

## 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 ILLINOIS and employed by H.S.B.I. & I. Co. of HARTFORD. CT. have inspected these items described in this Data Report on June 27, 2001, 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 June 27, 2001 Signed (Authorized Nuclear Inspector) Commissions NB10104, N, B, A (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

Removed for further manufacturing 08/28/01

To be sent to the customer with the data package.

08/21/03.

BWC INCOMING INSPECTION

AUG 27 2001

Q.C. 16 APPROVED

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

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



1. Manufactured and certified by The Japan Steel Works, Ltd., Muroran Plant/4-Chatsu-machi,Muroran,Hokkaido,051-8505 Japan (name and address of NPT Certificate Holder)
2. Manufactured for Babcock & Wilcox, 581 Coronation Blvd., Cambridge, Ontario, N1R 5V3, Canada (name and address of purchaser)
3. Location of installation Oconee Nuclear Power Plant Unit 1, 2 & 3 Oconee, South Carolina (name and address)
4. Type N148361W, Rev. 2 (drawing no.) | SA-508, Cl. 3a (mat'l spec. no.) | Min. 90ksi (tensile strength) | - (CRN) | 2001 (year built)
5. ASME Code, Section III, Division 1: 1989 (edition) | No addenda (addenda date) | 1 (class) | - (Code Case no.)
6. Fabricated in accordance with Const. Spec. (Div. 2 only) - (no.) Revision - Date -
7. Remarks:* Hydrostatic test is not performed in The Japan Steel Works, Ltd.
   Cladding thickness is min. 0.20" from base metal.
   Cladding materials are SFA-5.4, AWS Cl. E309L-16 + E308L-16 and SFA-5.9 ER309L + ER308L.
8. Nom. thickness (in.) 6-3/8" Min. design thickness (in.) 6-1/4" Dia. ID (ft & in.) 9'-11.75" Length overall (ft & in.) 7'-0.87"
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) 1051 | 425 | (26) | |
| (2) | | (27) | |
| (3) | | (28) | |
| (4) | | (29) | |
| (5) | | (30) | |
| (6) | | (31) | |
| (7) | | (32) | |
| (8) | | (33) | |
| (9) | | (34) | |
| (10) | | (35) | |
| (11) | | (36) | |
| (12) | | (37) | |
| (13) | | (38) | |
| (14) | | (39) | |
| (15) | | (40) | |
| (16) | | (41) | |
| (17) | | (42) | |
| (18) | | (43) | |
| (19) | | (44) | |
| (20) | | (45) | |
| (21) | | (46) | |
| (22) | | (47) | |
| (23) | | (48) | |
| (24) | | (49) | |
| (25) | | (50) | |

BWC INCOMING INSPECTION
APR 19 2001
Q.C. 16 APPROVED

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

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

7/99) This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

E00040

* P.O. No. : CM3314634 JSW Job No. : FN9-4305
Heat No. : 000330-1-1 JSW PC. No. : 1

FORM N-2 (Back — Pg 2 of 2)

Certificate Holder's Serial Nos. 1051 through -

## CERTIFICATION OF DESIGN

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

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

## CERTIFICATE OF COMPLIANCE

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

NPT Certificate of Authorization No. N-2725 Expires July 21, 2001

Date Mar. 7, 2001 Name The Japan Steel Works, Ltd. Muroran Plant (NPT Certificate Holder) Signed [signature] (authorized representative) J. Taira

## 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 ILLINOIS and employed by H.S.B.I. & I. Co. of HARTFORD. CT. have inspected these items described in this Data Report on March 7, 2001, 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 Mar. 7, 2001 Signed [signature] (Authorized Nuclear Inspector) Commissions NB10104, N. B. A (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

Removed for further manufacturing 05/24/01
S Dienhus

To be sent to the customer with the data package
[signature] ANI.
08/21/03.

BWC
INCOMING INSPECTION
APR 19 2001
Q.C. 16
APPROVED

FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code, Section XI

1. Owner Duke Power Company (Name) — Date August 21, 2003
PO Box 1006, Charlotte, NC 28201-1006 (Address) — Sheet 1 of 1

2. Plant Oconee 1 (Name) — Unit 006K01
Seneca, South Carolina (Address) — 205 (Repair/Replacement Organization P.O. No., Job No., etc.)

3. Work Performed by Babcock & Wilcox Canada (Name) — Type Code Symbol Stamp N
581 Coronation Blvd., Cambridge, Ontario N1R 5V3 (Address) — Authorization No. N-2789
Expiration Date Jan. 23/04

4. Identification of System 205

5. (a) Applicable Construction Code ASME Sec III 1989 (Year) Edition, No Addenda, -- Code Case

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity 1998 (Year) - 2000 Addenda

(c) Applicable Section XI Code Cases --

6. Identification of Components:

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes or No) |
|---|---|---|---|---|---|---|---|
| Heat Exchanger | B&W Canada | 006K01 | 205 | N/A | 2003 | see below | Yes |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work One prim. inlet nozzle, two prim. outlet nozzles weld cladded and final machined PWHT not performed. Two steam outlet nozzles, final machined.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. 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 number of sheets is recorded at the top of this form.

FORM NIS-2 (Back)

Remarks --

Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp N

Certificate of Authorization No. N-2789 Expiration Date Jan. 23/04

Signed [signature], Manager Nuclear Quality Date August 21, 2003

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 ONTARIO and employed by TECHNICAL STANDARDS & SAFETY AUTHORITY of ONTARIO have inspected the components described in this Owner's Report during the period JULY 17, 03 to AUG. 21, 03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] Commissions NB ABIN NS, ONT. 62

Inspector's Signature National Board, State, Province, and Endorsements

Date AUG. 21, 03

# FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS*
## As Required by the Provisions of the ASME Code, Section III, Division 1



1. Manufactured and certified by: Babcock & Wilcox Canada, 581 Coronation Boulevard, Cambridge, Ontario N1R 5V3 (name and address of N Certificate Holder)

2. Manufactured for: Duke Power Company, P.O. Box 1006, Charlotte, North Carolina, 28201-1006 (name and address of Purchaser)

3. Location of installation: Oconee 1, Seneca, South Carolina (name and address)

4. Type: Vert. (horiz. or vert.) | Heat Ex. (tank, jacketed, heat ex.) | 005K02 (Cert. Holder's serial no.) | — (CRN) | 005KE001 Rev. 3 & E002 Rev. 01 (drawing no.) | 205 (Nat'l Bd. No.) | 2003 (year built)

5. ASME Code, Section III, Division 1: 1989 (edition) | None (addenda date) | 1 (class) | List #1 Att. (Code Case no.)

Items 6 – 10 inclusive to be completed for single wall vessels, jackets of jacked vessels, or shells of heat exchangers.

6. Shell: SA-508 Cl. 3a (mat'l spec. no.) | 90 ksi (tensile strength) | List #2 Att. (nom. Thickness (in.)) | List #2 Att. (min. design thickness (in.)) | List #2 Att. (dia. ID (ft. & in.)) | List #2 Att. (length (overall) (ft. & in.))

7. Seams: List #3 Att. (long.) | List #3 Att. (HT[1]) | List #3 Att. (RT) | List #3 Att. (eff. %) | List #3 Att. (girth) | List #3 Att. (HT[1]) | List #3 Att. (RT) | 4 (no. of courses)

8. Heads: — ((a) mat'l spec. no.) | — (tensile strength) | — ((b) mat'l spec. no.) | — (tensile strength)

| | Location (top bottom, ends | Thickness | Corrosion Allowance | Crown Radius | Knuckle Radius | Elliptical Radius | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Pressure (convex or concave) |
|---|---|---|---|---|---|---|---|---|---|---|
| (a) | — | — | — | — | — | — | — | — | — | — |
| (b) | — | — | — | — | — | — | — | — | — | — |

If removable bolts used: — (mat'l spec. no., size, quantity) Other fastening — (describe or attach sketch)

9. Jacket Closure: — (Describe as ogee & weld, bar, etc. If bar, give dimensions, describe, or sketch)

10. Design pressure[2]: 1150 (psi) At max. temp. 600 (°F) Min. pressure test temp 70 (°F) Pneu., hydro., or combined test 1500 (psi)

Items 11 and 12 to be completed for tube sections.

11. Tubesheets: SA-508 Cl. 3a (stationary, mat'l. spec. no.) | 137 7/8 (dia. in. (subject to pressure)) | 22-3/16 (thickness (in.)) | welded (attachment(welded, bolted)) | — (floating, mat'l. spec.) | — (dia.(in.)) | — (thickness (in.)) | — (attachment)

12. Tubes: SB-163 UNS N06690 (mat'l. spec. no.) | 5/8 (OD(in)) | 0.038 Thickness (inches or gauge) | 15631 (no.) | straight (type (straight or U))

Items 13 to 16 inclusive to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

13. Shell: — (mat'l. spec. no.) | — (tensile strength) | — (nom. Thickness (in.)) | — (min. design thickness (in.)) | — (dia. (ft & in.)) | — (length (overall)(ft. & in.))

14. Seams: — (long(welded, dbl., single)) | — (HT[1] (yes or no)) | — (RT) | — (eff. %) | Single (girth) | Yes (HT[1]) | Full (RT) | 1 (no. of courses)

15. Heads: — ((a) mat'l spec.) | — (tensile strength) | SA-508 Cl. 3a ((b) mat'l. spec. no.) | 90 ksi (tensile strength) | — ((c)mat'l. spec. no.) | — (tensile strength)

| Location | Thickness | Crown Radius | Knuckle Radius | Elliptical Ratio | Conical Apex Angle | Hemispherical Radius | Flat Diameter | Side to Pressure (convex or concave) |
|---|---|---|---|---|---|---|---|---|
| (a) Top, bottom, ends | — | — | — | — | — | — | — | — |
| (b) Channel – top | 6 3/8" | — | — | 1:1 | — | 59-17/32" | — | concave |
| Channel – bottom | 6 3/8" | — | — | 1:1 | — | 59-17/32" | — | concave |
| (c) Floating | — | — | — | — | — | — | — | — |

If removable, bolts used: — (mat'l. spec. no., size, quantity) Other fastening — (describe or attach sheet)

Design pressure[2]: 2500 (psi) at 650 (°F) Min. pressure-test temp. 70 (°F) Pneu., hydro., or comb. Test pressure 3125 (psi)

[1] If post weld heat treated. [2] List other internal or external pressure with coincident temperature when applicable.

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

FORM N-1(back Pg. 2 of 6 )

Certificate Holder's Serial No. 005K02

17. Nozzles, inspection and safety valve openings.

| Purpose (inlet, outlet, drain, etc.) | Quantity | Dia. or size | Type | How attached | Mat'l. | Thickness | Reinforcement Material | Location |
|---|---|---|---|---|---|---|---|---|
| See List #4 | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

18. Supports: Skirt See List #5 (yes or no) Lugs See List #5 (quantity) Legs — (quantity) Other — (describe) Attached See List #5 (where and how)

19. Remarks:

## CERTIFICATION OF DESIGN

Design specification certified by See List #6 P.E. State See List #6 Reg. No. See List #6

Design report* certified by J. T. Boyd P.E. State Province Ont. Reg. No. 04801502

## CERTIFICATE OF SHOP COMPLIANCE

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

N Certificate of Authorization No. N-2789 Expires January 23, 2004

Date August 18, 2003 Name Babcock & Wilcox Canada (N Certificate Holder) Signed for S. Joshi (authorized representative)

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Ontario and employed by T.S.S.A. Technical Standards and Safety Authority of Ontario have inspected the component described in this Data Report on July 10/03, and state that to the Best of my knowledge and belief, the Certificate Holder has constructed this component in accordance with the ASME Code, Section III, Division 1.

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

Date July. 10/03 Signed (Authorized Inspector) Commissions NB#8112-N-B. (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

## CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements on this report are correct and that the field assembly construction of all parts of this nuclear vessel conforms to the rules of construction of the ASME Code, Section III, Division 1.

N Certificate of Authorization No. Expires

Date Name (N Certificate Holder) Signed (authorized representative)

## CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of and employed by of have compared the statements in this Data Report with the described component and state that parts referred to as data items , not included in the certificate of shop inspection, have been inspected by me on and that to the best of my knowledge and belief the Certificate Holder has constructed and assembled this component 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 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 Signed (Authorized Inspector) Commissions (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

REVIEWER
AUG 26 2003

Attachment to FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS
As Required by the Provisions of the ASME Code, Section III, Division 1



1. Manufactured and certified by Babcock & Wilcox Canada, 581 Coronation Boulevard, Cambridge, Ontario N1R 5V3 (name and address of N Certificate Holder)

2. Manufactured for Duke Power Company, P.O. Box 1006, North Carolina, 28201-1006 (name and address of Purchaser)

3. Location of installation Oconee 1, Seneca, South Carolina (name and address)

| 4. Type: | Vertical | Heat Exchanger | 006K02 | — | 006KE001 Rev. 3 & 006KE002 Rev. 1 | 206 | 2003 |
|---|---|---|---|---|---|---|---|
| | (horiz. or vert.) | (tank, pressure, heat ex.) | (Cert. Holder's serial no.) | (CRN) | (drawing no.) | (Nat'l Bd. No.) | (year built) |

List #1

N-20-4
N-474-2
2142-1
2143-1

List #2

| | Nominal Thickness | Min. Design Thickness | Inner Diameter | Length (per section thickness) | Length Overall |
|---|---|---|---|---|---|
| Shell can below upper T/S (thick shell, adjacent to T/S, taper to thin shell) | 5¼"<br>3¼" | 5"<br>3" | 137¼"<br>137¼" | 52¾"<br>79 1/16" | 131 13/16" |
| Thin Shell to Thick to Thin | 3¼"<br>5¼"<br>3¼" | 3"<br>5"<br>3" | 137¼"<br>137¼"<br>137¼" | 19¼"<br>112¾"<br>27½" | 159⅛" |
| Thin Shell | 3¼" | 3" | 137¼" | — | 173¾" |
| Shell Can Above Lower T/S (thin shell taper to thick shell, adjacent to T/S) | 3¼"<br>5¼" | 3"<br>5" | 137¼"<br>137¼" | 106 7/16"<br>52½" | 159 3/16" |

Attachment to FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS
As Required by the Provisions of the ASME Code, Section III, Division 1



1. Manufactured and certified by Babcock & Wilcox Canada, 581 Coronation Boulevard, Cambridge, Ontario N1R 5V3 (name and address of N Certificate Holder)

2. Manufactured for Duke Power Company, P.O. Box 1006, North Carolina, 28201-1006 (name and address of Purchaser)

3. Location of installation Oconee 1, Seneca, South Carolina (name and address)

| 4. Type: | Vertical (horz. or vert.) | Heat Exchanger (tank, jacketed, heat ex.) | 006K02 (Cert. Holder's serial no.) | — (CRN) | 006KE001 Rev. 3 & 006KE002 Rev. 1 (drawing no.) | 206 (Nat'l Bd. No.) | 2003 (year built) |
|---|---|---|---|---|---|---|---|

List #3

| Seam | Longitudinal Joint Type | HT | RT | eff (%) | Girth Joint Type | HT | RT |
|---|---|---|---|---|---|---|---|
| Tubesheet (Forging) | N/A | N/A | N/A | N/A | Double | Yes | Full |
| Shell Can #1 | None | Yes | Full | 100 | Double | Yes | Full |
| Shell Can #2 | None | Yes | Full | 100 | Double | Yes | Full |
| Shell Can #3 | None | Yes | Full | 100 | Double | Yes | Full |
| Shell Can #4 | None | Yes | Full | 100 | Double | Yes | Full |
| Tubesheet (Forging) | N/A | N/A | N/A | N/A | | | |

Attachment to FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS
As Required by the Provisions of the ASME Code, Section III, Division 1



1. Manufactured and certified by: Babcock & Wilcox Canada, 581 Coronation Boulevard, Cambridge, Ontario N1R 5V3 (name and address of N Certificate Holder)

2. Manufactured for: Duke Power Company, P.O. Box 1006, North Carolina, 28201-1006 (name and address of Purchaser)

3. Location of installation: Oconee 1, Seneca, South Carolina (name and address)

4. Type: Vertical (horiz. or vert.) | Heat Exchanger (flank, jacketed, heat ex.) | 006K02 (Cert. Holder's serial no.) | — (CRN) | 006KE001 Rev. 3 & 006KE002 Rev. 1 (drawing no.) | 206 (Nat'l Bd. No.) | 2003 (year built)

## List #4

| Purpose (inlet, outlet, drain, etc.) | Qty. | (ID) Dia. or Size | Type | How Attached | Material | (min.) Thickness | Reinforcement Material | Location |
|---|---|---|---|---|---|---|---|---|
| Primary Nozzles inlet | 1 | 36" | I | Integral | SA-508 CL 3a | 3" | N/A | Upper Chan. Head |
| Primary Nozzles t Outlet | 2 | 28" | F | Welded | SA-508 CL 3a | 3½" | N/A | Lower Chan. Head |
| Primary Manway | 2 | 16" | I | Integral | SA-508 CL. 3a | 8" | SA-508 CL. 3a | Chan. Heads |
| Primary Manway Cover | 2 | 26½" | — | Bolted | SA-533 Typ. B CL. 1 | 5½" | N/A | Chan. Heads |
| Primary Handhole | 1 | 6" | I | Integral | SA-508 CL 3a | 3½" | N/A | Upper Chan. Head |
| Primary Handhole Cover | 1 | 12¾" | — | Bolted | SA-533 Typ. B CL. 1 | 2½" | N/A | Upper Chan. Head |
| Secondary Handholes | 5 | 6" | I | Integral | SA-508 CL. 3a | * | N/A | Shell |
| Handhole Covers | 5 | 12¾" | — | Bolted | SA-533 Typ. B CL. 1 | 2½" | N/A | Shell |
| Inspection Ports | 30 | 3" | I | Integral | SA-508 CL 3a | * | N/A | Shell |
| Inspection Port Covers | 30 | 8½" | — | Bolted | SA-533 Typ. B CL. 1 | 1.48" | N/A | Shell |
| Feedwater Nozzles fed by external header | 32 | 4" | — | Welded/ Bolted | SA-182 Gr. F22 | 0.602" | N/A | Shell |
| Auxiliary Feedwater Nozzles fed by external header | 6 | 4" | — | Welded/ Bolted | SA-182 Gr. F22 | 0.602" | N/A | Shell |
| Secondary Manway | 2 | 16" | I | Integral | SA-508 CL. 3a | * | N/A | Shell |
| Secondary Manway Cover | 2 | 25½" | — | Bolted | SA-533 Typ. B CL. 1 | 3" | N/A | Shell |
| Steam Nozzle | 2 | 22.265" | F | Welded | SA-508 CL. 3a | 3½" | SA-508 CL. 3a | Shell |
| Instrument Nozzles | 7 | 1½" | F | Welded | SFA 5.5 E7018 A1 | 0.41" | N/A | Shell |
| Instrument Nozzles | 12 | 1" | F | Welded | SFA 5.5 E7018 A1 | 0.45" | N/A | Shell |
| MFW Inspection Plugs | 6 | ¾" | F | Welded | SA-105 | 0.30" | SA-105 | Shell |
| Downcomer Temp Sensor | 3 | ½" NPT fitting | P | Welded | SA-479 Type 316L | 0.565" | N/A | Shell |

* n/a – no protruding shell penetration
F = full penetration weld
I = integrally forged
P=partial penetration weld

Attachment to FORM N-1 CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR VESSELS
As Required by the Provisions of the ASME Code, Section III, Division 1



1. Manufactured and certified by Babcock & Wilcox Canada, 581 Coronation Boulevard, Cambridge, Ontario N1R 5V3 (name and address of N Certificate Holder)

2. Manufactured for Duke Power Company, P.O. Box 1006, North Carolina, 28201-1006 (name and address of Purchaser)

3. Location of installation Ocones 1, Seneca, South Carolina (name and address)

4. Type: Vertical (horiz. or vert.) | Heat Exchanger (tank, jacketed, heat ex.) | 006K02 (Cert. Holder's serial no.) | — (CRN) | 006KE001 Rev. 3 & 006KE002 Rev. 1 (drawing no.) | 206 (Nat'l Bd. No.) | 2003 (year built)

List #5

| Description | Skirt (yes or no) | Lugs (qty.) | Legs (qty.) | Attached (where & how) |
|---|---|---|---|---|
| Lower Shroud Lugs | No | 12 | — | shell/welded |
| Upper Shroud Lug | Yes | — | — | shell/integral |
| Orifice Ring Lug | Yes | — | — | shell/integral |
| Lower Primary Head Base Support | Yes | — | — | channel head/integral |

List #6

| Name | State | Reg. No. |
|---|---|---|
| M. C. Keck | N.C. | 18367 |
| J. C. Herrin | N.C. | 14504 |

JQA-01-045 17-1

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

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



1. Manufactured and certified by The Japan Steel Works, Ltd.,Muroran Plant/4-Chatsu-machi,Muroran,Hokkaido,051-8505 Japan
(name and address of NPT Certificate Holder)

2. Manufactured for Babcock & Wilcox,581 Coronation Blvd.,Cambridge, Ontario, N1R 5V3, Canada
(name and address of purchaser)

3. Location of installation Oconee Nuclear Power Plant Unit 1,2 & 3 Oconee, South Carolina
(name and address)

4. Type N148344H, Rev. 1 (drawing no.) SA-508, Cl. 3a (mat'l spec. no.) Min. 90ksi (tensile strength) - (CRN) 2001 (year built)

5. ASME Code, Section III, Division 1: 1989 (edition) No addenda (addenda date) 1 (class) - (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) - (no.) Revision - Date -

7. Remarks:* Hydrostatic test is not performed in The Japan Steel Works, Ltd.
Cladding thickness is min. 0.20" from base metal
Cladding materials are SFA-5.4, AWS Cl. E309L-16 + E308L-16 and SFA-5.9 ER309L + ER308L.

8. Nom. thickness (in.) 6-3/8" Min. design thickness (in.) 6-3/8" Dia. ID (ft & in.) ~~319.75"~~ Length overall (ft & in.) ~~62.59"~~

9. When applicable, Certificate Holders' Data Reports are attached for each item of this report: 8'-11.75" 5'-2.59"

| Part or Appurtenance Serial Number | National Board No. In Numerical Order |
|---|---|
| (1) 1050 | 421 |
| (2) | |
| (3) | |
| (4) | |
| (5) | |
| (6) | |
| (7) | |
| (8) | |
| (9) | |
| (10) | |
| (11) | |
| (12) | |
| (13) | |
| (14) | |
| (15) | |
| (16) | |
| (17) | |
| (18) | |
| (19) | |
| (20) | |
| (21) | |
| (22) | |
| (23) | |
| (24) | |
| (25) | |

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

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

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

(7/98) This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

E00040

* P.O. No. : CM3313634 JSW Job No. : FN9-4304
Heat No. : 00D245-1-1 JSW PC. No. : 1

JQA-01-045 17-2

FORM N-2 (Back — Pg 2 of 2)

Certificate Holder's Serial Nos. 1050 through -

## CERTIFICATION OF DESIGN

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

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

## CERTIFICATE OF COMPLIANCE

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

NPT Certificate of Authorization No. N-2725 Expires July 21, 2001

Date Feb. 22, 2001 Name The Japan Steel Works, Ltd. Muroran Plant (NPT Certificate Holder) Signed (Authorized representative) J. TAIRA

## 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 ILLINOIS and employed by H.S.B.I. & I. Co. of HARTFORD, CT. have inspected these items described in this Data Report on February 22, 2001 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 Feb. 22, 2001 Signed (Authorized Nuclear Inspector) Commissions NB10104, N, B, A (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

Removed for further manufacturing -01-04-02
Sheng Donkus
To be sent to the customer with the data pkg.
[illegible] 08/13/03 (ANI)

Page 25 of 28
JWA-01-138

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

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



1. Manufactured and certified by The Japan Steel Works,Ltd.,Muroran Plant/4-Chatsu-machi,Muroran,Hokkaido,051-8505 Japan
(name and address of NPT Certificate Holder)

2. Manufactured for Babcock & Wilcox,581 Coronation Blvd.,Cambridge,Ontario,N1R 5V3,Canada
(name and address of purchaser)

3. Location of installation Oconee Nuclear Power Plant Unit 1,2 & 3 Oconee,South Carolina
(name and address)

4. Type N148361W, Rev. 2 (drawing no.) | SA-508, Cl. 3a (mat'l spec. no.) | Min. 90ksi (tensile strength) | - (CRN) | 2001 (year built)

5. ASME Code, Section III, Division 1: 1989 (edition) | No addenda (addenda date) | 1 (class) | - (Code Case no.)

6. Fabricated in accordance with Const. Spec. (Div. 2 only) - (no.) Revision - Date -

7. Remarks:* Hydrostatic test is not performed in The Japan Steel Works, Ltd.
Cladding thickness is min. 0.20" from base metal
Cladding materials are SFA-5.4, AWS Cl. E309L-16 + E308L-16 and SFA-5.9 ER309L + ER308L.

8. Nom. thickness (in.) 6-3/8" Min. design thickness (in.) 6-1/4" Dia. ID (ft & in.) 9'-11.75" Length overall (ft & in.) 7'-0.87"

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) 1052 | 429 | (26) | |
| (2) | | (27) | |
| (3) | | (28) | |
| (4) | | (29) | |
| (5) | | (30) | |
| (6) | | (31) | |
| (7) | | (32) | |
| (8) | | (33) | |
| (9) | | (34) | |
| (10) | | (35) | |
| (11) | | (36) | |
| (12) | | (37) | |
| (13) | | (38) | |
| (14) | | (39) | |
| (15) | | (40) | |
| (16) | | (41) | |
| (17) | | (42) | |
| (18) | | (43) | |
| (19) | | (44) | |
| (20) | | (45) | |
| (21) | | (46) | |
| (22) | | (47) | |
| (23) | | (48) | |
| (24) | | (49) | |
| (25) | | (50) | |

BWC
INCOMING INSPECTION
JUN 25 2001
Q.C. 16
APPROVED

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

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

(7/98) This form (E00040) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

E00040

* P.O. No. : CM3313634 JSW Job No. : FN9-4305
Heat No. : OOD331-1-1 JSW PC. No. 2

FORM N-2 (Back — Pg 2 of 2)

Certificate Holder's Serial Nos. 1052 through -

## CERTIFICATION OF DESIGN

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

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

## CERTIFICATE OF COMPLIANCE

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

NPT Certificate of Authorization No. N-2725 Expires July 21, 2001

Date Apr. 19, 2001 Name The Japan Steel Works, Ltd. Muroran Plant (NPT Certificate Holder) Signed (authorized representative) J. Taira

## 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 ILLINOIS and employed by H.S.B.I. & I.Co. of HARTFORD.CT. have inspected these items described in this Data Report on April 19, 2001, 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 April 19, 2001 Signed (Authorized Nuclear Inspector) Commissions NB10104, N, B, A (Nat'l. Bd. (incl. endorsements) and state or prov. and no.)

Removed for further manufacturing 07/11/01
Sherry Perkins

To be sent to the customer with the data package
01/07/11 (ANI)

BWC
INCOMING INSPECTION
JUN 25 2001
Q.C. 16
APPROVED

# FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY
As Required by the Provisions of the ASME Code, Section XI

1. Owner: Duke Power Company (Name) — Date: August 18, 2003
PO Box 1006, Charlotte, NC 28201-1006 (Address) — Sheet 1 of 1

2. Plant: Oconee 1 (Name) — Unit: 006K02
Seneca, South Carolina (Address) — 206 (Repair/Replacement Organization P.O. No., Job No., etc.)

3. Work Performed by: Babcock & Wilcox Canada (Name) — Type Code Symbol Stamp: N
581 Coronation Blvd., Cambridge, Ontario N1R 5V3 (Address) — Authorization No.: N-2789
Expiration Date: Jan. 23/04

4. Identification of System: 206

5. (a) Applicable Construction Code: ASME Sec III 1989 (Year), Edition: No, Addenda: --, Code Case

(b) Applicable Edition of Section XI Utilized for Repair/Replacement Activity: 1998 - 2000 Addenda (Year)

(c) Applicable Section XI Code Cases: --

6. Identification of Components:

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes or No) |
|---|---|---|---|---|---|---|---|
| Heat Exchanger | B&W Canada | 006K02 | 206 | N/A | 2003 | see below | Yes |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

7. Description of Work: One prim. inlet nozzle, two prim. outlet nozzles weld cladded and final machined PWHT not performed. Two steam outlet nozzles, final machined.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐

Other ☐ Pressure _____ psi Test Temp. _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8½ in. 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 number of sheets is recorded at the top of this form.

(7/99) This form (E00030) may be obtained from the Order Dept., ASME, 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300.

E00030

FORM NIS-2 (Back)

9. Remarks

Applicable Manufacturer's Data Reports to be attached

**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp N

Certificate of Authorization No. N-2789 Expiration Date Jan. 23/04

Signed for S. Joshi Date August 18 2003

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 ONTARIO and employed by TECHNICAL STANDARDS & SAFETY AUTHORITY of ONTARIO have inspected the components described in this Owner's Report during the period JULY 17, 03 to AUG. 18, 03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions NB. ABIN NS, ONT. 62

National Board, State, Province, and Endorsements

Date AUG. 18, 03

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/20/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513935
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM4 WP 13065A

4. Identification of System Reactor Coolant Class 1

5. (a) Applicable Construction Code ASME III NB 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Piping | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Re-Install reactor coolant piping for SG 1A.

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

Pressure _____ psig Test Temp. _____ °F

Pressure _____ psig Test Temp. _____ °F

Pressure _____ psig Test Temp. _____ °F

9. Remark: Existing reactor coolant piping had to be removed to allow removal of old SG and installation of the new 1A steam generator. Applied Code Case N-416-1

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A SGRH SENIOR ENGINEER Expiration Date N/A

Signed [signature] Date 9/29/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of CA and employed by HSB-CT have inspected the components described in this Owner's Report during the period 10-2-03 to 9-2-04, 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.

E.O. [signature] Commissions CA-1969 NAI

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REPO OR REPAIRS OR REPLACEMENTS
As Required By The Prov s Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/20/04

Sheet 1 of 3
(Taylor Forge Elbow 1A)

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513935
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM4 WP 13065A

4. Identification of System Reactor Coolant System Class 1

5. (a) Applicable Construction Code ASME III 1989 Edition N/A Addenda, No Addenda /Code Cases N-474-2
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Taylor Forge Elbow 1A | Taylor Forge Engineered Systems, Inc. | 806050-1A | ------- | N/A | 2003 | ☐ Repaired<br>☐ Replaced<br>☑ Replacement | ☐ No<br>☑ Yes |

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

7. Description of Work Replaced Unit 1 "A" RCS Hot Leg 145 Degree Elbow

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remarks: Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 9/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT ~~9-2-04 thru 9-28-04~~ have inspected the components described in this Owner's Report during the period 8-2-03 to 9-2-04; 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] Commissions NC853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-28-04

SGT ID# P060-0487 Page 256 of 519 DIL:ERH/09-25-03/01

# FORM NPP-1 CERTIFICATE HOLDERS' DATA REPORT FOR FABRICATED NUCLEAR PIPING SUBASSEMBLIES*

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



1. Fabricated and certified by TAYLOR FORGE ENGINEERED SYSTEMS, INC., 208 N. IRON STREET, PAOLA, KANSAS 66071
(name and address of NPT Certificate Holder)

2. Fabricated for SGT OCONEE P.O. 817 SENECA, S.C. 29679
(name and address)

3. Location of Installation DUKE POWER COMPANY SGT OCONEE NUCLEAR STATION 155 E PICKENS HIGHWAY SENECA, S.C. 29672
(name and address of Purchaser)

4. Type: 806050 – 1A (Cert. Holder's serial no.) — (CRN) 806050-1 D1 R/4 (drawing no.) — (Nat'l. Bd.no.) 2003 (year built)

5. ASME Code, Section III, Division 1: 1989 (edition) — (addenda date) 1 (class) N-474-2 (Code Case no.)

6. Shop hydrostatic test 3125 Psi at 70 °F (if performed)

7. Description of piping RCS HOT LEG 145 DEGREE ELBOW

8. Certificate Holders' Data Reports properly identified and assigned by commissioned inspectors have been furnished for the following items of this report:

Remarks: OCONEE STEAM GENERATOR REPLACEMENT PROJECT

## CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that the fabrication of the described piping subassembly conforms to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1937 expires November 25, 2004.

Date 8/29/03 Name Taylor Forge Engineered Systems, Inc. (NPT Certificate Holder) Signed [signature] (authorized representative)

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Kansas and employed by HSB CT of Hartford, CT, have inspected the piping subassembly described in this Data Report on 8/29/2003, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated this piping subassembly 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 piping subassembly described in this Data Report. Furthermore, neither the inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 8/29/2003 Signed [signature] (Authorized Nuclear Inspector) Commissions NB12497AN KS557 (Nat'l. Bd. (incl. endorsement state or prov. and no.))

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ 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.

Page 3 of 3
(Taylor Forge Elbow 1A)

FORM NIS-2 OWNER'S REPO[illegible]R REPAIRS OR REPLACEMENTS
As Required By The Provi[illegible]ns Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/20/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3a. Work Order # 98514007
Repair Organization Job #

3b. NSM or MM # ON-13086 AM4 WP 13065B

4. Identification of System Reactor Coolant Class 1

5. (a) Applicable Construction Code ASME III NB 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Piping | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Re-Install reactor coolant piping for SG 1B.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Existing reactor coolant piping had to be removed to allow removal of old SG and installation of the new 1B steam generator. This NIS-2 covers the welding for re-installing this piping performed. Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A SGRH SENIOR ENGINEER Expiration Date N/A

Signed [signature] Date 9/30/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 6-20-03 to 6-16-04; 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.

[signature] Commissions NC853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-30-04

FORM NIS-2 OWNER'S REP' OR REPAIRS OR REPLACEMENTS
As Required By The Pro ns Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/20/04

Sheet 1 of 3
(Taylor Forge Elbow 1B)

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514007
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM4 WP 13065B

4. Identification of System Reactor Coolant System Class 1

5. (a) Applicable Construction Code ASME III 1989 Edition N/A Addenda, No Addenda /Code Cases N-472-2
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Taylor Forge Elbow 1B | Taylor Forge Engineered Systems, Inc. | 806050-1B | ------- | N/A | 2003 | ☐ Repaired<br>☐ Replaced<br>☑ Replacement | ☐ No<br>☑ Yes |

NOTE: Supplemental sheets in form of lists, sketches, or drawings maybe used, provided (1) size is 8 1/2 in. 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. (Taylor Forge Elbow 1B)

7. Description of Work Replaced Unit 1 "B" RCS Hot Leg 145 Degree Elbow

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remarks: Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [illegible] SGRH SENIOR ENGINEER Date 9/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT ~~6-16-04~~ 9-29-04 have inspected the components described in this Owner's Report during the period 6-20-03 to 6-16-04, 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.

[illegible] Commissions NB853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

Page 516 of 519 DIL: EKH/09-25-03/01 SGT ID #P060-0488

# FORM NPP-1 CERTIFICATE HOLDERS' DATA REPORT FOR FABRICATED NUCLEAR PIPING SUBASSEMBLIES*

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



1. Fabricated and certified by TAYLOR FORGE ENGINEERED SYSTEMS, INC., 208 N. IRON STREET, PAOLA, KANSAS 66071
(name and address of NPT Certificate Holder)

2. Fabricated for SGT OCONEE P.O. 817 SENECA, S.C. 29679
(name and address)

3. Location of Installation DUKE POWER COMPANY SGT OCONEE NUCLEAR STATION 155 E PICKENS HIGHWAY SENECA, S.C. 29672
(name and address of Purchaser)

4. Type: 806050 – 1B (Cert. Holder's serial no.) — (CRN) 806050-1 D1 R/4 (drawing no.) — (Nat'l. Bd.no.) 2003 (year built)

5. ASME Code, Section III, Division 1: 1989 (edition) — (addenda date) 1 (class) N-474-2 (Code Case no.)

6. Shop hydrostatic test 3200 Psi at 70 °F (if performed)

7. Description of piping RCS HOT LEG 145 DEGREE ELBOW

8. Certificate Holders' Data Reports properly identified and assigned by commissioned inspectors have been furnished for the following items of this report:

Remarks: OCONEE STEAM GENERATOR REPLACEMENT PROJECT

## CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements made in this report are correct and that the fabrication of the described piping subassembly conforms to the rules for construction of the ASME Code, Section III, Division 1.

NPT Certificate of Authorization No. N-1937 expires November 25, 2004.

Date 9/5/03 Name Taylor Forge Engineered Systems, Inc. (NPT Certificate Holder) Signed [signature] (authorized representative)

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Kansas and employed by HSB CT of Hartford, CT, have inspected the piping subassembly described in this Data Report on 9/5/2003, and state that to the best of my knowledge and belief, the Certificate Holder has fabricated this piping subassembly 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 piping subassembly 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 9/5/2003 Signed [signature] (Authorized Nuclear Inspector) Commissions NB12497AN KS557 (Nat'l. Bd. (incl. endorsement state or prov. and no.)

* Supplemental information in form of lists, sketches, or drawings may be used provided (1) size is 8 ½ 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.

Page 3 of 3
(Taylor Forge Elbow 1B)

FORM NIS-2 OWNER'S REP[illegible] OR REPAIRS OR REPLACEMENTS
As Required By The Provi[illegible]s Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/20/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513924
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM3 WP 13075A

4. Identification of System Emergency Feedwater Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Piping | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Install emergency feedwater piping for SG 1A.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Existing emergency feedwater piping had to be removed to allow installation of the 1A steam generator. This NIS-2 covers the welding for re-installing this piping. Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGEH SENIOR ENGINEER Date 9/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 9-26-03 to 9-2-04; 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] Commissions NC PS3, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP OR REPAIRS OR REPLACEMENTS
As Required By The Prov ns Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3a. Work Order # 98513924
Repair Organization Job #

3b. NSM or MM # ON-13086 AM3 WP13075A

4. Identification of System Emergency Feedwater Class 3

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-03-480A-H6178 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-03-480A-H6011 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove/replace supports for removal of Interferences for SG 1A removal.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Hangers were removed for the removal of the 1A SG and replaced after installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 9/27/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of CA and employed by HSB-CT have inspected the components described in this Owner's Report during the period 9-26-03 to 9-2-04; 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] Commissions CA-1969 N A I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REPO OR REPAIRS OR REPLACEMENTS
As Required By The Provi. .s Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513925
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM3 WP 13075B

4. Identification of System Emergency Feedwater Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Piping | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Install emergency feedwater piping for SG 1B.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Existing emergency feedwater piping had to be removed to allow installation of the 1B steam generator. This NIS-2 covers the welding for re-installing this piping. Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 9/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 9-26-03 to 3-3-04; 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 NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REPOR' R REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513925
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM3 WP13075B

4. Identification of System Emergency Feedwater Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-03-480A-H6069 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-03-480A-H6022 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | Hanger/Support 1-03-480A-H6071 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove/replace supports for removal of Interferences for SG 1B removal.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Hangers were removed for the removal of the 1B SG and replaced after installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 9/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of CA and employed by HSB-CT have inspected the components described in this Owner's Report during the period 9-26-03 to 3-3-04; 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 CA-1969, N, A, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-28-04

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3a. Work Order # 98513925
Repair Organization Job #

3b. NSM or MM # ON-13086 AM3 WP13075B

4. Identification of System Emergency Feedwater Class 3

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-03-480A-NPS-H44 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-03-480A-H6179 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | Hanger/Support 1-03-480A-H6021 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove/replace supports for removal of interferences for SG 1B removal.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remarks: Hangers were removed for the removal of the 1B SG and replaced after installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A SGRH SENIOR ENGINEER Expiration Date N/A

Signed [signature] Date 9/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of CA and employed by HSB-CT have inspected the components described in this Owner's Report during the period 9-26-03 to 3-3-04; 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 CA-1969, N, A, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-28-04

FORM NIS-2 OWNER'S REPOR'. R REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513884
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM1 WP 13080A

4. Identification of System Main Steam Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Piping | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Install main steam piping for SG,1A.

8. Test Conducted: ☐ Hydrostatic ☐ Pneumatic ☑ ~~Nominal~~ Operating Pressure ☐ Other ☐ Exempt
NOP

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Existing main steam piping had to be removed to allow installation of the 1A steam generator. This NIS-2 covers the welding for re-installing this piping. Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 09/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 9-24-03 to 8-26-04; 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 NB853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP . OR REPAIRS OR REPLACEMENTS
As Required By The Prov. ons Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 9/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3a. Work Order # 98513884
Repair Organization Job #

3b. NSM or MM # ON-13086 AM1 WP13080A

4. Identification of System Main Steam Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-01A-0-481A-H1A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-01A-0-481A-H5A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | Hanger/Support 1-01A-0-481A-H3A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | Hanger/Support 1-01A-0-480A-H9A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| E | Hanger/Support 1-01A-0-480A-H10A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove/replace supports for removal of interferences for SG 1A removal.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remarks: Hangers were removed/pinned for the removal of the 1A SG and replaced/unpinned after installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRA SENIOR ENGINEER Date 9/29/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of CA and employed by HSB-CT have inspected the components described in this Owner's Report during the period 9-24-03 to 8-26-04, 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 CA-1969 N.A.I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP[illegible]R REPAIRS OR REPLACEMENTS
As Required By The Prov[illegible]ns Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 9/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513884
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM1 WP13080A

4. Identification of System Main Steam Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-01A-0-481A-H11A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-01A-0-481A-H12A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | Hanger/Support 1-01A-0-481A-H7A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove/replace supports for removal of interferences for SG 1A removal.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Hangers were removed/pinned for the removal of the 1A SG and replaced/unpinned after installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 9/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 9-24-03 to 8-26-04; 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 NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REPO[illegible] OR REPAIRS OR REPLACEMENTS
As Required By The Provis[illegible] Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513915
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM1 WP 13080B

4. Identification of System Main Steam Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Piping | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Install main steam piping for SG 1B.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Existing feedwater piping had to be removed to allow installation of the 1B steam generator. This NIS-2 covers the welding for re-installing this piping. Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 09/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 9-24-03 to 9-13-04; 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 NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP[illegible]OR REPAIRS OR REPLACEMENTS
As Required By The Prov[illegible]ns Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 9/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513915
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM1 WP13080B

4. Identification of System Main Steam Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-01A-0-480A-H8B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-01A-0-480A-H9B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | Hanger/Support 1-01A-0-481A-H3B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | Hanger/Support 1-01A-0-481A-H1B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| E | Hanger/Support 1-01A-0-481A-H5B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove/replace supports for removal of interferences for SG 1B removal.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remarks: Hangers were removed/pinned for the removal of the 1B SG and replaced/unpinned after installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 9/23/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 9-24-03 to 9-13-04; 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.

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[signature] Commissions NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REF OR REPAIRS OR REPLACEMENTS
As Required By The Prov...ons Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513915
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM1 WP13080B

4. Identification of System Main Steam Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-01A-0-481B-H10B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-01A-0-481B-H11B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove/replace supports for removal of interferences for SG 1B removal.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Hangers were removed/pinned for the removal of the 1B SG and replaced/unpinned after installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGEH SENIOR ENGINEER Date 9/23/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 9-24-03 to 9-13-04; 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 NB853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP' )R REPAIRS OR REPLACEMENTS
As Required By The Prov. .ns Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513919
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM2 WP 13085A

4. Identification of System Feedwater Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.).

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Piping | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Install feedwater piping for SG 1A.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Existing feedwater piping had to be removed to allow installation of the 1A steam generator. This NIS-2 covers the welding for re-installing this piping. Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A SGRH SENIOR ENGINEER Expiration Date N/A

Signed [signature] Date 9/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 5-10-03 to 9-1-04; 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 NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S RE' 'OR REPAIRS OR REPLACEMENTS
As Required By The Pr .ons Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513919
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM2 WP13085A

4. Identification of System Feedwater Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-03-0-479A-H1A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-03-0-479A-H2A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | Hanger/Support 1-03-0-479A-H3A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Secure/restrain supports for removal of interferences for SG 1A removal.

8. Test Conducted: ☐ Hydrostatic ☐ Pneumatic ☐ Norminal Operating Pressure ☐ Other ☑ Exempt

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Hangers were pinned for the removal of the 1A SG and unpinned after installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A SGRH SENIOR ENGINEER Expiration Date N/A

Signed [signature] Date 09/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 5-10-03 to 9-1-04; 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 NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP[illegible] 'OR REPAIRS OR REPLACEMENTS
As Required By The Prov. [illegible] .is Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513922
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM2 WP 13085B

4. Identification of System Feedwater Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Piping | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Install feedwater piping for SG 1B.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Existing feedwater piping had to be removed to allow installation of the 1B steam generator. This NIS-2 covers the welding for re-installing this piping. Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 09/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 5-10-03 to 8-31-04, 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 NC 853, NJ

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP[illegible] FOR REPAIRS OR REPLACEMENTS
As Required By The Provi[illegible]s Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98513922
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM2 WP13085B

4. Identification of System Feedwater Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-03-0-479A-H2B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-03-0-479A-H4B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | Hanger/Support 1-03-0-479A-H8B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Secure/restrain supports for removal of interferences for SG 1B removal.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Hangers were pinned for the removal of the 1B SG and unpinned after installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A SGEH SENIOR ENGINEER Expiration Date N/A

Signed [signature] Date 09/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 5-10-03 to 8-31-04; 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 NB853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP[illegible] [illegible]R REPAIRS OR REPLACEMENTS
As Required By The Prov[illegible]ons Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514043
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM5 WP 13522A

4. Identification of System Secondary Side Drains Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Piping | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Re-Install Secondary Side Drains piping for SG 1A.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Existing Secondary Side Drains piping had to be removed to allow removal of old SG and installation of the new 1A steam generator. This NIS-2 covers the welding for re-installing this piping. Applied Code Case N-416-1

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 9/29/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of CA and employed by HSB-CT have inspected the components described in this Owner's Report during the period 6-20-04 to 9-1-04; 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 CA-1969 N, A, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP' OR REPAIRS OR REPLACEMENTS
As Required By The Prov ns Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514043
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM5 WP13522A

4. Identification of System SG Secondary Drain Lines Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-04A-0-478A-H2A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-04A-0-478A-H3A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | Hanger/Support 1-04A-0-478A-H5A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | Hanger/Support 1-04A-0-478A-H12A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| E | Hanger/Support 1-04A-0-478A-H15A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove and replace SG 1A secondary drain lines in support of SG Replacement.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: SG 1A secondary side drain line hangers were removed for the removal of the 1A SG and replaced after installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 09/29/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 6-20-03 to 9-1-04; 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 NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REPO OR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514046
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM5 WP 13522B

4. Identification of System Secondary Side Drains Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Piping | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Re-Install Secondary Side Drains piping for SG 1B.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Existing Secondary Side Drains had to be removed to allow removal of old SG and installation of the new 1B steam generator. This NIS-2 covers the welding for re-installing this piping. Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed SGRH SENIOR ENGINEER Date 09/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 6-20-03 to 9-2-04; 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.

Inspector's Signature Commissions NC 853, N, I

National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3a. Work Order # 98514046
Repair Organization Job #

3b. NSM or MM # ON-13086 AM5 WP13522B

4. Identification of System SG Secondary Drain Lines Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-04A-0-478A-H3B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-04A-0-478A-H5B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | Hanger/Support 1-04A-0-478A-H12B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | Hanger/Support 1-04A-0-478A-H13B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| E | Hanger/Support 1-04A-0-478A-H15B | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

NOTE: Supplemental sheets in form of lists, sketches, or drawings maybe ι 1.a Date 09/21/04 is 8 1/2 in. 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.

7. Description of Work Remove and replace SG 1B secondary drain lines in support of SG Replacement.

8. Test Conducted: ☐ Hydrostatic ☐ Pneumatic ☐ Norminal Operating Pressure ☐ Other ☑ Exempt

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Listed hangers were removed for the removal of the 1B SG and replaced after Installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 09/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 6-20-03 to 9-2-04; 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] Commissions NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S RE' .'OR REPAIRS OR REPLACEMENTS
As Required By The Pr. ..ons Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514051
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM6 WP 13524A

4. Identification of System SG Vent System Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Piping | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Re-Install SG vent piping for SG 1A.

8. Test Conducted: ☐ Hydrostatic ☐ Pneumatic ☑ Norminal Operating Pressure ☐ Other ☐ Exempt

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Existing SG vent piping had to be removed to allow removal of old SG and installation of the new 1A steam generator. This NIS-2 covers the welding for re-installing this piping. Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 9/27/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 9-6-03 to 9-2-04; 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] Commissions NC853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP' ,R REPAIRS OR REPLACEMENTS
As Required By The Prov. ,ns Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514051
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM6 WP13524A

4. Identification of System SG Vent Piping Installation Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-57-481A-H6589 | Duke Power Company | N/A | N/A | ON-13086 AM6-036 | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-57-481A-H6591 | Duke Power Company | N/A | N/A | ON-13086 AM6-037 | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | Hanger/Support 1-57-481A-H6625 | Duke Power Company | N/A | N/A | ON-13086 AM6-001 | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☑ No ☐ Yes |
| D | Hanger/Support 1-57-481A-H6627 | Duke Power Company | N/A | N/A | ON-13086 AM6-003 | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☑ No ☐ Yes |
| E | Hanger/Support 1-57-481A-H6628 | Duke Power Company | N/A | N/A | ON-13086 AM6-004 | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| F | Hanger/Support 1-57-481A-H6629 | Duke Power Company | N/A | N/A | ON-13086 AM6-005 | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☑ No ☐ Yes |

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

7. Description of Work Remove and replace SG 1A vent lines in support of SG Replacement.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remarks: Hangers were removed for the removal of the 1A SG and replaced after installation of the new replacement steam generator. Note Hangers 1-57-481A-H6625, H6627, H6629 are new hangers added to the system.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A SGRH SENIOR ENGINEER Expiration Date N/A

Signed [signature] Date 9/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 9-6-03 to 9-2-04, 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] Commissions NC853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP' JR REPAIRS OR REPLACEMENTS
As Required By The Prov. ns Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514051
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM6 WP13524A

4. Identification of System SG Vent Piping Installation Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-57-481A-H6630 | Duke Power Company | N/A | N/A | ON-13086 AM6-006 | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-57-481A-H6590 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | Hanger/Support 1-57-481A-H6592 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove and replace SG 1A vent lines in support of SG Replacement.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remarks: Hangers were removed for the removal of the 1A SG and replaced after installation of the new replacement steam generator. Note Hanger 1-57-481A-H6630 Is a new hanger.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 09/21/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 9-6-03 to 9-2-04; 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] Commissions NB853 N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP  OR REPAIRS OR REPLACEMENTS
As Required By The Prov...ons Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/21/04

Sheet 1 of 5

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3a. Work Order # 98514051
Repair Organization Job #

3b. NSM or MM # ON-13086 AM6 WP 13524A

4. Identification of System SG Vent System Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Valve 1FDW-601 | Flowserve | 07AXK | 1150 | N/A | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☐ No ☑ Yes |
| B | Valve 1FDW-604 | Flowserve | 08AXK | 1151 | N/A | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☐ No ☑ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

## Form NIS-2 (Back)

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

7. Description of Work Re-Install SG vent piping for SG 1A.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Existing SG vent piping had to be removed to allow removal of old SG and installation of the new 1A steam generator. Modification involved installing new valves. Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed SGRH SENIOR ENGINEER Date 9/29/04

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of CA and employed by HSB-CT have inspected the components described in this Owner's Report during the period 9-6-03 to 9-2-04; 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.

Inspector's Signature Commissions CA-1969 N, A I

National Board, State, Providence and Endorsements

Date 9-29-04

WP 13524A Valve Traceability Table

| DPC Stock Code | UTC | MCN | Valve Number | Serial No. |
|---|---|---|---|---|
| | | | | |
| 538523 | 1061480 | P078-0539 | 1FDW-601 | 07AXK |
| | | | | |
| 538523 | 1061651 | P078-0538 | 1FDW-604 | 08AXK |
| | | | | |

UTC#1061480 - SN#07AXK UTC#1061651 - SN#08AXK UTC#1061652 - SN#09AXK

Page 4 of 5

# FORM NPV-1 N CERTIFICATE HOLDERS' DATA REPORT FOR NUCLEAR PUMPS OR VALVES*

As Required by the Provisions of the ASME Code, Section III, Div. 1



1. Manufactured by FLOWSERVE CORPORATION, 1900 S. Saunders St., Raleigh, NC 27603
(Name and Address of N Certificate Holder)

2. Manufactured for DUKE ENERGY CORP CHARLOTTE NC 28201
(Name and Address of Purchaser or Owner)

3. Location of Installation DUKE ENERGY CORP, OCONEE SENECA SC 29672
(Name and Address)

4. Pump or Valve Valve Nominal Inlet Size 1 1/2" (inch) Outlet Size 1 1/2" (inch)

| | (a) Model No. Series No. or Type | (b) N Certificate Holder's Serial No. | (c) Canadian Registration No. | (d) Drawing No. | (e) Class | (f) Nat'l Bd. No. | (g) Year Built |
|---|---|---|---|---|---|---|---|
| (1) | 800 GB | 07AXK | N/A | 03-25070-01 / 0 | 1 | 1150 | 2003 |
| (2) | | 08AXK | | | | 1151 | |
| (3) | 800 GB | 09AXK | N/A | 03-25070-01 / 0 | 1 | 1152 | 2003 |
| (4) | | | | | | | |
| (5) | | | | | | | |
| (6) | | | | | | | |
| (7) | | | | | | | |
| (8) | | | | | | | |
| (9) | | | | | | | |
| (10) | | | | | | | |

5. 1 1/2" GLOBE VALVE
(Brief description of service for which equipment was designed)

25070

6. Design Conditions 1425 (Pressure) psi 680 (Temperature) °F or Valve Pressure Class 800 (1)

7. Cold Working Pressure 1973 psi at 100 °F

8. Pressure Retaining Pieces

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (a) Castings | | | |
| M1276 | SA216 GR WCB | FLOWSERVE | BODY |
| (b) Forgings | | | |
| 150593 | SA479 T 316 | NOVA | BONNET |
| 57543 | A564 T630 1075 | DUBOSE | DISC |
| Q1754-G30X | SA564 T630 1075 | ASKEW | GASKET RETAINER |

(1) For manually operated valves only

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8-1/2" x 11", (2) information in items 1, 2 and 5 on this Data Report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded at top of this form.

FORM NPV-1 (Back)



Valve S/N _07AXK_ through _09AXK_

| Mark No. | Material Spec. No. | Manufacturer | Remarks |
|---|---|---|---|
| (c) Bolting | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
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| | | | |
| | | | |
| | | | |
| (d) Other Parts | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

9. Hydrostatic test 2975 psi. Disk Differential test pressure 2170 psi.

## CERTIFICATE OF COMPLIANCE

We certify that the statements made in this report are correct and that this pump, or valve, conforms to the rules of construction of the ASME Code for Nuclear Power Plant Components. Section III, Div. 1., Edition 1986

Addenda NO, Code Case No. N/A, Date 9/22/03

Signed Flowserve Corporation. (N Certificate Holder) by [signature]

Our ASME Certificate of Authorization No. N-1562 to use the N (N) symbol expires 11-26-03 (Date)

## CERTIFICATION OF DESIGN

Design Information on file at FLOWSERVE CORP

Stress analysis report (Class 1 only) on file at FLOWSERVE CORP

Design specifications certified by (1) F A BENSINGER

PE State PA Reg. No. PE-31002-E

Stress analysis certified by (1) RONALD S FARRELL

PE State NC Reg. No. 028656

(1) Signature not required. List name only.

## 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 North Carolina and employed by HSB CT of Hartford Connecticut have inspected the pump, or valve, described in this Data Report on 9 / 23 / 03, and state that, to the best of my knowledge and belief, the N Certificate Holder has constructed this pump, or valve, in accordance with ASME Code, Section III.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the equipment described in this s 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 9 / 23 / 03

Signed [signature] (Inspector) Commissions NB#11666 NBA- NC1421 (Nat'l Bd., State, Prov. and No.)

8

FORM NIS-2 OWNER'S REP[illegible] OR REPAIRS OR REPLACEMENTS
As Required By The Prov[illegible]s Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/22/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3a. Work Order # 98514054
Repair Organization Job #

3b. NSM or MM # ON-13086 AM6 WP 13524B

4. Identification of System SG Vent System Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Piping | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

RDK 9/29/04
WP 9/29/04

7. Description of Work Re-Install SG Vent piping for SG 1B.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Existing SG Vent piping had to be removed to allow removal of old SG and installation of the new 1B steam generator. This NIS-2 covers the welding for re-installing this piping. Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A SGRH SENIOR ENGINEER Expiration Date N/A

Signed [signature] Date 09/23/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 9-11-03 to 9-8-04; 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 NC853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REF OR REPAIRS OR REPLACEMENTS
As Required By The Pro. .ons Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/22/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514054
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM6 WP13524B

4. Identification of System SG Vent Piping Installation Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-57-481A-H6585 | Duke Power Company | N/A | N/A | ON-13086 AM6-034 | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-50-481A-H6587 | Duke Power Company | N/A | N/A | ON-13086 AM6-035 | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | Hanger/Support 1-57-481B-H6634 | Duke Power Company | N/A | N/A | ON-13086 AM6-008 | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☑ No ☐ Yes |
| D | Hanger/Support 1-57-481B-H6635 | Duke Power Company | N/A | N/A | ON-13086 AM6-009 | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| E | Hanger/Support 1-57-481B-H6636 | Duke Power Company | N/A | N/A | ON-13086 AM6-010 | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☑ No ☐ Yes |
| F | Hanger/Support 1-57-481B-H6637 | Duke Power Company | N/A | N/A | ON-13086 AM6-011 | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☑ No ☐ Yes |

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

7. Description of Work Remove and replace SG 1B vent lines in support of SG Replacement.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Hangers were removed for the removal of the 1B SG and replaced after installation of the new replacement steam generator. Note Hangers 1-57-481A-H6585, 1-57-481B-H6634, H6636 and H6637are new hangers that were added to the system.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 09/27/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 9-11-03 to 9-8-04; 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 NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP OR REPAIRS OR REPLACEMENTS
As Required By The Provisions Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/22/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514054
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AM6 WP13524B

4. Identification of System SG Vent Piping Installation Class 2

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-57-481A-H6638 | Duke Power Company | N/A | N/A | ON-13086 AM6-012 | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-50-481A-H6586 | Duke Power Company | N/A | N/A | ON-13086 AM6-007 | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove and replace SG 1B vent lines in support of SG Replacement.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: SG Vent Line hangers were removed for the removal of the 1B SG and replaced after installation of the new replacement steam generator. Note Hanger 1-57-481A-H6638 is a new hanger.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 9/27/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCI have inspected the components described in this Owner's Report during the period 9-11-03 to 9-8-04; 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 NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

| PIP Serial No: | Action Category: | LER No: | Other Report: |
|---|---|---|---|
| O-04-05512 | 3 | | |

## *Problem Identification*

**Discovered Time/Date:** 10:53 08/25/2004 **Occurred Time/Date:**

**Unit(s) Affected:**

| Unit | Mode | %Power | Unit Status Remarks |
|---|---|---|---|
| 1 | N/A | 100 | None |

**System(s) Affected:**
FDW Feedwater

**Affected Equipment**

(No Equipment Affected)

**Location of Problem:**
Bldg: Column Line: Elev:

**Location Remarks:**

**Method Used to Discover Problem:**

**Brief Problem Description:**
'IS-2 data needed for two Unit 1 Feedwater valves.

**..ail Problem Description:**
The duty OSM(Jim Snowden concurs with thhis assessment.

Last Updated By: JGS6156: SNOWDEN, JAMES G Team: DMS1427 Group: OPS Date: 08/31/2004

*******OPERABILITY ASSESSMENT******by Basil W. Carney, Jr.*******

Valves 1FDW-606 and 1FDW-609 are clearly operable.

The NIS-2 form is an ASME Section XI form. This form ask for information about the removed component and the installed component. This information is used to prove that the new component is equivalent to the replacement piece of equipment. Valves 1FDW-606 and 1FDW-609 were added by the steam generator replacement modification.

The NIS-2 form ask for such information as the component Serial Number, National Board Number (if any), Year Built, and is the component ASME stamped. Typically this information is available from the component name plate and the document package supplied with the component. However, with two similar valves missing specific information it is impossible to determine from the document package which valve was installed at what position.

The valves were received as QA condition 1 so the valves are acceptable for their application. The problem is that there is just no way to complete the NIS-2 form without the serial number or national board number for each component. Failure to obtain the supporting information from a valve does not affect the documentation supplied with the valve or the fact that the valve is the proper valve for this application..

Last Updated By: BWC7315: CARNEY JR, BASIL W Team: PAW4981 Group: MCE Date: 08/31/2004

ast Updated By: WLP8374: PATTON, WILLIAM L Team: BKM7360 Group: SGR Date: 08/26/2004

During the process of accumulating data to populate NIS-2 forms for the U1EOC21outage, SGRH Project, sufficient supporting data for valves 1FDW-606 and 1FDW-609 could not be located. During the next opportunity to enter Unit 1 containment, these valves need to be inspected to identify their serial numbers. The serial numbers are needed by ONS NSC QC to locate the appropriate data needed to complete the NIS-2 forms for the valves.

Work Orders 98687402 and 98687741 have been generated to initiate inspection of these valves.

This PIP is being generated as a tracking tool only and should be assigned to the ONS NIS-2 Coordinator, Robert Bosnak.

Originated By: WLP8374: PATTON, WILLIAM L Team: BKM7360 Group: SGR Date: 08/25/2004

**Other Units/Components/Systems/Areas Affected(Y,N,U):** N

**Industry Plants Affected(Y,N,U):** U

**Immediate Corrective Actions:**

**Immediate Corrective Action Documents / Work Orders:**

| | Indiv | Team | Group | Date |
|---|---|---|---|---|
| Problem Identified By: | WLP8374 | BKM7360 | SGR | 08/25/2004 |
| Problem Entered By: | WLP8374 | BKM7360 | SGR | 08/25/2004 |

## Problem Evaluation

| Event | Cause Code | Cause Description | Primary | Causing Groups |
|---|---|---|---|---|
| A1a | G1f | Planning not coordinated with inputs from walkdown | Yes | SGR |

**Problem Evaluation From:** Resp. Group: SGR Status: Open OEDB Checked: No

No further corrective actions are required. ONS WMS Work Orders are now in place to ensure the NIS-2 data is collected in a timely manner.

Last Updated By: WLP8374: PATTON, WILLIAM L Team: BKM7360 Group: SGR Date: 09/02/2004

The apparent cause is inability to identify the valves' Manufacturer Numbers and National Board Numbers which are unique for each valve and are required information on the NIS-2 forms. As stated below, if the valves' serial number or the ONS NSC assigned UTC numbers had been identified while the valves were physically accessible, the remaining information could have been obtained. There are a number of reasons why the information was not obtained. The leading reason is that the valve data was not collected in a timely manner by the SGHR Project Team.

The corrective action has been initiated to gain the required valve data as part of the installation process. This is a change to the previous information gathering methodology. The information will be gathered by SGT, SGRH and ONS NSC. The SGRH Lead Mechanical Engineer (Bill Patton) has been assigned the responsibility to oversee this collection of data such that the NIS forms will be populated with the required data in a timely fashion.

Last Updated By: WLP8374: PATTON, WILLIAM L Team: BKM7360 Group: SGR Date: 09/02/2004

.... follow-up text below was generated by Basil Carney (Oconee Engineering) and Jim Snowden (Oconee Operations) and explains the apparent

cause and resolution to this PIP. This PIP should be reassigned as a Category 4 PIP. However, if Corrective Actions are required, please follow the guidance given in Work Orders 98687402 and 98687741.

Updated By: WLP8374: PATTON, WILLIAM L Team: BKM7360 Group: SGR Date: 09/01/2004

The duty OSM(Jim Snowden concurs with this assessment.

Last Updated By: JGS6156: SNOWDEN, JAMES G Team: DMS1427 Group: OPS Date: 08/31/2004

*******OPERABILITY ASSESSMENT******by Basil W. Carney, Jr.*******

Valves 1FDW-606 and 1FDW-609 are clearly operable.

The NIS-2 form is an ASME Section XI form. This form ask for information about the removed component and the installed component. This information is used to prove that the new component is equivalent to the replacement piece of equipment. Valves 1FDW-606 and 1FDW-609 were added by the steam generator replacement modification.

The NIS-2 form ask for such information as the component Serial Number, National Board Number (if any), Year Built, and is the component ASME stamped. Typically this information is available from the component name plate and the document package supplied with the component. However, with two similar valves missing specific information it is impossible to determine from the document package which valve was installed at what position.

The valves were received as QA condition 1 so the valves are acceptable for their application. The problem is that there is just no way to complete the NIS-2 form without the serial number or national board number for each component. Failure to obtain the supporting information from a valve does not affect the documentation supplied with the valve or the fact that the valve is the proper valve for this application..

Updated By: BWC7315: CARNEY JR, BASIL W Team: PAW4981 Group: MCE Date: 08/31/2004

Last Updated By: WLP8374: PATTON, WILLIAM L Team: BKM7360 Group: SGR Date: 08/26/2004

During the process of accumulating data to populate NIS-2 forms for the U1EOC21outage, SGRH Project, sufficient supporting data for valves 1FDW-606 and 1FDW-609 could not be located. During the next opportunity to enter Unit 1 containment, these valves need to be inspected to identify their serial numbers. The serial numbers are needed by ONS NSC QC to locate the appropriate data needed to complete the NIS-2 forms for the valves.

Work Orders 98687402 and 98687741 have been generated to initiate inspection of these valves.

This PIP is being generated as a tracking tool only and should be assigned to the ONS NIS-2 Coordinator, Robert Bosnak.

Originated By: WLP8374: PATTON, WILLIAM L Team: BKM7360 Group: SGR Date: 08/25/2004

Last Updated By: WLP8374: PATTON, WILLIAM L Team: BKM7360 Group: SGR Date: 09/01/2004

Originated By: WLP8374: PATTON, WILLIAM L Team: BKM7360 Group: SGR Date: 09/01/2004

**OEDB Comments:**

**arks Comments:**

| Signature Type | Indiv | Team | Group | Date |
|---|---|---|---|---|
| Due Date: | 09/24/2004 | | | |
| Accepted By: | MDRAVAN | BKM7360 | SGR | 08/31/2004 |
| Assigned To: | WLP8374 | BKM7360 | SGR | 08/31/2004 |

End of the Document for PIP No: O-4-5512
The status of this PIP is: Screened
The duration of this PIP was: 5 days

UNIT: 1

1
11
1
1
11111

08/26/04
15:36:02
98687741 01

OCONEE NUCLEAR STATION
CREW COVER SHEET FOR WO#/TSK
CREW NUMBER:244 FOR :( / )

WORK ORDER TITLE : 1FDW VA0609 INSPECT FOR NIS-2 DATA

WORK AGAINST : ON 1 FDWVA0609

MISCELLANEOUS
98687741-01

EQUIPMENT DESC : 1B S/G VENT TO DRAIN LINE BLOCK
LOCATION - D030 : R808+08
LOC NARR DESC : RB ELEV. 808+08 W. SIDE OUTSIDE SEC. SHIEL
: D
EQUIPMENT LIST NUM: EQUIP TAG: 1FDW-609

TASK DESCRIPTION : 1FDW VA0609 INSPECT FOR NIS-2 DATA
SAFETY INSTRUCTION:
SPECIAL INSTRUCTN : DATA ACQUISITION ONLY,NO PROCEDURE REQUIRED.

CLEARANCE : OPS _____ DATE: _____ PRA: _____

TECH SPEC ITEM: TECH SPEC RELATED: EXP. DATE/TIME:
TSAIL:

DETAILED TSK DESC : 1FDW VA0609 INSPECT FOR NIS-2 DATA
A.DATA ACQUISITION ONLY,NO PROCEDURE REQUIRED.
B.OBTAIN SERIAL NUMBER AND ANY OTHER INFORMATIOM ATTACHED TO
THE VALVE.
C.FORWARD INFORMATION ON VALVE TO JENNIFER LITTLEJOHN WHO
WILL PROVIDE THE OTHER DATA NEEDED FOR THE NIS-2 VALVES.
D.THE ABOVE INFORMATION OBTAINED FROM JENNIFER LITTLEJOHN
MUST BE GIVEN TO ROBERT BOSNAK IN MOD ENGINEERING
AT EXT.4176.

PROC/STD: NSD104/FME REF PRE-JOB BRIEFING & FME EXEC STD PLN
POWERCHEMISTRYMANUAL PCMG MAY APPLY TO THIS JOB, REFERENCE EWP 7.6

**DETERMINATIONS**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| QA CONDITION | : 1 | QC REQ. | : N | RWP# | : | RED TAG | : NO RED TAGS |
| CONT CLOSURE | : | RETEST | : N | RWP IND | : Y | BTO# | : |
| CONTL RM IND | : | FUNC | : M | ALARA | : N | BTO2# | : |
| CLEAN ZONE | : 4 | OOC | : X | NPRDS | : | R & R | : |
| DUKE/ISI CLS | : F /B | SIZE | : 2" | ACTIVE | : N | CRIP | : |

*** SDQA CAT E --- FOR CONTROL COPY, REFER TO ELECTRONIC DATA ***

UNIT: 1

1
11
1
1
11111

08/26/04
15:36:02
98687741 01

OCONEE NUCLEAR STATION
CREW COVER SHEET FOR WO#/TSK
CREW NUMBER:244 FOR :( / )

MODEL WO : _____ DUE DATE : _____ LATE DATE: _____ FREQ: _____
ORIG WR : W/O PRI : 0 PROJ : _____
WO/TSK TP: MI /MI CRAFT : MM R121 Y/N : N
JOB STAT : NEW TSK STAT : PLAN DOC/PEND :

REFERENCE DRAWINGS :
FLW 0 FD-121B-01-05 C08

| TSK | CRAFT | SEQ | WORK ORDER TASK LISTING | WORK AGAINST | TYPE | CREW | HOURS |
|---|---|---|---|---|---|---|---|
| 01 | MM | 01 | 1FDW VA0609 INSPECT FOR NIS-2 DATA | ON1 FDWVA0609 | MI | 244 | 4.0 |

- CORRECT COMPONENT VERIFICATION

IDENTIFIED BY: _____ UNIT: ___ DATE: _____ TIME: _____

VERIFIED BY: _____ UNIT: ___ DATE: _____ TIME: _____

- VERIFICATION OF SAFE WORKING CONDITIONS

VERIFIED BY: _____ DATE: _____ TIME: _____

- TASK COMPLETION

JOB SUPV: _____ DATE: _____

*** SDQA CAT E --- FOR CONTROL COPY, REFER TO ELECTRONIC DATA ***

UNIT: 1

1
11
1
1
11111

08/26/04
10:03:22
87402 01

OCONEE NUCLEAR STATION
CREW COVER SHEET FOR WO#/TSK
CREW NUMBER:244 FOR ;( / )

WORK ORDER TITLE : 1FDW VA0606 1FDW VA0606 INSPECT FOR NIS-2 DATA____

WORK AGAINST : ON 1 FDWVA0606

MISCELLANEOUS
98687402-01

EQUIPMENT DESC : 1B S/G VENT BLOCK
LOCATION - D030 : R808+08
LOC NARR DESC : RB ELEV. 808+08 W. SIDE OUTSIDE SEC. SHIEL
: D
EQUIPMENT LIST NUM: EQUIP TAG: 1FDW-606

TASK DESCRIPTION : 1FDW VA0606 INSPECT FOR NIS-2 DATA
SAFETY INSTRUCTION:
SPECIAL INSTRUCTN : DATA ACQUISITION ONLY,NO PROCEDURE REQUIRED.

CLEARANCE : OPS _____ DATE: _____ PRA: *NO_CODE

TECH SPEC ITEM: N TECH SPEC RELATED: N EXP. DATE/TIME:
TSAIL:

DETAILED TSK DESC : 1FDW VA0606 INSPECT FOR NIS-2 DATA_____
A.DATA ACQUISITION ONLY,NO PROCEDURE REQUIRED.____-_____
B.OBTAIN SERIAL NUMBER AND ANY OTHER INFORMATIOM ATTACHED TO
__THE VALVE._____
C.FORWARD INFORMATION ON VALVE TO JENNIFER LITTLEJOHN WHO__
__WILL PROVIDE THE OTHER DATA NEEDED FOR THE NIS-2 VALVES.__
D.THE ABOVE INFORMATION OBTAINED FROM JENNIFER LITTLEJOHN__
__MUST BE GIVEN TO ROBERT BOSNAK IN MOD ENGINEERING_____
__AT EXT.4176._____

PROC/STD: NSD104/FME REF PRE-JOB BRIEFING & FME EXEC STD PLN_____
POWERCHEMISTRYMANUAL PCMG MAY APPLY TO THIS JOB, REFERENCE EWP 7.6____

DETERMINATIONS

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| QA CONDITION | : 1 | QC REQ. | : N | RWP# | : | RED TAG | : NO RED TAGS |
| CONT CLOSURE | : | RETEST | : N | RWP IND | : Y | BTO# | : |
| CONTL RM IND | : N | FUNC | : M | ALARA | : N | BTO2# | : |
| CLEAN ZONE | : 4 | OOC | : X | NPRDS | : | R & R | : |
| DUKE/ISI CLS | : F /B | SIZE | : 2 | ACTIVE | : N | CRIP | : N |

*** SDQA CAT E --- FOR CONTROL COPY, REFER TO ELECTRONIC DATA ***

FORM NIS-2 OWNER'S REP' ,R REPAIRS OR REPLACEMENTS
As Required By The Prov ,ns Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/22/04

Sheet 1 of 4

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514761
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 BM4 WP13535A

4. Identification of System Misc. Mechanical Interferences Class 3

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-57-481A-H1 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-57-481A-H24 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | Hanger/Support 1-57-481A-H23 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | Hanger/Support 1-57-481A-H18 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| E | Hanger/Support 1-57-481A-H21 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| F | Hanger/Support 1-57-481A-H22 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove/replace SG 1A misc. mech. interferences in support of SG Replacement.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remarks: Miscelleaneous Mechanical hangers were removed for the removal of the 1A SG and replaced after Installation of the new replacement steam generator

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 9/27/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 6-20-03 to 8-30-04; 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 NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REPC .1 REPAIRS OR REPLACEMENTS
As Required By The Provis..is Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/22/04

Sheet 3 of 4

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514761
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 BM4 WP13535A

4. Identification of System Misc. Mechanical Interferences Class 3

5. (a) Applicable Construction Code ASME III ND 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| G | Hanger/Support 1-57-481A-H12 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| H | Hanger/Support 1-57-481A-H8 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| I | Hanger/Support 1-57-481A-H23A | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| J | Hanger/Support 1-57-481A-H13C | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| K | Hanger/Support 1-57-480A-H19 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| L | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove/replace SG 1A misc. mech. Interferences in support of SG Replacement.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remarks: Miscelleaneous Mechanical hangers were removed for the removal of the 1A SG and replaced after installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 9/30/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 6-20-03 to 8-30-04; 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 NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-30-04

FORM NIS-2 OWNER'S REPO' ( REPAIRS OR REPLACEMENTS
As Required By The Provi. .s Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/27/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514761
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 BM4 WP 13535A

4. Identification of System Miscellaneous Mechanical Interferences Class 3

5. (a) Applicable Construction Code ASME III ND 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Piping | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired<br>☐ Replaced<br>☐ Replacement | ☑ No<br>☐ Yes |
| B | | | | | | | ☐ Repaired<br>☐ Replaced<br>☐ Replacement | ☐ No<br>☐ Yes |
| C | | | | | | | ☐ Repaired<br>☐ Replaced<br>☐ Replacement | ☐ No<br>☐ Yes |
| D | | | | | | | ☐ Repaired<br>☐ Replaced<br>☐ Replacement | ☐ No<br>☐ Yes |
| E | | | | | | | ☐ Repaired<br>☐ Replaced<br>☐ Replacement | ☐ No<br>☐ Yes |
| F | | | | | | | ☐ Repaired<br>☐ Replaced<br>☐ Replacement | ☐ No<br>☐ Yes |

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

7. Description of Work Re-Install Miscellaneous Interference piping for SG 1A.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Existing Miscellaneous Interference piping had to be removed to allow removal of old SG and Installation of the new 1A steam generator. This NIS-2 covers the welding for re-installing this piping. Applied Code Case N-416-1.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 9/30/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 6-20-03 to 8-30-04; 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 NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-30-04

FORM NIS-2 OWNER'S REP OR REPAIRS OR REPLACEMENTS
As Required By The Pro ns Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/22/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514080
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AS1 WP13050A

4. Identification of System Reactor Coolant Class 1

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-50-RCPM-H6598 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-50-RCPM-H6599 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove/replace supports for removal of Interferences for SG 1A removal.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Hangers were removed for the removal of the 1A SG and replaced after installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A SGRH SENIOR ENGINEER Expiration Date N/A

Signed [signature] Date 09/22/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 4-9-03 to 8-30-04; 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 NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REPOR . REPAIRS OR REPLACEMENTS
As Required By The Provisi... Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/22/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514083
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AS1 WP13050B

4. Identification of System Reactor Coolant Class 1

5. (a) Applicable Construction Code ASME III NC 1989 Edition N/A Addenda, No Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Hanger/Support 1-50-RCPM-H6600 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Hanger/Support 1-50-RCPM-H6601 | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

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

7. Description of Work Remove/replace supports for removal of Interferences for SG 1B removal.

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

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: Hangers were removed for the removal of the 1B SG and replaced after installation of the new replacement steam generator.

(Applicable Manufacturer's Data Records to be Attached)

CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGRH SENIOR ENGINEER Date 9/22/04

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 4-9-03 to 1-17-04; 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.

[signature] Commissions NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP[illegible]JR REPAIRS OR REPLACEMENTS
As Required By The Prov[illegible]ons Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/22/04

Sheet 1 of 4

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3a. Work Order # WO 98514564 (Tendon Removal/Replacement)
Repair Organization Job #

3b. NSM or MM # ON-13086 AS9 WP 11551 (Tendon Removal)
WP 13551 (Tendon Replacement)

4. Identification of System Reactor Containment Class CC

5. (a) Applicable Construction Code ASME III Div. 2 1992 Edition N/A Addenda, 1992 /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and CC and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Tendons | Duke Power Company | See Attached Table A For Affected Tendon Number | N/A | N/A | 1973 | ☐ Repaired ☑ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Tendons | Duke Power Company | See Attached Table B For Affected Tendon Number | N/A | N/A | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☑ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

 9/22/04

## Form NIS-2 (Back)

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

7. Description of Work **Removal/replacement of tendons for construction opening.**

8. Test Conducted: ☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☑ Other (ILRT) ☐ Exempt

Pressure 60.934 psig Test Temp 98 °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: **Selected tendons were removed for installation of construction opening. Closure of construction opening required tendon replacement. Table A lists tendors that were removed and Table B documents final configuration of installed tendons per this modification.**

(Applicable Manufacturer's Data Records to be Attached)

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed [signature] SGEH SENIOR ENGINEER Date 9/29/04

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of CA and employed by HSB-CT have inspected the components described in this Owner's Report during the period 10-8-03 to 9-8-04 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 CA-1969 N, A I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04



ZDP 9/29/04

1. Owner Duke Power Company

Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/22/04

Sheet 3 of 4

2. Plant Oconee Nuclear Station

Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ( )

3a. Work Order # WO 98514564 (Tendon Removal/Replacement)

Work Performed By Duke Power Company

Repair Organization Job #

Address 526 S. Church Street, Charlotte, NC 28201-1006

Type Code Symbol Stamp N/A Authorization No. N/A

3b. NSM or MM # ON-13086 AS9 WP 11551 (Tendon Removal)

WP 13551 (Tendon Replacement)

4. Identification of System Reactor Containment Class CC

5. (a) Applicable Construction Code ASME III Div. 2 1992 Edition N/A Addenda, 1992 /Code Cases N/A

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and CC and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

**TABLE A**

**ONS 1 TENDONS REMOVED DURING 1EOC21**

| ONS Unit 1 Vertical Tendons | | | | | |
|---|---|---|---|---|---|
| Tendon Number | Heat Code | Shop Head Heat Number | Heat Code | Field Head Heat Number | Wire Heat No. |
| 23V25 | 38 | 6022665 | 36 | 48373 | X9390 |
| 23V26 | 38 | 6022665 | 36 | 48373 | X9390 |
| 23V27 | 28 | 6013084 | 38 | 6022665 | A69910 |
| 23V28 | 28 | 6013084 | 36 | 48373 | A69910 |
| 23V29 | 28 | 6013084 | 36 | 48373 | A69910 |
| 23V30 | 30 | 6339225 | 36 | 48373 | A69910 |
| 34V1 | 28 | 6013084 | 30 | 6339225 | A69910 |
| 34V2 | 30 | 6339225 | 38 | 6022665 | A69910 |
| 34V3 | 30 | 6339225 | 30 | 6339225 | A69910 |
| 34V4 | 28 | 6013084 | 38 | 6022665 | A69910 |
| 34V5 | 28 | 6013084 | 30 | 6339225 | A69910 |
| 34V6 | 30 | 6339225 | 30 | 6339225 | A69910 |
| 34V7 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V8 | 28 | 6013084 | 38 | 6022665 | Z7654 |
| 34V9 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V10 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V11 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V12 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V13 | 28 | 6013084 | 30 | 6339225 | Z7654 |
| 34V14 | 38 | 6022665 | TENDON MISSING | | |
| 34V15 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V16 | 38 | 6022665 | 30 | 6339225 | Z7654 |
| 34V17 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V18 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V19 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V20 | 38 | 6022665 | 30 | 6339225 | Z7654 |
| 34V21 | 38 | 6022665 | 30 | 6339225 | Z7654 |
| 34V22 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V23 | 38 | 6022665 | 30 | 6339225 | Z7654 |
| 34V24 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V25 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V26 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V27 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V28 | 38 | 6022665 | 38 | 6022665 | Z7654 |
| 34V29 | 28 | 6013084 | 30 | 6339225 | Z7654 |
| 34V30 | 38 | 6022665 | 30 | 6339225 | Z7654 |
| 45V1 | 28 | 6013084 | 30 | 6339225 | Z7364 |
| 45V2 | 30 | 6339225 | 30 | 6339225 | Z7654 |
| 45V3 | 30 | 6339225 | 30 | 6339225 | Z7372-Z7364 |
| 45V4 | 38 | 6022665 | 30 | 6339225 | Z7372-Z7364 |
| 45V5 | 28 | 6013084 | 36 | 48373 | Z7372-Z7364 |
| 45V6 | 38 | 6022665 | 30 | 6339225 | Z7372-Z7364 |

| ONS Unit 1 Horizontal Tendons | | | | | |
|---|---|---|---|---|---|
| Tendon Number | Heat Code | Shop Head Heat Number | Heat Code | Field Head Heat Number | Wire Heat No. |
| 42H46 | 38 | 6022665 | 52 | 6013827 | A79461 |
| 42H47 | 38 | 6022665 | 52 | 6013827 | A79461 |
| 42H48 | 38 | 6022665 | 38 | 6022665 | A79461 |
| 42H49 | 38 | 6022665 | 52 | 6013827 | A79461 |
| 42H50 | 38 | 6022665 | 52 | 6013827 | A79461 |
| 42H51 | 38 | 6022665 | 52 | 6013827 | A79461 |
| 42H52 | 38 | 6022665 | 52 | 6013827 | A79461 |
| 42H53 | 38 | 6022665 | 52 | 6013827 | A79461 |
| 42H54 | 38 | 6022665 | 38 | 6022665 | A79461 |
| 42H55 | 38 | 6022665 | 30 | 6339225 | A79461 |
| 42H56 | 38 | 6022665 | NA | Not Available | A80955 |
| 42H57 | 38 | 6022665 | 52 | 6013827 | A80955 |
| 42H58 | 38 | 6022665 | 52 | 6013827 | A80955 |
| 42H59 | 28 | 6013084 | 30 | 6339225 | A80955 |
| 42H60 | 38 | 6022665 | 30 | 6339225 | A80955 |
| 42H61 | 38 | 6022665 | 38 | 6022665 | A80955 |
| 42H62 | 38 | 6022665 | 38 | 6022665 | A80955 |
| 42H63 | 38 | 6022665 | 52 | 6013827 | A80955 |
| 42H64 | 38 | 6022665 | 52 | 6013827 | A80955 |
| 42H65 | 38 | 6022665 | 52 | 6013827 | A80955 |
| 53H47 | 38 | 6022665 | 30 | 6339225 | R0360 |
| 53H48 | 38 | 6022665 | 30 | 6339225 | R0360 |
| 53H49 | 38 | 6022665 | 30 | 6339225 | R0360 |
| 53H50 | 38 | 6022665 | 30 | 6339225 | R0360 |
| 53H51 | 38 | 6022665 | 30 | 6339225 | R0360 |
| 53H52 | 29 | 6013111 | 38 | 6022665 | L19137 |
| 53H53 | 29 | 6013111 | 38 | 6022665 | L19137 |
| 53H54 | 29 | 6013111 | 38 | 6022665 | L19137 |
| 53H55 | 29 | 6013111 | 38 | 6022665 | L19137 |
| 53H56 | 29 | 6013111 | 30 | 6339225 | L19137 |
| 53H57 | 29 | 6013111 | 30 | 6339225 | L19137 |
| 53H58 | 29 | 6013111 | 30 | 6339225 | L19137 |
| 53H59 | 29 | 6013111 | 30 | 6339225 | L19137 |
| 53H60 | 29 | 6013111 | 30 | 6339225 | L19137 |
| 53H61 | 29 | 6013111 | 30 | 6339225 | L19137 |
| 53H62 | 29 | 6013111 | 30 | 6339225 | A70260 |
| 53H63 | 29 | 6013111 | 30 | 6339225 | A70260 |
| 53H64 | 29 | 6013111 | 30 | 6339225 | A70260 |
| 53H65 | 29 | 6013111 | 30 | 6339225 | L19137 |
| 53H66 | 29 | 6013111 | 30 | 6339225 | A70260 |
| 13H13 | 38 | 6022665 | 38 | 6022665 | Not Available |

1. Owner Duke Power Company

Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/22/04

Sheet 4 of 4

2. Plant Oconee Nuclear Station

Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ( )

3a. Work Order # WO 98514564 (Tendon Removal/Replacement)

3. Work Performed By Duke Power Company

Repair Organization Job #

Address 526 S. Church Street, Charlotte, NC 28201-1006

Type Code Symbol Stamp N/A Authorization No. N/A

3b. NSM or MM # ON-13086 AS9 WP 11551 (Tendon Removal)

WP 13551 (Tendon Replacement)

4. Identification of System Reactor Containment Class CC

5. (a) Applicable Construction Code ASME III Div. 2 1992 Edition N/A Addenda, 1992 /Code Cases N/A

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and CC and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

**TABLE B**

**ONS 1 TENDONS REPLACEMENT DURING 1EOC21**

| ONS Unit 1 Vertical Tendons | | | | | | ONS Unit 1 Horizontal Tendons | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tendon Number | Heat Code | Shop Head Heat Number | Heat Code | Field Head Heat Number | Wire Heat No. | Tendon Number | Heat Code | Shop Head Heat Number | Heat Code | Field Head Heat Number | Wire Heat No. |
| 23V25 | TX131 | 13746 | TX59 | 13746 | 49460 | 42H46 | TX171 | 13746 | TX113 | 13746 | 62065 |
| 23V26 | TX133 | 13746 | TX67 | 13746 | 49460 | 42H47 | TX164 | 13746 | TX81 | 13746 | 62065 |
| 23V27 | TX140 | 13746 | TX78 | 13746 | 62065 | 42H48 | TX134 | 13746 | TX73 | 13746 | 62065 |
| 23V28 | TX151 | 13746 | TX70 | 13746 | 62065 | 42H49 | TX18 | 13746 | TX104 | 13746 | M32771 |
| 23V29 | TX146 | 13746 | TX51 | 13746 | 62065 | 42H50 | TX28 | 13746 | TX112 | 13746 | M32771 |
| 23V30 | TX156 | 13746 | TX88 | 13746 | 62065 | 42H51 | TX41 | 13746 | TX197 | 13746 | M32771 |
| 34V1 | TX143 | 13746 | TX85 | 13746 | 62065 | 42H52 | TX17 | 13746 | TX199 | 13746 | M32771 |
| 34V2 | TX139 | 13746 | TX66 | 13746 | 62065 | 42H53 | TX25 | 13746 | TX111 | 13746 | M32771 |
| 34V3 | TX138 | 13746 | TX55 | 13746 | 62065 | 42H54 | TX16 | 13746 | TX107 | 13746 | M32771 |
| 34V4 | TX148 | 13746 | TX58 | 13746 | 62065 | 42H55 | TX37 | 13746 | TX121 | 13746 | 49460 |
| 34V5 | TX141 | 13746 | TX87 | 13746 | 62065 | 42H56 | TX13 | 13746 | TX122 | 13746 | 49460 |
| 34V6 | TX142 | 13746 | TX57 | 13746 | 62065 | 42H57 | TX21 | 13746 | TX124 | 13746 | 49460 |
| 34V7 | TX135 | 13746 | TX79 | 13746 | 62065 | 42H58 | TX5 | 13746 | TX110 | 13746 | 49460 |
| 34V8 | TX136 | 13746 | TX82 | 13746 | 62065 | 42H59 | TX36 | 13746 | TX115 | 13746 | 49460 |
| 34V9 | TX137 | 13746 | TX80 | 13746 | 62065 | 42H60 | TX26 | 13746 | TX108 | 13746 | 49460 |
| 34V10 | TX30 | 13746 | TX100 | 13746 | 49460 | 42H61 | TX10 | 13746 | TX106 | 13746 | 49460 |
| 34V11 | TX20 | 13746 | TX119 | 13746 | 49460 | 42H62 | TX24 | 13746 | TX125 | 13746 | 49460 |
| 34V12 | TX3 | 13746 | TX114 | 13746 | 49460 | 42H63 | TX38 | 13746 | TX77 | 13746 | 49460 |
| 34V13 | TX39 | 13746 | TX95 | 13746 | 49460 | 42H64 | TX48 | 13746 | TX68 | 13746 | 49460 |
| 34V14 | Not installed on Unit 1 | | | | | 42H65 | TX46 | 13746 | TX63 | 13746 | 49460 |
| 34V15 | TX40 | 13746 | TX97 | 13746 | 49460 | 53H47 | TX29 | 13746 | TX50 | 13746 | 49460 |
| 34V16 | TX27 | 13746 | TX103 | 13746 | 49460 | 53H48 | TX129 | 13746 | TX75 | 13746 | 49460 |
| 34V17 | TX7 | 13746 | TX123 | 13746 | 49460 | 53H49 | TX8 | 13746 | TX116 | 13746 | 49460 |
| 34V18 | TX23 | 13746 | TX94 | 13746 | 49460 | 53H50 | TX2 | 13746 | TX90 | 13746 | 49460 |
| 34V19 | TX1 | 13746 | TX96 | 13746 | 49460 | 53H51 | TX42 | 13746 | TX126 | 13746 | 49460 |
| 34V20 | TX15 | 13746 | TX93 | 13746 | 49460 | 53H52 | TX34 | 13746 | TX92 | 13746 | 49460 |
| 34V21 | TX9 | 13746 | TX117 | 13746 | 49460 | 53H53 | TX6 | 13746 | TX38 | 13746 | 49460 |
| 34V22 | TX150 | 13746 | TX53 | 13746 | 62065 | 53H54 | TX35 | 13746 | TX105 | 13746 | 49460 |
| 34V23 | TX176 | 13746 | TX196 | 13746 | 66053 | 53H55 | TX12 | 13746 | TX102 | 13746 | 49460 |
| 34V24 | TX174 | 13746 | TX64 | 13746 | 62065 | 53H56 | TX11 | 13746 | TX101 | 13746 | 49460 |
| 34V25 | TX152 | 13746 | TX80 | 13746 | 62065 | 53H57 | TX31 | 13746 | TX91 | 13746 | 49460 |
| 34V26 | TX149 | 13746 | TX71 | 13746 | 62065 | 53H58 | TX33 | 13746 | TX116 | 13746 | 49460 |
| 34V27 | TX145 | 13746 | TX56 | 13746 | 62065 | 53H59 | TX44 | 13746 | TX109 | 13746 | 49460 |
| 34V28 | TX163 | 13746 | TX65 | 13746 | 62065 | 53H60 | TX43 | 13746 | TX120 | 13746 | 49460 |
| 34V29 | TX155 | 13746 | TX61 | 13746 | 62065 | 53H61 | TX45 | 13746 | TX99 | 13746 | 49460 |
| 34V30 | TX180 | 13746 | TX83 | 13746 | 62065 | 53H62 | TX32 | 13746 | TX195 | 13746 | 49460 |
| 45V1 | TX161 | 13746 | TX54 | 13746 | 62065 | 53H63 | TX22 | 13746 | TX198 | 13746 | 49460 |
| 45V2 | TX170 | 13746 | TX76 | 13746 | 62065 | 53H64 | TX49 | 13746 | TX86 | 13746 | 49460 |
| 45V3 | TX127 | 13746 | TX84 | 13746 | 49460 | 53H65 | TX128 | 13746 | TX74 | 13746 | 49460 |
| 45V4 | TX4 | 13746 | TX72 | 13746 | 49460 | 53H66 | TX132 | 13746 | TX52 | 13746 | 49460 |
| 45V5 | TX130 | 13746 | TX69 | 13746 | 49460 | 13H13 | | Not installed | | | |
| 45V6 | TX14 | 13746 | TX62 | 13746 | 49460 | | | | | | |

FORM NIS-2 OWNER'S REF OR REPAIRS OR REPLACEMENTS
As Required By The Pro. .ons Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/22/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3a. Work Order # 98535912 (Concrete Removal/Replacement)
Repair Organization Job #

3b. NSM or MM # ON-13086 AS9 WP 11550 (conc./rebar removal)
WP 13550 (conc./rebar replacemt)

4. Identification of System Containment Class CC

5. (a) Applicable Construction Code per SGRP-SPEC-C-003 19 N/A Edition N/A Addenda, N/A /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Concrete (Removed for Construction Opening) | Duke Power Company | N/A | N/A | N/A | 1973 | ☐ Repaired ☑ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | Concrete (Replaced for Restoring Containment) | Duke Power Company | N/A | N/A | N/A | 2003 | ☐ Repaired ☐ Replaced ☑ Replacement | ☑ No ☐ Yes |
| C | Rebar | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

## Form NIS-2 (Back)

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

7. Description of Work **Creation of construction opening for removing old RVHA/SG/s and installing new.**

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

Pressure 60.353 psig Test Temp 72 °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: **Work involved removing concrete, rebar and liner plate to create the construction opening above the Unit 1 equipment hatch. After the RVH and two SGs were replaced the old liner plate was re-installed, rebar re-installed and new concrete placed to re-establish containment. Testing was accomplished with the integrated leak rate test. Pressure and temperature numbers came from the Unit 1 Containment Integrated Leakage Test Report, reading # 92.**

(Applicable Manufacturer's Data Records to be Attached)

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A SGRH SENIOR ENGINEER Expiration Date N/A

Signed [signature] Date 09/29/04

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 11-3-03 to 9-1-04; 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 NC853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

FORM NIS-2 OWNER'S REP OR REPAIRS OR REPLACEMENTS
As Required By The Pro. ons Of The ASME Code Section XI

1. Owner Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006

1.a Date 09/22/04

Sheet 1 of 2

2. Plant Oconee Nuclear Station
Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☑ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____)

3a. Work Order # 98514558
Repair Organization Job #

3. Work Performed By Duke Power Company
Address 526 S. Church Street, Charlotte, NC 28201-1006
Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # ON-13086 AS9 WP 13555

4. Identification of System Containment Class MC

5. (a) Applicable Construction Code ASME Section VIII 1998 Edition N/A Addenda, 98 Addenda /Code Cases N/A
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and cc and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | Containment Liner Plate | Duke Power Company | N/A | N/A | N/A | 1973 | ☑ Repaired ☐ Replaced ☐ Replacement | ☑ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

## Form NIS-2 (Back)

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

7. Description of Work **Creation of construction opening for removing old RVHA/SG/s and installing new.**

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

Pressure 60.353 psig Test Temp 72 °F

Pressure _____ psig Test Temp _____ °F

Pressure _____ psig Test Temp _____ °F

9. Remark: **Work involves cutting the liner plate above the equipment hatch for construction opening. After moving new RVHA and S/Gs into containment the cut out liner plate was then welded back in place. Testing is accomplished with the integrated leak rate test after plate is re-welded, concrete replaced and tendons replaced. Pressure and temperature numbers came from the Unit 1 Containment Integrated Leakage Test Report, reading # 92.**

(Applicable Manufacturer's Data Records to be Attached)

### CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

Certificate of Authorization No. N/A SGRH SENIOR ENGINEER Expiration Date N/A

Signed [signature] Date 9/28/04

### CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commision issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Providence of NC and employed by HSBCT have inspected the components described in this Owner's Report during the period 10-5-03 to 9-2-04; 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] Commissions NC 853, N, I

Inspector's Signature National Board, State, Providence and Endorsements

Date 9-29-04

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
## As Required By The Provisions Of The ASME Code Section XI

1. Owner Duke Power Company
   Address 526 S. Church Street, Charlotte, NC 28201-1006

1a. Date 07-12-04
Sheet 1 of 1

2. Plant Oconee Nuclear Station
   Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☒ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units _____ )

3a. Work Order # 98616048-01
Repair Organization Job #

3. Work Performed By Duke Power Company
   Address 526 S. Church Street, Charlotte, NC 28201-1006
   Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # 17643

4. Identification of System HIGH PRESSURE INJECTION Class 2

5. (a) Applicable Construction Code ANSI B31.7 19 68 Edition, N/A Addenda, N/A Code Cases
   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and CC and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | SIR 1-51-0-439C-SR44 | DPC | N/A | N/A | N/A | 2004 | ☒ Repaired ☐ Replaced ☐ Replacement | ☒ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

# Form NIS-2 (Back)

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

7. Description of Work MODIFY S/R 1-51-0-439C-SR44

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

Pressure _____ psig Test Temp. _____ °F

Pressure _____ psig Test Temp. _____ °F

Pressure _____ psig Test Temp. _____ °F

9. Remarks N/A

(Applicable Manufacturer's Data Records to be Attached)

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed Larry T. Mangall QA SPEC Date JULY 12, 2004

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 Providence of North Carolina and employed by HSB CT have inspected the components described in this Owner's Report during the period 10-5-03 to 7-12-04; 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.

Inspector's Signature

Commissions NC1444 NI

National Board, State, Providence and Endorsements

Date 7/12/04

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98579586 - 01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/9/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp: Not Applicable<br>Authorization Number: Not Applicable<br>Expiration Date: Not Applicable |

**4. Identification of System, ASME Class**

High Pressure Injection, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Hanger 1-51A-O-479A-H8E (1) | DPC | None | None | None | 2005 | Corrected ~~Installed~~ Rwc 5/24/2005 | NO |
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**7. Description of Work**

Replaced rusty U-bolt with new U-bolt.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other _____

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98579586 - 01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Replaced U-bolt: 1/4 inch diameter, Carbon steel, UTC # 1063158.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Basil W. Carey Senior Engineer Date 5/9/2005

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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5-5-05 to 5-9-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions NC1444 NIRAC

National Board, State, Province, and Endorsements

Date 5/24/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98634155 - 01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/30/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp: Not Applicable<br>Authorization Number: Not Applicable<br>Expiration Date: Not Applicable |

**4. Identification of System, ASME Class**

High Pressure Injection, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Hanger 1-51A-479A-H6418 (1) | DPC | None | None | 1 HPIHS31851A | UNK | Corrected | NO |
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**7. Description of Work**

Hanger rod was bent and needed to be replaced.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other QAF-18

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98634155 - 01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Replaced a piece of 1/2 inch round rod, Material A36.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Basil W. Cam Senior Engineer Date 4/30/2005

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-18-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions NC1444 NIABC

National Board, State, Province, and Endorsements

Date 5/18/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98628435 - 01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/27/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Low Pressure Service Water , ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 3 inch piping components (1) | DPC | None | None | None | UNK | Corrected | NO |
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**7. Description of Work**

Due to excessive pitting on flange face, the 4 pipe side flanges to the RCP motor air cooler were replaced.

**8. Test Conducted**

☒ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other _____

Pressure 115 PSI Test Temperature 69 °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98628435 - 1 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Replaced 4 - 3 inch 150 # raised face, weld neck carbon steel (SA 105) flanges

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Basil W. Cummings Senior Engineer Date 5/2/2005

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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2-14-05 to 5-18-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions NC 444 NBAC

National Board, State, Province, and Endorsements

Date 5/18/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98634017 - 01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/4/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Gaseous Waste Disposal, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Hanger 1-57-O-481A-H12 (1) | DPC | None | None | None | UNK | Corrected | NO |
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**7. Description of Work**

Constant support hanger 1-57-O-481A-H12, on the Gaseous Waste Disposal line had a bent 1/2 inch rod. This rod has been replaced.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other QAF-18

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98634017 - 01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ A new 1/2 inch round rod made of A-36 and clevis replaced the damaged existing parts.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Basil W. Cam[illegible] Senior 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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 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.

[illegible] Commissions NC1444 N/ABC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5/13/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98723645 - 01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/4/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant System, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Hanger 1-50-O-481A-H1 | DPC | None | None | None | UNK | Corrected | NO |
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**7. Description of Work**

The plate attached to the valve operator interfered with the installation of the pressurizer platform so it was decided to cut off the corner that was making contact with the platform to allow free movement of the pipe.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other QAF-18

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98723645 - 01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ No material was added to this hanger. A corner was cut off.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Senior 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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-28-05 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.

[signature] Commissions NC1444 NBBC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5/13/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98693303-03 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/4/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1RC-68 | Consolidated | BT-04976 | None | None | UNK | Removed | YES |
| 1RC-68 | Consolidated | BT-04975 | None | None | UNK | Installed | YES |
| ❶ Outlet Flange Stud for 1RC-68 | UNK | None | None | None | UNK | Installed | NO |
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**7. Description of Work**

Installed valve, serial number BT-04976, was removed for section XI testing. Replaced with previously tested spare, serial number BT-04975, from stock. Valve, serial number BT-04975 was removed from unit 3 and repaired on work order number 98659465. Replaced one outlet stud due to normal wear.

Replacement stud material is SA 193 GR B7. Outlet Stud Material: stock code: 297415, UTC #: 1057311.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other RCS Visual

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98693302-04 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Outlet Stud Material - Stock Code # 297415 - UTC # 1057311

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## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] 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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-13-05 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.

[signature] Commissions NC1444 NBBC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5/13/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98659458 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 0 |
| | | Date<br>4/14/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable<br>Authorization Number<br>Not Applicable<br>Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant, ASME Class 1

**5.**

(a) Applicable Construction Code: ASME Section III 19 65 Edition, 67 Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Pressurizer Code Safety Valve (spare) removed from 3RC-68 | Dresser | BT-04975 | n/a | n/a | 1979 | Corrected | YES |
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**7. Description of Work**

Replaced disc (UTC 1067821), serial number ADQ-59 and nozzle (UTC 1038640), serial number ADF-63.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other _____

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98659458 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Replaced disc (UTC 1067821), serial number ADQ-59 and nozzle (UTC 1038640), serial number ADF-63.

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## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Engineer Date 4/14/2005

Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-30-04 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.

[signature] Commissions NC1444 NIABC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-13-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98693301-06 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/3/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable<br>Authorization Number<br>Not Applicable<br>Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant System, ASME Class I

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1RC-66 | Consolidated | BL-08904 | none | none | UNK | Removed | NO |
| ❶1RC-66 | Consolidated | BY-93617 | none | none | UNK | Installed | NO |
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**7. Description of Work**

Valve, serial number BL-08904, was removed for ASME section XI testing. Replaced with new spare valv, serial number BY-93617.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other RCS visual

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98693301-06 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Replaced existing valve with a new spare from stock.

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## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Engineer Date 5-3-05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-18-05 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.

[signature] Commissions NC444 NB10C

Inspector's Signature National Board, State, Province, and Endorsements

Date 5/13/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98695394-01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/25/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressue Injection, ASME Class 2

**5.**

(a) Applicable Construction Code: ASME Section III 19 86 Edition, 1988 Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Valve - 1HP-120 | CCI | 706573-1-2 | None | None | Unk | Corrected | NO |
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**7. Description of Work**

Work order # 98695394-01 was written for the valve PM. During the PM Maintenance techs identified that the spindle was damgaged from the flow conditions.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Visual

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98695394-01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Valve spindle, serial # 139641, stock code # 486801, UTC # 0001028497

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## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed John M Alexander Senior Technical Specialist Date 4/25/05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-18-05 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.

Inspector's Signature

Commissions NC 444 NBIBC

National Board, State, Province, and Endorsements

Date 5/13/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98693302-04 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/25/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable<br>Authorization Number<br>Not Applicable<br>Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| ❶ Flange bolting on valve 1RC-67 | UNK | None | None | None | UNK | Installed | NO |
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**7. Description of Work**

Valve, serial number BL-08890, was removed for section XI testing. Replaced with previously tested spare valve, serial number BL-08889, from stock. Replace (2) inlet and (3) outlet studs due to normal wear.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other RCS Visual

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98693302-04 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Inlet Stud Material - Stock Code # 297388 - UTC # 1066921, Outlet Stud Material - Stock Code # 297415 - UTC # 1057311

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## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Engineer Date 4/26/2005

Owner or Owner's Designee, Title

## CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-13-05 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.

[signature] Commissions NC1444 NBIBC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5/13/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98686229-01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/3/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Main Steam, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1MS-8 | Crosby | None | None | None | UNK | Corrected | NO |
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**7. Description of Work**

During PM of valve 1MS-8, the disc insert was found with seat damage from leakage experienced while in service. Visual indication was found on the disc insert. Dye-Penetrant test performed by QA did not show any indication. To be conservitive, the disc insert was replaced with a new one form stock.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other F/V Leak Check and Stroke Retest

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98686229-01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Disc Insert, Stock Code #: 113418, UTC #: 856272.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Engineer Date 5/3/2005

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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-19-05 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.

[signature] Commissions NC1444/NIRBL

Inspector's Signature National Board, State, Province, and Endorsements

Date 5/13/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-11 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp: Not Applicable<br>Authorization Number: Not Applicable<br>Expiration Date: Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| New Miller Cylinder on Snubber 50-0-481A-113 | New Miller | 18786 | N/A | N/A | UNK | Removed | NO |
| Hydraulic snubber upgrade kit | Anvil | 36035 | N/A | N/A | UNK | Installed | NO |
| ~~Hydraulic snubber seal kit~~ | ~~Anvil~~ Not Required TRB 5/11/05 | ~~N/A~~ | ~~N/A~~ | ~~N/A~~ | ~~UNK~~ | ~~Installed~~ | ~~NO~~ |
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**7. Description of Work**

Replaced existing New Miller cylinder with a Anvil Config. A.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-11 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature], Sr. Eng. 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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-11-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] Commissions NC1444 NIRBC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-12-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98679855 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | **Date** 5/3/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | **Type Code Symbol Stamp** Not Applicable<br>**Authorization Number** Not Applicable<br>**Expiration Date** Not Applicable |

**4. Identification of System, ASME Class**

RCS, ASME Class 1

**5.**

(a) Applicable Construction Code: ASME Section III 19 65 Edition, 5-67 Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| CRDM #57 | Diamond Power | UNK | UNK | UNK | UNK | Installed | YES |
| ❶ 8 CRDM hold down bolts | FANP | UNK | N/A | UTC 1052097<br>UTC 1056490 | 2003 | Installed | NO |
| ❷ 1 (2 piece) nut ring | FANP | UNK | N/A | UTC 1057050 | 2003 | Installed | NO |
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**7. Description of Work**

Remove CRDM #57 for ISI and re-install. Replace CRDM hold down bolts and nut ring with new ones per station practice for this component.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☐ Exempt ☐ Other _____

Pressure 2155 PSI Test Temperature ~ 532 °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98679855 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ 8 new CRDM hold down bolts installed, old ones discarded per standard practice. Material SA-453, Gr. 660. 6 from UTC 1056490, (S/N's GN-5960, -5970, -6191, -6220, -6226, -6321), 2 from UTC 1052097, S/N Not available.

❷ 1 new (2 piece) nut ring installed, old one discarded per standard practice. Material SA-320, Gr. L-43. UTC 1057050 S/N 9717-GN-25

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## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed ENGR Date 5/11/2005

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5-5-05 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.

Inspector's Signature

Commissions NC 1444 NBBC

National Board, State, Province, and Endorsements

Date 5/12/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98622416-01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/22/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressure Injection, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Valve - 1HP-31 | Fisher | 4768601 | None | None | 1971 | Corrected | NO |
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**7. Description of Work**

Work Order 98622416-01 was written for a bonnet/body leak. The valve plug/stem assembly was replaced.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Visual

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98622416-01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Valve Plug, stock code # 0018079, UTC # 0001069361

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed John M Alexander Senior Tech Specialist 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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-18-05 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.

Inspector's Signature

Commissions NC1444 NBIBC

National Board, State, Province, and Endorsements

Date 5/13/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98634011 - 01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/4/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Gaseous Waste Disposal, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Hanger 1-57-O-481A-H7 (1) | DPC | None | None | None | UNK | Corrected | NO |
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**7. Description of Work**

Constant support hanger 1-57-O-481A-H7, on the Gaseous Waste Disposal line, had a bent 1/2 inch rod. This rod has been replaced.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other QAF-18

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98634011 - 01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ A new 1/2 inch round rod made of A-36 and clevis replaced the damaged existing parts.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Basil W. Carroll Senior 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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 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.

Inspector's Signature

Commissions NC444 NIAB

National Board, State, Province, and Endorsements

Date 5/12/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98677758 | 1 of 3 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/4/05 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressure Injection (HPI), ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| S/R 1-51B-2-0-436D-H42 | D.P.Co. | UKN | UKN | UKN | UNK | Removed | NO |
| S/R 51A-0-479A-JH-H1404 | D.P.Co. | UKN | UKN | UKN | UNK | Removed | NO |
| S/R 51A-0-479A-JH-H1411 | D.P.Co. | UKN | UKN | UKN | UNK | Removed | NO |
| S/R 1-51A-479A-H6660 | D.P.Co. | UKN | UKN | UKN | 2005 | Installed | NO |
| S/R 1-51A-479A-H6661 | D.P.Co. | UKN | UKN | UKN | 2005 | Installed | NO |
| S/R 1-51-436D-H5598 (1) | D.P.Co. | UKN | UKN | UKN | 2005 | Installed | NO |
| S/R 1-51A-1-0-439A-RD-2501 (2) | D.P.Co. | UKN | UKN | UKN | 2005 | Installed | NO |
| S/R 1-51B-2-0-436E-SR66 (3) | D.P.Co. | UKN | UKN | UKN | 2005 | Installed | NO |
| S/R 1-51B-2-0-436G-SR64 (4) | D.P.Co. | UKN | UKN | UKN | 2005 | Installed | NO |

**7. Description of Work**

ONOE-17299, Revise the design temperature of the RC Seal Return Piping (HPI) from 200°F to 286°F, modified S/R's, installed Flex Hoses in the RCW and HPI Piping and raised the design temperature of 1HP-71 and 1HP-302 to 300°F.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☐ Exempt ☐ Other _____

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98677758 | 2 of 3 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/4/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressure Injection (HPI), ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| S/R 51A-0-479A-GPD-H0029 (6) | D.P.Co. | UKN | UKN | UKN | 2005 | Installed | NO |
| S/R 1-51A-0-479A-JH-H1405 (7) | D.P.Co. | UKN | UKN | UKN | 2005 | Installed | NO |
| Pipe | D.P.Co. | UKN | UKN | UKN | 2005 | Installed | NO |
| Flex Hose 1HPIFX0021 | Senior Flexonics | J86210-1-2 | UKN | UKN | 2005 | Installed | YES |
| Flex Hose 1HPIFX0022 | Senior Flexonics | J86210-1-1 | UKN | UKN | 2005 | Installed | YES |
| 1HPI HX001A (8) | Atlas | 862 | 712 | B&W Tag No. 1HP-C2A | 1969 | Corrected | YES |
| 1HPI HX001B (8) | Atlas | 864 | 714 | B&W Tag No. 1HP-C2A | 1969 | Corrected | YES |
| 1HP VA0071 (9) | Crosby | N67965-00-0001 | UKN | UKN | 1985 | Corrected | YES |
| 1HP VA0302 (9) | Crosby | N67965-00-0001 | UKN | UKN | 1985 | Corrected | YES |
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# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98677758 | 3 of 3 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Replaced vertical strut with rod hanger with spring can to S/R.

❷ Removed the horizontial strut portion of S/R.

❸ Added structural angle to S/R.

❹ Added diaginal brace and structual angle to S/R.

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❻ Added structural angles and shims to S/R to limit horizontial movements.

❼ Replaced tube steel and length of pipe welded to tube steel with structural angles, U-bolt and pipe to S/R.

❽ Raised the RC Seal Return Cooler Design Temperature from 200°F to 300°F.

❾ Raised the Relief Valve Design Temperature from 200°F to 300°F.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] 5/11/2005 Senior Engineer Date 5/11/2005

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-20-05 to 5-9-05, 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] Commissions NC1444 NIPBC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5/12/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-06 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Main Steam, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| New Miller Cylinder on Snubber 1-51-478A-H6140 | New Miller | 76113648 | N/A | N/A | UNK | Removed | NO |
| Hydraulic snubber upgrade kit | Anvil | 36028 | N/A | N/A | UNK | Installed | NO |
| Hydraulic snubber seal kit | Anvil | N/A | N/A | N/A | UNK | Installed | NO |
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**7. Description of Work**

Replaced existing New Miller cylinder with a Anvil Config. A.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-06 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [illegible], Senior Eng. Date 4/25/05

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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-2-05, 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.

[illegible] Commissions NC 4444 DIBC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5/2/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-12 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp: Not Applicable<br>Authorization Number: Not Applicable<br>Expiration Date: Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| New Miller Cylinder on Snubber 50-0-479A-H3A | New Miller | 18796 | N/A | N/A | UNK | Removed | NO |
| Hydraulic snubber upgrade kit | Anvil | 36031 | N/A | N/A | UNK | Installed | NO |
| ~~Hydraulic snubber seal kit~~ | ~~Anvil~~ Not Required | ~~N/A~~ | ~~N/A~~ TRB 5/10/05 | ~~N/A~~ | ~~UNK~~ | ~~Installed~~ | ~~NO~~ |
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**7. Description of Work**

Replaced existing New Miller cylinder with a Anvil Config. A.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-12 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [illegible], Sr. Eng. Date 5/2/05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-11-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions NC1444 NIABC

National Board, State, Province, and Endorsements

Date 5-11-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-13 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp: Not Applicable<br>Authorization Number: Not Applicable<br>Expiration Date: Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| New Miller Cylinder on Snubber 50-0-481A-H7 | New Miller | 18788 | N/A | N/A | UNK | Removed | NO |
| Hydraulic snubber upgrade kit | Anvil | 36030 | N/A | N/A | UNK | Installed | NO |
| ~~Hydraulic snubber seal kit~~ | ~~Anvil~~ | ~~N/A~~ | ~~N/A~~ | ~~N/A~~ | ~~UNK~~ | ~~Installed~~ | ~~NO~~ |
| | Not Required TRB 5/10/05 | | | | | | |
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**7. Description of Work**

Replaced existing New Miller cylinder with a Anvil Config. A.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-13 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Sr. Eng. Date 5/2/05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-11-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions NC 1444 NIAB

National Board, State, Province, and Endorsements

Date 5-11-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-14 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp: Not Applicable<br>Authorization Number: Not Applicable<br>Expiration Date: Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| New Miller Cylinder on Snubber 50-0-480A-H8 | New Miller | 18817 | N/A | N/A | UNK | Removed | NO |
| Hydraulic snubber upgrade kit | Anvil | 36038 | N/A | N/A | UNK | Installed | NO |
| ~~Hydraulic snubber seal kit~~ Not Required TRB 5/11/04 | ~~Anvil~~ | ~~N/A~~ | ~~N/A~~ | ~~N/A~~ | ~~UNK~~ | ~~Installed~~ | ~~NO~~ |
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**7. Description of Work**

Replaced existing New Miller cylinder with a Anvil Config. A.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-14 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Sr. Eng. Date 5/2/05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-11-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] Commissions NC1444 NIBC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-11-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-15 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp: Not Applicable<br>Authorization Number: Not Applicable<br>Expiration Date: Not Applicable |

**4. Identification of System, ASME Class**

High Pressure Injection, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| New Miller Cylinder on Snubber 50-0-480A-H9 | New Miller | 15121 | N/A | N/A | UNK | Removed | NO |
| Hydraulic snubber upgrade kit | Anvil | 36033 | N/A | N/A | UNK | Installed | NO |
| ~~Hydraulic snubber seal kit~~ | ~~Anvil~~ | ~~N/A~~ | ~~N/A~~ | ~~N/A~~ | ~~UNK~~ | ~~Installed~~ | ~~NO~~ |
| | | Not Required TBB 5/10/05 | | | | | |
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**7. Description of Work**

Replaced existing New Miller cylinder with a Anvil Config. A.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-15 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Sr. Eng. Date 5/2/05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-11-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] Commissions NC1444 NIABC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-11-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-18 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp: Not Applicable<br>Authorization Number: Not Applicable<br>Expiration Date: Not Applicable |

**4. Identification of System, ASME Class**

Low Pressure Injection - High Pressure Portion, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| New Miller Cylinder on Snubber 53A-0-481A-H41C | New Miller | 18802 | N/A | N/A | UNK | Removed | NO |
| Hydraulic snubber upgrade kit | Anvil | 36034 | N/A | N/A | UNK | Installed | NO |
| ~~Hydraulic snubber seal kit~~ | ~~Anvil~~ | ~~N/A~~ Not Required | ~~N/A~~ | ~~N/A~~ TRA 5/10/05 | ~~UNK~~ | ~~Installed~~ | ~~NO~~ |
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**7. Description of Work**

Replaced existing New Miller cylinder with a Anvil Config. A.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-18 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Sr. Eng. Date 5/2/05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-11-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] Commissions NC1444 NIABC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-11-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98697254-46 | 1 of 3 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/5/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp: Not Applicable<br>Authorization Number: Not Applicable<br>Expiration Date: Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1-50-0-66A-RCPM-S4 Rear Bracket | ANVIL | N/A | N/A | 873208 | UNK | Installed | NO |
| 1-50-0-66A-RCPM-S4 5x5 Bar Stock | N/A | N/A | N/A | 1057383 | UNK | Installed | NO |
| 1-50-0-66A-RCPM-S4 5x5 Tube Steel | N/A | N/A | N/A | ~~1069495~~ 1076666 | UNK | Installed | NO |
| 1-50-0-66A-RCPM-S4 1" Plate | N/A | N/A | N/A | 1069495 | UNK | Installed | NO |
| 1-50-0-66A-RCPM-S4 1 3/4" Plate | N/A | N/A | N/A | 1075155 | UNK | Installed | NO |
| 1-50-0-66A-RCPM-S5 Rear Bracket | ANVIL | N/A | N/A | 1073585 | UNK | Installed | NO |
| 1-50-0-66A-RCPM-S5 1 1/2" Plate | N/A | N/A | N/A | 1071258 | UNK | Installed | NO |

**7. Description of Work**

Install snubbers and snubber brackets per OE100226

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98697254-46 | 2 of 3 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | - |
| | | Date |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp: Not Applicable<br>Authorization Number: Not Applicable<br>Expiration Date: Not Applicable |

4. Identification of System, ASME Class

, ASME Class

5.

(a) Applicable Construction Code: _____ 19 ____ Edition, _____ Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 ____ Edition, _____ Addenda.

(c) Applicable Section XI Code Case(s) None

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1-50-0-66A-RCPM-S5 2 " Plate | N/A | N/A | N/A | 1036576 | UNK | Installed | NO |
| 1-50-0-66A-RCPM-S6 Rear Bracket | ANVIL | N/A | N/A | 1073585 | UNK | Installed | NO |
| 1-50-0-66A-RCPM-S6 2" Plate | N/A | N/A | N/A | 1036576 | UNK | Installed | NO |
| 1-50-0-66A-RCPM-S6 1 1/2" Plate | N/A | N/A | N/A | 1071258 | UNK | Installed | NO |
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# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98697254-46 | 3 of 3 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [illegible], Sr. Eng. Date 5-5-05

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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-7-05 to 5-9-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions NC 1444 NBASC

National Board, State, Province, and Endorsements

Date 5-9-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694411-05 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

LPI, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Snubber on 1-51-478A-H6140 | PSA | 10131 | N/A | N/A | UNK | Removed | NO |
| Snubber on 1-51-478A-H6140 | Lisega | 615873/013 | N/A | N/A | UNK | Installed | NO |
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**7. Description of Work**

Replaced existing PSA mechanical snubber with a Lisega hydraulic snubber per OSS 0027.00-00-0002

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694411-05 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [illegible], Senior Eng. 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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-19-05 to 5-2-05, 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.

[illegible] Commissions NC1444 NB&C

Inspector's Signature National Board, State, Province, and Endorsements

Date 5/2/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/4/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Low Pressure Service Water, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 4" Pipe Coupling installed on LPSW Supply Piping upstream of 1A RBCU | UNK | UNK | UNK | 0001078579 | UNK | Installed | NO |
| Bolting Material for 6" flange up stream of 1A RBCU(LPSW Supply) | UNK | UNK | UNK | UNK | UNK | Removed | NO |
| Bolting Material for 6" flange up stream of 1A RBCU(LPSW Supply) (1) | UNK | UNK | UNK | SEE NOTE 2 | UKN | Installed | NO |
| | | | | | | | |

**7. Description of Work**

Installed 4" full coupling in LPSW Supply line to 1A RBCU and make-up 6" flange upstream of new Coupling

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☐ Exempt ☐ Other _____

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98723529 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Bolting Materials, Studs SA193, B7 and Heavy Hex Nuts, SA194, Grade 2H

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed JOHN BRADSHAW John Bradshaw / TECH. SPEC. II 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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-18-05 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.

Inspector's Signature Commissions NC 1449 NBBC

National Board, State, Province, and Endorsements

Date 5-9-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98656161 | 1 of 4 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressure Injection, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1HP-939 | Velan | 052005 | None | UTC-1076723 | 2005 | Installed | YES |
| 1HP-940 | Velan | 042065 | None | UTC-1074859 | 2005 | Installed | YES |
| 1HP-969 | Flowserve | 57BAK | 1436 | UTC-1074852 | 2004 | Installed | YES |
| 1HP-970 | Flowserve | 58BAK | 1437 | UTC-1074853 | 2004 | Installed | YES |
| 1HP-973 | Flowserve | 42BAG | 1404 | UTC-1074159 | 2004 | Installed | YES |
| 1HP-974 | Flowserve | E371A-30-3 | 2252 | UTC-1014737 | 1999 | Installed | YES |
| 1HP-981 | Flowserve | 56BAK | 1435 | UTC-1074851 | 2004 | Installed | YES |
| 1HP-982 | Flowserve | 55BAK | 1434 | UTC-1074850 | 2004 | Installed | YES |
| 1HP-79 Flange Bolting Material | Unknown | Unknown | Unknown | See Sect. 9 on Sheet 4 of 4 | UNK | Corrected | NO |

**7. Description of Work**

**NSM-13106 AM1 and workorder 98656161 installed two MOV's , 4 manual valves, and two check valves with associated piping and fittings on the HPI system. Bolting material for existing relief valve 1HP-79 was also replaced during this modification. Installed twelve (12) new supports for new piping and components.**

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other _____

Pressure 70.2 PSI Test Temperature N.O.T. °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98656161 | 2 of 4 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressure System, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Piping Material | DPCo | None | None | None | 2005 | Installed | NO |
| 1-51B-435B-H5783 Support | DPCo | None | None | None | 2005 | Installed | NO |
| 1-51B-435B-H5784 Support | DPCo | None | None | None | 2005 | Installed | NO |
| 1-51B-435B-H5785 Support | DPCo | None | None | None | 2005 | Installed | NO |
| 1-51B-435B-H5786 Support | DPCo | None | None | None | 2005 | Installed | NO |
| 1-51B-435B-H5787 Support | DPCo | None | None | None | 2005 | Installed | NO |
| 1-51B-435B-H5788 Support | DPCo | None | None | None | 2005 | Installed | NO |
| 1-51B-435B-H5789 Support | DPCo | None | None | None | 2005 | Installed | NO |
| 1-51B-435B-H5790 Support | DPCo | None | None | None | 2005 | Installed | NO |
| 1-51B-435B-H5791 Support | DPCo | None | None | None | 2005 | Installed | NO |
| | | | | | | | |

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98656161 | 3 of 4 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressure Injection, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1-51B-435B-H5792 Support | DPCo | None | None | None | 2005 | Installed | NO |
| 1-51B-435B-H5793 Support | DPCo | None | None | None | 2005 | Installed | NO |
| 1-51B-435B-H5794 Support | DPCo | None | None | None | 2005 | Installed | NO |
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# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98656161 | 4 of 4 |

). Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Bolting for relief valve 1HP-79 - 5/8" SA193, Gr B7 thrd rod (UTC-1074195) and SA194, Gr 2H nuts (UTC-1071271)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed W. D. Davis Mech. IA Date 5/5/05

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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-1-04 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.

[signature] Commissions NC1444 NIABC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-6-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98656161 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/27/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressure Injection, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| HPI piping | DPCo | None | None | None | Unk | Corrected | NO |
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**7. Description of Work**

NSM-13106 - Portion of piping connected to LDST was re-rated from 100 psig to 150 psig. The system operating pressure was not changed and no components were replaced. Existing components were evaluated for acceptability.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒ Exempt ☐ Other _____

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98656161 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed W. B. Davis Mech. IA Date 5/2/05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-1-04 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.

Inspector's Signature Commissions NC1444 NIABC

National Board, State, Province, and Endorsements

Date 5-6-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98624201 - 01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/30/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Low Pressure Service Water, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Hanger 1-14B-O-479A-H1 | DPC | None | None | None | UNK | Corrected | NO |
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**7. Description of Work**

Hanger was identified to have a damaged U-bolt and undersize welds. It was decided to replace the U-bolt while it was still functional.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other QAF-18

Pressure _____ PSI Test Temperature _____ °F

TR

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98624201 - 01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Replaced 2 U-bolts, hex nuts and hardened washers and made weld repairs to undersize welds.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Basil W. Cam[illegible] Senior Engineer Date 4/30/2005

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1-21-05 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.

[illegible] Commissions NC1444 NIABL

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-5-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98624201 - 02 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/30/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Low Pressure Service Water, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Hanger 1-14-O-479A-H2 | DPC | None | None | None | UNK | Corrected | NO |
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**7. Description of Work**

Hanger was identified to have inadequate gap under U-bolt. It was decided to replace the U-bolt to achieve proper gap.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other QAF-18

Pressure _____ PSI Test Temperature _____ °F

TR

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98624201 - 02 | 2 of 2 |

. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Replaced 2 U-bolts (1/2") , hex nuts and hardened washers.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Basil W. Carney Senior Engineer Date 4/30/2005

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1-21-05 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.

Inspector's Signature Commissions NC 1444 NIABC

National Board, State, Province, and Endorsements

Date 5-5-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98624201 - 03 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/30/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Low Pressure Service Water, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Hanger 1-14-O-479A-H3 | DPC | None | None | None | UNK | Corrected | NO |
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**7. Description of Work**

Hanger was identified to have inadequate gap under U-bolt. It was decided to replace the U-bolt to achieve proper gap.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other QAF-18

Pressure _____ PSI Test Temperature _____ °F

TR

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98624201 - 03 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Replaced 2 U-bolts (1/2") , hex nuts and hardened washers.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Basil W. Campbell Senior Engineer Date 4/30/2005

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1-21-05 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.

Inspector's Signature

Commissions NC1444 NIABC

National Board, State, Province, and Endorsements

Date 5-5-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98624201 - 04 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/30/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Low Pressure Service Water, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Hanger 1-14B-O-479A-H4 | DPC | None | None | None | UNK | Corrected | NO |
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**7. Description of Work**

Hanger was identified to have inadequate gap under U-bolt and undersize welds. It was decided to replace the U-bolt to achieve proper gap.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other QAF-18

Pressure _____ PSI Test Temperature _____ °F

TR

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98624201 - 04 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Replaced 2 U-bolts (1/2") , hex nuts and hardened washers, and made weld repairs to undersize welds.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Basil W. Carney Jr. Senior Engineer Date 4/30/2005

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1-21-05 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.

[signature] Commissions NC 1444 NIABC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-5-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98623111 - 01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/27/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Low Pressure Service Water System, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 3 inch piping components | DPC | None | None | None | 2005 | Installed | NO |
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**7. Description of Work**

Replace existing pipe to cooler flanges due to pitting and elbows to facilitate replacement of the flanges. The seating surface of the flanges have been inspected and it was determined that the flange face was pitted and required replacing. Replaced 6 flanges and 2 elbows.

**8. Test Conducted**

☒ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other _____

Pressure 120 PSI Test Temperature 65 °F

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# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98623111 - 01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Basil W. Carney, Jr. Senior Engineer Date 4/28/2005

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10-24-03 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.

Inspector's Signature

Commissions NC 1444 NIABC

National Board, State, Province, and Endorsements

Date 5-5-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98656161 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/19/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Low Pressure Injection, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1LP-193 | Flowserve | 52BAK | 1431 | UTC1074847 | 2004 | Installed | YES |
| 1LP-194 | Flowserve | 54BAK | 1433 | UTC1074849 | 2004 | Installed | YES |
| Piping | DPCo | None | None | None | 2005 | Installed | NO |
| Support 1-51B-435B-H5795 | DPCo | None | None | None | 2005 | Installed | NO |
| Support 1-51B-435B-H5796 | DPCo | None | None | None | 2005 | Installed | NO |
| Support 1-51B-435B-H5797 | DPCo | None | None | None | 2005 | Installed | NO |
| Support 1-51B-435B-H5798 | DPCo | None | None | None | 2005 | Installed | NO |
| | | | | | | | |
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**7. Description of Work**

NSM-13106AM1 and workorder 98656161 installed two new manual valves in the LPI system. Associated piping and fittings were also installed. Installed four (4) new support restraints on new piping.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☐ Exempt ☐ Other _____

Pressure 75 (min) PSI Test Temperature N.O.T °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98656161 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed W. B. Davis Mech. IA Date 5/05/05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12-26-04 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.

Inspector's Signature

Commissions NC 1444 NIRBC

National Board, State, Province, and Endorsements

Date 5/6/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98721455-01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/24/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressure injection , ASME Class 2

**5.**

(a) Applicable Construction Code: ASME Section III 19 89 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 ____ Edition, ____ Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1HP-65 | Control Components Inc. | 708831-1-3 | none | N/A | UNK | Corrected | YES |
| | | | | | | | |
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**7. Description of Work**

Valve Assembly was installed as preventive maintenance.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other F/V Leak Check

Pressure ____ PSI Test Temperature ____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98721455-01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

10 JRK 4/28/05

❶ Valve assembly for IHP-65, UTC # 1078124, serial number 227953-~~01~~-2, installed.

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## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Engineer Date 4/24/2005

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/13/05 to 4-28-05, 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] Commissions NC1444 NIABC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5/5/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98693300 - 3 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/26/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressure Injection, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1 HP 242 | Borg Warner | Can not read | Can not read | None | UNK | Corrected | YES |
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**7. Description of Work**

Check valve 1 HP 242 was seal weld closed after attempts to disassemble did not work.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other PT & Leak Test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98693300 - 3 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Valve 1 HP 242 is a Borg-Warner stop check valve with a seal weld at the body to bonnet joint. Weld filler material SFA-5.9, ER308 was used to make this weld. Reference Code Interpretation XI-1-83-28R, Vol.26.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Senior Engineer Date 4/26/2005

Owner or Owner's Designee, Title

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4-19-05 to 5-4-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[signature] Commissions NC 1444 NIABC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-4-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98666145-01 | 1 of 3 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/27/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

LPSW, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) _____

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1LPSW-565 | BNL Ind. | A950301-1-15 | | Class 2 | 1999 | Removed | NO |
| 1LPSW-566 | BNL Ind. | A990205-1-9 | | Class 2 | 1999 | Removed | NO |
| | | | | | | | |
| 1LPSW-1054 | Velan | 42025 | | UTC 1074111 | 2003 | Installed | YES |
| 1LPSW-1055 | Velan | 42020 | | UTC 1072430 | 2003 | Installed | YES |
| 1LPSW-1058 | Flowserve | AV-910 | 1262 | UTC 1069163 | 2003 | Installed | YES |
| 1LPSW-1059 | Flowserve | AV-911 | 1263 | UTC 1069164 | 2003 | Installed | YES |
| 1LPSW-1061 | Velan | 42054 | | UTC 1074011 | 2004 | Installed | YES |
| 1LPSW-1062 | Velan | 42042 | | UTC 1074113 | 2004 | Installed | YES |

**7. Description of Work**

NSM ON-13107 Part BM1 modified LPSW piping to disconnect RB Aux Coolers from 1B RBCU LPSW headers and establish supply & return lines to main LPSW headers.

**8. Test Conducted**

☒ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☐ Other _____

Pressure 194 PSI Test Temperature 60 °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98666145-01 | 2 of 3 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/27/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

LPSW, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) _____

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| Piping | DPCo. | NONE | NONE | NONE | | Removed | NO |
| 1) Piping | DPCo. | NONE | NONE | NONE | 2005 | Installed | NO |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| 1-14B-439A-H5773 | DPCo. | NONE | NONE | NONE | 2005 | Installed | NO |
| 14-0-479A-H20E | DPCo. | NONE | NONE | NONE | 2005 | Corrected | NO |
| | | | | | | | |
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# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98666145-01 | 3 of 3 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ 6" - Pipe, Elbows, Flanges, (48) 3/4"nuts, 3/4"threaded Rod, 1/2"nuts, 1/2"threaded rod

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Tony E Hughes Technical Specialist II Date 5-2-05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1-12-05 to 5-3-05, 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.

Inspector's Signature

Commissions NC 1444 NIBSL

National Board, State, Province, and Endorsements

Date 5-4-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98703546 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/19/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp: Not Applicable<br>Authorization Number: Not Applicable<br>Expiration Date: Not Applicable |

**4. Identification of System, ASME Class**

Low Pressure Injection, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 ~~68~~ 69 WGD 5/3/05 Edition, ~~06/68~~ NO WGD 5/3/05 Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1LPIFE0005 Flanges | UNK | NONE | NONE | NONE | UNK | CORRECTED | NO |
| | | | | | | | |
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**7. Description of Work**

Modification ONOE-18851 and workorder 98703546 replaced orifice plate 1LPIFE0005 including flange bolting material and gaskets.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☐ Exempt ☐ Other _____

Pressure 200 PSI Test Temperature 200 °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98703546 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Replaced (16) 1" X 7 5/8" long studs SA193 B7 - UTC 1074196

❷ Replaced (32) 1"Nuts SA194 2H - UTC 1071274

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed W. D. Davis Mech. IA Date 4/19/05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2-21-05 to 5-3-05, 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.

Inspector's Signature

Commissions NC1444 NBBC

National Board, State, Province, and Endorsements

Date 5-4-05

## Enclosure 8.2 - VERIFICATION OF ACCEPTABILITY/SUITABILITY EVALUATION

| | |
|---|---|
| *Prior to returning an item to service, the suitability of repair/replaced items shall be evaluated. Like items may be grouped together or use as many additional sheets as needed.* | Work Order Number: 98703546 |

ITEM 1" Studs,8UNC-2A,SA-193,B-7 ID or Serial Number SC 297415
ITEM 1" Nuts,8UNC-2B,SA-194,2H ID or Serial Number SC 131798
ITEM _____ ID or Serial Number _____

Explain why the Repair/Replacement was required:
Flange studs and nuts replaced during 1LPIFE0005 orifice changeout per Minor Modification ONOE-18851. Replaced 16 studs and 32 nuts.

Has the item(s) undergoing Repair/Replacement (listed above) been evaluated for the anticipated service conditions and design parameters? YES ☒ NO ☐

What type of Repair/Replacement activity will be performed? *(Check all that apply)*

☐ A.) Repair by welding (no replacement parts)
☒ B.) Replace an existing item
☐ C.) Add a new item to an existing system
☐ D.) Add a new system

*IF either A or B is checked, proceed to next question. Otherwise skip down to signature block*

Is the intended life of the new item LESS THAN the remainder of the design life of the old item?
YES ☐ NO ☒

**IF YES,** notify the Component or System Engineer to review PM Action Tracking to require action prior to the end of the intended life.
Person Notified _____

Is this Repair/Replacement due to either a design or specification deficiency? YES ☐ NO ☒

**IF YES,** verify PIP or MOD written to correct:
Number _____

Was there a failure or significant degradation of the old item? YES ☐ NO ☒

**IF NO,** was there any degradation, premature wear or does the old item have a history of multiple repairs or replacements? YES ☐ NO ☒

**IF YES,** What was the cause of this failure or condition?

**IF YES,** What is the corrective action being taken to remedy this failure or condition?

Sign below and include this sheet in Traveler Package with the W/O

Completed By: [signature] 4-6-05 Reviewed By: [signature] 4-6-05

## Enclosure 8.3 - RECONCILIATION REPORT

| *Prior to returning an item to service, any differences in Code year and Specifications (design, material, weight, etc) shall be reconciled. Like items may be grouped together or use as many additional sheets as needed.* | Work Order Number: 98703546 |
|---|---|

| | | | |
|---|---|---|---|
| ITEM | 1" Studs,8UNC-2A,SA-193,B-7 | ID or Serial Number | SC 297415 |
| ITEM | 1" Nuts,8UNC-2B,SA-194,2H | ID or Serial Number | SC 131798 |
| ITEM | | ID or Serial Number | |

For any box checked **"YES"**, complete reconciliation evaluation below:

| **Components (pumps, vessels, complete piping systems)** | YES | NO | N/A |
|---|---|---|---|
| Owner Requirements- Any deviations from Design Spec? N/A | ☐ | ☐ | ☒ |
| Code Design Requirements- Any deviations? *(see instructions)* | ☐ | ☐ | ☒ |
| Material Requirements- Any changes from original component? | ☐ | ☐ | ☒ |
| **Valves, Flanged Components, Materials, Pressure Boundary Parts, Other** | YES | NO | N/A |
| Owner Requirements- Any deviations from Design Spec? N/A | ☐ | ☐ | ☒ |
| Code Design Requirements- Any deviations? *(see instructions)* | ☐ | ☐ | ☒ |
| Material Requirements- Item listed in Reedy Report Table 5-1 or 5-2? | ☐ | ☐ | ☒ |
| **Piping, Fittings, Flanges, Flange Bolting, etc from ONS Pipe Spec** | YES | NO | N/A |
| Owner Requirements- Any deviations from Design Spec? OS-0243.00-00-0001 | ☐ | ☒ | ☐ |
| Code Design Requirements- Any deviations? *(see instructions)* | ☐ | ☒ | ☐ |
| Material Requirements- Item listed in Reedy Report Table 5-1 or 5-2? | ☐ | ☒ | ☐ |
| **Supports** | YES | NO | N/A |
| Owner Requirements- Any deviations from Design Spec? N/A | ☐ | ☐ | ☒ |

Evaluation for **any** deviations or **any** boxes checked **"YES"** above:

Sign below and include this sheet in Traveler Package with the W/O

Completed By: MTurrin 14-6-05 Reviewed By: JLHumm 10/06/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-16 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressure Injection - High Pressure Portion, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Snubber 51A-0-479A-H1E | Grinnell | 18798 | N/A | N/A | UNK | Removed | NO |
| Snubber 51A-0-479A-H1E | Anvil | 35406 | N/A | N/A | UNK | Installed | NO |
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**7. Description of Work**

Replaced existing New Miller cylinder with a Anvil Config. A.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-~~08~~ 16 BWC | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature], Senior Eng. Date 4/27/05

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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-3-05, 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.

[signature] Commissions NC 1444 NBBC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5/3/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| New Miller Cylinder on Snubber 50-0-480A-H11 | New Miller | 74355669-867 | N/A | N/A | UNK | Removed | NO |
| Hydraulic snubber upgrade kit | Anvil | 36042 | N/A | N/A | UNK | Installed | NO |
| Hydraulic snubber seal kit | Anvil | N/A | N/A | N/A | UNK | Installed | NO |
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**7. Description of Work**

Replaced existing New Miller cylinder with a Anvil Config. A.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [illegible], Senior Eng. Date 4/27/05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-3-05, 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.

Inspector's Signature

Commissions NC1444 NIABC

National Board, State, Province, and Endorsements

Date 5-3-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-10 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| New Miller Cylinder on Snubber 50-0-479A-H1A | New Miller | 7612490-292 | N/A | N/A | UNK | Removed | NO |
| Hydraulic snubber upgrade kit | Anvil | 36036 | N/A | N/A | UNK | Installed | NO |
| Hydraulic snubber seal kit | Anvil | N/A | N/A | N/A | UNK | Installed | NO |
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**7. Description of Work**

Replaced existing New Miller cylinder with a Anvil Config. A.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-10 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [illegible], Senior Eng. Date 4/27/05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-3-05, 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.

[illegible] Commissions NC 1444 NIAOC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-3-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-05 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Main Steam, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| New Miller Cylinder on Snubber 01A-0-481B-H10B | New Miller | 76135959-5 | N/A | N/A | UNK | Removed | NO |
| Hydraulic snubber upgrade kit | Anvil | 36026 | N/A | N/A | UNK | Installed | NO |
| Hydraulic snubber seal kit | Anvil | N/A | N/A | N/A | UNK | Installed | NO |
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**7. Description of Work**

Replaced existing New Miller cylinder with a Anvil Config. A.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-05 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature], Senior Eng. Date 4/27/05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-05 to 5-3-05, 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.

[signature] Commissions NL1444N/ABC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-3-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-08 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable<br>Authorization Number<br>Not Applicable<br>Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Main Steam, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Snubber 1-01A-0-481B-H12B | Grinnell | 16201 | N/A | N/A | UNK | Removed | NO |
| Snubber 1-01A-0-481B-H12B | Anvil | 35032 | N/A | N/A | UNK | Installed | NO |
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**7. Description of Work**

Replaced existing New Miller cylinder with a Anvil Config. A.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-08 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [illegible], Senior Eng. Date 4/27/05

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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-3-05, 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.

[illegible] Commissions NC1444 NBIBC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5/3/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-07 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/21/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Main Steam, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| New Miller Cylinder on Snubber 01A-0-481B-H11B | New Miller | UNK | N/A | N/A | UNK | Removed | NO |
| Hydraulic snubber upgrade kit | Anvil | 36029 | N/A | N/A | UNK | Installed | NO |
| Hydraulic snubber seal kit | Anvil | N/A | N/A | N/A | UNK | Installed | NO |
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**7. Description of Work**

Replaced existing New Miller cylinder with a Anvil Config. A.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419-07 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [illegible], Senior Eng. Date 4/27/05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-3-05, 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.

[illegible] Commissions NC 1444 NIABC

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-3-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419 - 19 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/25/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable<br>Authorization Number<br>Not Applicable<br>Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Main Steam, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1 MS HS 21601A | ITT Grinnell | 18588 | None | None | UNK | Removed | NO |
| 1 MS HS 21601A | Anvil | 35943 | None | None | UNK | Installed | NO |
| | | | | | | | |
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**7. Description of Work**

Snubber 1-01A-O-550-R12(A) was remove to be upgraded to a 'Configuration A' but after the snubber was removed it was decided to just replace the snubber at this time and perform the upgrade later.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Visual(configuration)

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98694419 - 19 | 2 of 2 |

). Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Basil W. Carey Senior Engineer Date 4/26/2005

Owner or Owner's Designee, Title

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-9-04 to 5-2-05, 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] Commissions NC1444 NIABL

Inspector's Signature National Board, State, Province, and Endorsements

Date 5-3-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98646817 - 1 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/26/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressure Injection, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1 1/2 inch Pipe SA 376 TP304 | DPC | None | None | None | 2005 | Installed | NO |
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**7. Description of Work**

Relocate valve 1 HP-250 to permit future maintenance on this valve. To aid in the relocatiion process the pipe on each end of this valve was replaced.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other VT-2 Leak Test

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98646817 - 1 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Senior Engineer Date 4/26/2005

Owner or Owner's Designee, Title

**CERTIFICATE OF INSERVICE INSPECTION**

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/17/04 to 4/25/05, 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] Commissions NC1444 NIABC

Inspector's Signature National Board, State, Province, and Endorsements

Date 4/27/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98721454-01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/24/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressure injection , ASME Class 2

**5.**

(a) Applicable Construction Code: ASME Section III 19 89 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 ____ Edition, ____ Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1HP-64 | Control Components Inc. | 708831-1-2 | none | N/A | UNK | Corrected | YES |
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**7. Description of Work**

Valve Assembly was installed as preventive maintenance.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other F/V Leak Check

Pressure ____ PSI Test Temperature ____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98721454-01 | 2 of 2 |

**9. Remarks (Applicable Manufacturer's Data Reports to be attached)**

10 JRK 4/28/05

❶ Valve assembly for 1HP-64, UTC # 1070750, serial number 227953-~~01~~-1, installed.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Engineer Date 4/24/2005

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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/13/05 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.

Nancy C Ritchie Slaughter Commissions NC1169ABNI

Inspector's Signature National Board, State, Province, and Endorsements

Date 4/29/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98640356-01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/26/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Valve, 1RC-205 | KSB | 700 | 990 | stock code 321127 | 1998 | Removed | NO |
| ❶Valve,1RC-205 | KSB | 014606/1/8 | 1105 | stock code 321127 | 2000 | Installed | NO |
| ❷Tube to Pipe Connector | Swagelok | none | none | part number SS-810-1-8W | UNK | Installed | NO |
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**7. Description of Work**

Replaced valve with like for like replacement along with a tube to pipe connector.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Visual Leakage

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98640356-01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Replaced valve 1RC-205 with a like for like. Valve item number DMV-789, stock code: 321127, UTC #: 1028160.

❷ Installed Pipe to Tube Connector. Stock code: 276906, UTC #: 1003951.

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## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Engineer Date 4-26-05

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1-25-05 to 4-28-05, 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] Commissions NC1444 NIAB

Inspector's Signature National Board, State, Province, and Endorsements

Date 4/28/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98721457-01 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/24/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

High Pressure injection , ASME Class 2

**5.**

(a) Applicable Construction Code: ASME Section III 19 89 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 ____ Edition, ____ Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1HP-67 | Control Components Inc. | 708831-1-10 | none | N/A | UNK | Corrected | YES |
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**7. Description of Work**

Valve Assembly was installed as preventive maintenance.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other F/V Leak Check

Pressure ____ PSI Test Temperature ____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98721457-01 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Valve assembly for 1HP-67, UTC # 1073945, serial number 225245-020-1, installed.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed [signature] Engineer Date 4/24/2005

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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/13/05 to 4/28/05, 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] Commissions NC1169ABNI

Inspector's Signature National Board, State, Province, and Endorsements

Date 4/28/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98714300-09 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/5/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable<br>Authorization Number<br>Not Applicable<br>Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Low Pressure Injection, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 89 Edition, No Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1LPIFE0004 | Bailey Meter | UNK | None | None | UNK | Removed | NO |
| ❶ 1LPIFE0004 | DPCo | DPC0007 | None | UTC 1067429 | UNK | Installed | NO |
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**7. Description of Work**

Modification ONOE-18851 replaced orifice 1LPIFE0004 including flange bolting and gaskets in Low Pressure Injection piping.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☐ Exempt ☐ Other _____

Pressure 200 PSI Test Temperature 200 °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| HM 98714300 ~~98671111~~ | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

HM 4-6-05

❶ Replaced (16) 1",7-5/8" long studs UTC 10741956 & (32) 1" nuts, UTC 1071274, on 10" flange at 1LPIFE0004

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed M Bunn, Engineer Date 4-5-05

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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2-21-05 to 4-6-05, 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.

Inspector's Signature

Commissions NC1444 NIABC

National Board, State, Province, and Endorsements

Date 4-11-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98672635 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/5/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Low Pressure Injection (LPI) , ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1B LPI Cooler (1) | Atlas Industrial Manufacturing | 885 | 735 | Tag 1LP-C1B | 1969 | Corrected | YES |
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**7. Description of Work**

Preventative maintenance eddy current testing of the 1B LPI Cooler tubing required disassembly/reassembly of the cooler channel head end cover. Some of the end cover bolting material (1-1/4 inch dia. nuts) required replacement due to surface degradation.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☐ Exempt ☐ Other _____

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98672635 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Replaced 20 1-1/4 inch diameter nuts on the 1B LPI Cooler end cover (UTC # 0001067845, Stock Code # 131861)

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## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed James H Patton Date April 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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/25/05 to 4/27/05, 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.

Nancy C Ritchie Slaughter Commissions NC1169ABNI

Inspector's Signature National Board, State, Province, and Endorsements

Date 4/27/05

## Enclosure 8.2 - VERIFICATION OF ACCEPTABILITY/SUITABILITY EVALUATION

| *Prior to returning an item to service, the suitability of repair/replaced items shall be evaluated. Like items may be grouped together or use as many additional sheets as needed.* | Work Order Number: 98672635 |
|---|---|

ITEM 1-1/4-inch 8-UN-2B nut, Stock Code 131861, UTC # 0001067845 — ID or Serial Number _____
ITEM _____ — ID or Serial Number _____
ITEM _____ — ID or Serial Number _____

Explain why the Repair/Replacement was required:
Nuts were corroded/damaged such that reuse was not desired and/or material markings were illegible and therefore rejected by QC.

Has the item(s) undergoing Repair/Replacement (listed above) been evaluated for the anticipated service conditions and design parameters? YES ☒ NO ☐

What type of Repair/Replacement activity will be performed? *(Check all that apply)*

☐ A.) Repair by welding (no replacement parts)
☒ B.) Replace an existing item
☐ C.) Add a new item to an existing system
☐ D.) Add a new system

*IF either A or B is checked, proceed to next question. Otherwise skip down to signature block*

Is the intended life of the new item LESS THAN the remainder of the design life of the old item?
YES ☐ NO ☒

**IF YES,** notify the Component or System Engineer to review PM Action Tracking to require action prior to the end of the intended life.
Person Notified _____

Is this Repair/Replacement due to either a design or specification deficiency? YES ☐ NO ☒

**IF YES,** verify PIP or MOD written to correct:
Number _____

Was there a failure or significant degradation of the old item? YES ☐ NO ☒

**IF NO,** was there any degradation, premature wear or does the old item have a history of multiple repairs or replacements? YES ☐ NO ☒

**IF YES,** What was the cause of this failure or condition? There was no failure. This is no significant history of LPI Cooler channel head cover bolting material degradation that raises concern for use of the current nut material in this application. As-found condition of the nuts was no more degraded than what might reasonably be expected.

**IF YES,** What is the corrective action being taken to remedy this failure or condition? No corrective action is required.

Sign below and include this sheet in Traveler Package with the W/O

Completed By: James H Batton 4/5/05 Reviewed By: UA

## Enclosure 8.3 - RECONCILIATION REPORT

| *Prior to returning an item to service, any differences in Code year and Specifications (design, material, weight, etc) shall be reconciled. Like items may be grouped together or use as many additional sheets as needed.* | Work Order Number: 98672635 |
|---|---|

ITEM 1-1/4-inch nut, Stock Code 131861, UTC # 0001067845 — ID or Serial Number _____
ITEM _____ — ID or Serial Number _____
ITEM _____ — ID or Serial Number _____

For any box checked **"YES"**, complete reconciliation evaluation below:

| **Components (pumps, vessels, complete piping systems)** | YES | NO | N/A |
|---|---|---|---|
| Owner Requirements- Any deviations from Design Spec? List Spec No. here or N/A | ☐ | ☐ | ☒ |
| Code Design Requirements- Any deviations? *(see instructions)* | ☐ | ☐ | ☒ |
| Material Requirements- Any changes from original component? | ☐ | ☐ | ☒ |
| **Valves, Flanged Components, Materials, Pressure Boundary Parts, Other** | YES | NO | N/A |
| Owner Requirements- Any deviations from Design Spec? List Spec No. here or N/A | ☐ | ☐ | ☒ |
| Code Design Requirements- Any deviations? *(see instructions)* | ☐ | ☐ | ☒ |
| Material Requirements- Item listed in Reedy Report Table 5-1 or 5-2? | ☐ | ☐ | ☒ |
| **Piping, Fittings, Flanges, Flange Bolting, etc from ONS Pipe Spec** | YES | NO | N/A |
| Owner Requirements- Any deviations from Design Spec? OS-0243.00-00-0001 | ☐ | ☒ | ☐ |
| Code Design Requirements- Any deviations? *(see instructions)* | ☐ | ☒ | ☐ |
| Material Requirements- Item listed in Reedy Report Table 5-1 or 5-2? | ☐ | ☒ | ☐ |
| **Supports** | YES | NO | N/A |
| Owner Requirements- Any deviations from Design Spec? OS-0027.00-00-0001 | ☐ | ☐ | ☒ |

Evaluation for any deviations or any boxes checked **"YES"** above:

No deviations. The LPI Cooler manufacturer's drawing (OM 201-286) identifies SA-194 Gr 2H nuts as the original bolting material for this component. The ONS Pipe Specification, OS-243.00-00-0001, Appendix E, Table E1, identifies that SA194 Gr 7 may be substituted for Grade 2H. A review of the Reedy Report shows that there have been no changes in the material property requirements for SA194 since 1969, the year of manufacturer of the 1B LPI Cooler.

Sign below and include this sheet in Traveler Package with the W/O

Completed By: James H Patton 4/5/05 Reviewed By: NA BNC /

# FORM NIS-2 OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS
## As Required By The Provisions Of The ASME Code Section XI

1. Owner Duke Power Company
   Address 526 S. Church Street, Charlotte, NC 28201-1006

1a. Date 3-24-04

Sheet 1 of 1

2. Plant Oconee Nuclear Station
   Address 7800 Rochester Hwy. Seneca, S.C. 29672

2a. Unit ☒ 1 ☐ 2 ☐ 3 ☐ Shared (specify Units_____)

3a. Work Order # 98583602-46
Repair Organization Job #

3. Work Performed By Duke Power Company
   Address 526 S. Church Street, Charlotte, NC 28201-1006
   Type Code Symbol Stamp N/A Authorization No. N/A Expiration Date N/A

3b. NSM or MM # NA

4. Identification of System LOW PRESSURE SERVICE WATER Class 2

5. (a) Applicable Construction Code ANSI B31.1 19 67 Edition, NA Addenda, NA Code Cases
   (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989, No Addenda (1992 through 1992 Addenda for Class MC and CC and their supports.)

6. Identification of Components Repaired or Replaced and Replacement Components

| | Column 1 | Column 2 | Column 3 | Column 4 | Column 5 | Col. 6 | Column 7 | Column 8 |
|---|---|---|---|---|---|---|---|---|
| | Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board Number | Other Identification | Year Built | Repaired, Replaced, or Replacement | ASME Code Stamped (yes or no) |
| A | BOLTING | NA | NA | NA | NA | 7/73 | ☐ Repaired ☐ Replaced ☒ Replacement | ☒ No ☐ Yes |
| B | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| C | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| D | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| E | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |
| F | | | | | | | ☐ Repaired ☐ Replaced ☐ Replacement | ☐ No ☐ Yes |

# Form NIS-2 (Back)

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

7. Description of Work • REPLACED 16-5/8X5" STUDS & 32-5/8 NUTS ON UPPER & LOWER AIR COOLER INLET & OUTLET FLAN ON 1B1 R.C. PUMP. • REPLACED 8-5/8 X5" STUDS & 16 NUTS 5/8 ON UPPER BEARING OIL COOLER ON INLET & OUTLET - Co BEL

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

| | | | |
|---|---|---|---|
| Pressure | _____ psig | Test Temp. | _____ °F |
| Pressure | _____ psig | Test Temp. | _____ °F |
| Pressure | _____ psig | Test Temp. | _____ °F |

9. Remarks FLANGES ON 1B1 R.C. PUMP.

(Applicable Manufacturer's Data Records to be Attached)

## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp N/A

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

Signed A. L. Blackburn QA TECH. SPEC Date 3-24-04
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 Providence of North Carolina and employed by HSB CT have inspected the components described in this Owner's Report during the period 3/25/04 to 3/25/04; 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.

Nonny Ritchie Slaughter Commissions NC1169 AB NI
Inspector's Signature National Board, State, Providence and Endorsements

Date 3/25/04

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98656161 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>4/26/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp: Not Applicable<br>Authorization Number: Not Applicable<br>Expiration Date: Not Applicable |

**4. Identification of System, ASME Class**

Liquid Waste Disposal System, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 1LWD-99 | Velan | UNK | UNK | None | UNK | Removed | NO |
| 1LWD-103 | Velan | UNK | UNK | None | UNK | Removed | NO |
| 1LWD-99 | Flowserve | 51BAK | 1430 | UTC-1074726 | 2004 | Installed | YES |
| 1LWD-103 | Flowserve | 53BAK | 1432 | UTC-1074848 | 2004 | Installed | YES |
| ❶Piping | DPCo | None | None | None | Unk | Corrected | NO |
| Piping | DPCo | None | None | None | 2005 | Installed | YES |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

**7. Description of Work**

NSM-ON-13106, Piping and valves in downstream of Penetration 40 upgraded from Class 3 to Class 2. In addition, new piping is routed to new HPI piping.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☒ Nominal Operating Pressure ☐ Exempt ☐ Other _____

Pressure 65 PSI Test Temperature N.O.T. °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98656161 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Portion of LWD piping was removed with valves to upgrade piping to Class 2.

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed W. B. Davis Mech. IA Date 5/2/05

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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-1-04 to 5-2-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions NC1444 NIABC

National Board, State, Province, and Endorsements

Date 5-2-05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98640356 - 08 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/10/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Reactor Coolant System, ASME Class 1

**5.**

(a) Applicable Construction Code: USAS B31.7 19 69 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Tubing between 1RC-205 & orifice assembly | DPC | None | None | None | 2005 | Installed | NO |
| | | | | | | | |
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**7. Description of Work**

Tubing and compression fittings between 1RC-205 and the orifice assembly was replaced

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other Functional Leak Ck.

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98640356 - 08 | 2 of 2 |

9. Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ About 5 feet of ½ inch stainless steel SA 213 TP304, UTC # 1074683, HT # 500445 and 2 Swagelok tube unions, ½ inch stainless steel SA 479 Grade 316, UTC # 1074988, Part # SS-810-6 were replaced.

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## CERTIFICATE OF COMPLIANCE

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Basil W. Carey II Senior Engineer Date 5/11/2005

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 NORTH CAROLINA and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5-10-05 to 5-31-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature

Commissions NC1444 NIRBC

National Board, State, Province, and Endorsements

Date 6/1/05

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98724355-07 | 1 of 2 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/2/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Steam Generator - Reactor Coolant System, Feedwater System , ASME Class 1

**5.**

(a) Applicable Construction Code: ASME Section III 19 89 Edition, No Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| Steam Generator, Inspection Port Diaphragm (1) | B&W Canada | 006K02 | 206 | NONE | 2003 | Corrected | YES |
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**7. Description of Work**

placement of 1B Steam Generator secondary side Inspection Port diaphragm.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☒ Other pressure

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98693918 | 1 of 3 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/9/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp: Not Applicable<br>Authorization Number: Not Applicable<br>Expiration Date: Not Applicable |

**4. Identification of System, ASME Class**

Steam Generator Flush & Drains, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 68 Edition, 06/68 Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 04A-0-478A-H26A (1) | DPCO | None | None | None | 2005 | Installed | NO |
| 04A-0-479A-H27A | DPCO | None | None | None | 2005 | Removed | NO |
| 04A-0-478A-H24B (1) | DPCO | None | None | None | 2005 | Installed | NO |
| 04A-0-478A-H25A (1) | DPCO | None | None | None | 2005 | Installed | NO |
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**7. Description of Work**

OE-100018, Modify 5 piping supports.

**8. Test Conducted**

☐ Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐ Exempt ☑ Other STRUCTURAL INSPN.

Pressure _____ PSI Test Temperature _____ °F

# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98693918 | 2 of 3 |

| 1. Owner | 2. Plant | Unit |
|---|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Oconee Nuclear Station<br>7800 Rochester Hwy<br>Seneca, SC 29672 | ONS - 1 |
| | | Date<br>5/9/2005 |

| 3. Work Performed by | |
|---|---|
| Duke Power Company<br>526 South Church Street<br>Charlotte, NC 28201-1006 | Type Code Symbol Stamp<br>Not Applicable |
| | Authorization Number<br>Not Applicable |
| | Expiration Date<br>Not Applicable |

**4. Identification of System, ASME Class**

Drains, Reactor Building Components, ASME Class 2

**5.**

(a) Applicable Construction Code: USAS B31.7 19 68 Edition, 06/68 Addenda, No Code Case

(b) Applicable Edition Section XI Utilized For R/R Activity 19 98 Edition, 2000 Addenda.

(c) Applicable Section XI Code Case(s) None

**6. Identification of Components**

| Name of Component | Name of Manufacturer | Manufacturer Serial Number | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped (Yes / No) |
|---|---|---|---|---|---|---|---|
| 59-0-478A-H27 (1) | DPCO | None | None | None | 2005 | Installed | NO |
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# Form NIS-2 Owner's Report for Repair/Replacement Activity

As required by the provisions of the ASME Code Section XI

| Work Order Number | Sheet |
|---|---|
| 98693918 | 3 of 3 |

). Remarks (Applicable Manufacturer's Data Reports to be attached)

❶ Modified supports by adding structural steel elements

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**CERTIFICATE OF COMPLIANCE**

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

Type Code Symbol Stamp Not Applicable

Certificate of Authorization Number Not Applicable Expiration Date Not Applicable

Signed Martin Hemphill Martin Hemphill, Engineer Date 5/9/2005

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 North Carolina and employed by HSB CT of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11-17-04 to 5-9-05, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Inspector's Signature Commissions NC1444 NIASC

National Board, State, Province, and Endorsements

Date 5/9/05

# STEAM GENERATOR PRESERVICE WELD EXAMINATION

| Modification Package No. | Work Package No. | Work Order No. | Field Weld No. | ISI Class | Preservice NDE |
|---|---|---|---|---|---|
| ON 13086 AM1 | 13080A | 98513884 | 1MS-0074-15V R2 | 2 | VT, MT, RT, UT |
| ON 13086 AM1 | 13080A | 98513884 | 1MS-0074-16V R1 | 2 | VT, MT, RT, UT |
| ON 13086 AM1 | 13080A | 98513884 | 1MS-0076-12V R4 | 2 | VT, MT, RT, UT |
| ON 13086 AM1 | 13080A | 98513884 | 1MS-0076-13V | 2 | VT, MT, RT, UT |
| ON 13086 AM1 | 13080B | 98513915 | 1MS-0068-35V R3 | 2 | VT, MT, RT, UT |
| ON 13086 AM1 | 13080B | 98513915 | 1MS-0068-36V R2 | 2 | VT, MT, RT, UT |
| ON 13086 AM1 | 13080B | 98513915 | 1MS-0069-35V R2 | 2 | VT, MT, RT, UT |
| ON 13086 AM1 | 13080B | 98513915 | 1MS-0069-36V R1 | 2 | VT, MT, RT, UT |
| ON 13086 AM2 | 13085A | 98513919 | 1FDW-0250-67V R2 | 2 | VT, MT, RT, UT |
| ON 13086 AM2 | 13085A | 98513919 | 1FDW-0250-69V | 2 | VT, MT, RT, UT |
| ON 13086 AM2 | 13085A | 98513919 | 1FDW-0250-72V | 2 | VT, MT, RT, UT |
| ON 13086 AM2 | 13085A | 98513919 | 1FDW-0250-74V R3 | 2 | VT, MT, RT, UT |
| ON 13086 AM2 | 13085B | 98513922 | 1FDW-0249-68V | 2 | VT, MT, RT, UT |
| ON 13086 AM2 | 13085B | 98513922 | 1FDW-0249-70V | 2 | VT, MT, RT, UT |
| ON 13086 AM2 | 13085B | 98513922 | 1FDW-0249-73V | 2 | VT, MT, RT, UT |
| ON 13086 AM2 | 13085B | 98513922 | 1FDW-0249-75V | 2 | VT, MT, RT, UT |
| ON 13086 AM3 | 13075A | 98513924 | 1FDW-0207-85V R1 | 3 | VT, MT, RT |
| ON 13086 AM3 | 13075A | 98513924 | 1FDW-0207-86V R3 | 2 | VT, MT, RT, UT |

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## STEAM GENERATOR PRESERVICE WELD EXAMINATION

| Modification Package No. | Work Package No. | Work Order No. | Field Weld No. | ISI Class | Preservice NDE |
|---|---|---|---|---|---|
| ON 13086 AM3 | 13075A | 98513924 | 1FDW-0207-87V R1 | 3 | VT, MT, RT |
| ON 13086 AM3 | 13075A | 98513924 | 1FDW-0207-88V R1 | 2 | VT, MT, RT |
| ON 13086 AM3 | 13075B | 98513925 | 1FDW-0182-23V R1 | 2 | VT, MT, RT, UT |
| ON 13086 AM3 | 13075B | 98513925 | 1FDW-0182-24V | 2 | VT, MT, RT, UT |
| ON 13086 AM4 | 13065A | 98513935 | 1RC-289-5V | 1 | VT, MT, RT, UT |
| ON 13086 AM4 | 13065A | 98513935 | 1RC-289-6V | 1 | VT, MT, RT, UT |
| ON 13086 AM4 | 13065A | 98513935 | 1RC-289-7V | 1 | VT, MT, RT, UT |
| ON 13086 AM4 | 13065A | 98513935 | 1RC-289-8V | 1 | VT, MT, RT, UT |
| ON 13086 AM4 | 13065B | 98514007 | 1RC-289-1V | 1 | VT, MT, RT, UT |
| ON 13086 AM4 | 13065B | 98514007 | 1RC-289-2V | 1 | VT, MT, RT, UT |
| ON 13086 AM4 | 13065B | 98514007 | 1RC-289-3V | 1 | VT, MT, RT, UT |
| ON 13086 AM4 | 13065B | 98514007 | 1RC-289-4V | 1 | VT, MT, RT, UT |
| ON 13086 AM5 | 13522A | 98514043 | 1FDW-0173-26V | 2 | VT, RT |
| ON 13086 AM5 | 13522A | 98514043 | 1FDW-0174-49V R1 | 2 | VT, RT |
| ON 13086 AM5 | 13522A | 98514043 | 1FDW-0174-56V | 2 | VT, RT |
| ON 13086 AM5 | 13522A | 98514043 | 1FDW-0244-234V | 2 | VT, RT |
| ON 13086 AM5 | 13522A | 98514043 | 1FDW-0264-233V | 2 | VT, RT |
| ON 13086 AM5 | 13522A | 98514043 | 1FDW-0264-238V | 2 | VT, RT |

# STEAM GENERATOR PRESERVICE WELD EXAMINATION

| Modification Package No. | Work Package No. | Work Order No. | Field Weld No. | ISI Class | Preservice NDE |
|---|---|---|---|---|---|
| ON 13086 AM5 | 13522B | 98514046 | 1FDW-0169-67V | 2 | VT, RT |
| ON 13086 AM5 | 13522B | 98514046 | 1FDW-0169-68V | 2 | VT, RT |
| ON 13086 AM5 | 13522B | 98514046 | 1FDW-0171-54V R1 | 2 | VT, RT |
| ON 13086 AM5 | 13522B | 98514046 | 1FDW-0172-32V R1 | 2 | VT, RT |
| ON 13086 AM5 | 13522B | 98514046 | 1FDW-0172-37V | 2 | VT, RT |

Date: 05/10/05

Sheet: 1 of 1

TO: ONS ISIM Plan Manager

FROM: ONS QA Tech. Support

RE: **PRESERVICE EXAMINATIONS OF CLASS 1 & 2 WELDS**

As required by ASME Section XI 1998 Edition with 2000 addenda. Pre-service examinations were performed on ISI Class 1 & 2 welds made during the U1EOC22 outage timeframe. The following is a list of the welds that received pre-service examinations during this outage timeframe.

| WORK ORDER NUMBER | WELD NUMBER | ISI CLASS | INSPECTION TYPE | | | |
|---|---|---|---|---|---|---|
| | | | MT | PT | RT | UT |
| 98656161 | 1HP-0468 - 4, 5, 7, 6, 8, 9, 10, 11, 12 13, 14, 15, 16, 17, 18, 19, 20, 21 & 22 | 2 | | X | | |
| 98656161 | 1HP-0469 - 1, 2, 3, 4, 5, 10, 11, 12, &15 | 2 | | X | | |
| 98656161 | 1HP-0470 - 1, 2, 3, 4, 5, 10, 11, 12, & 15 | 2 | | X | | |
| 98656161 | 1HP-0471 - 1, 2, 3, 4, 5, 6, 7, 11, &16 | 2 | | X | | |
| 98656161 | 1HP-0472 - 1, 2, 3, 4, 5, 6, 7, 11, & 16 | 2 | | X | | |
| 98666145 | 1LPS-0746 - 2, 3, 4, 5, 6, 7, 8 & 9 | 2 | | X | | X |
| 98666145 | 1LPS-0750 - 1, 2, 3, 4, & 5 | 2 | | X | | X |
| 98666145 | 1LPS-0751 - 13, 14, 15, 16, 17, 18, & 19 | 2 | | X | | X |
| 98666145 | 1LPS-0753 - 1, 2, 3, 4, & 5 | 2 | | X | | X |
| | | | | | | |
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Prepared By: John R. Bryant

## 6.0 *Pressure Testing*

This is a two-part summary showing a compilation of Class 1 and Class 2 pressure tests conducted from refueling outage EOC-21 through refueling outage EOC-22. The first part of this summary, titled "*Third Period / Third Interval Summary,*" is a completion status for the third period of the third 10-year interval. The second part, titled "*First Period / Fourth Interval Summary,*" is a completion status for the first period of the fourth 10-year interval.

*Third Period / Third Interval Summary*

Table 6-1 shows the number of the Class 1 pressure tests conducted to fulfill the requirements of the third inspection period of the third 10-year interval. There was no through-wall leakage observed during the pressure test.

**Table 6-1**

| *Examination Category* | *Test Requirement* | *Total Examinations Credited Since Refueling Outage 21* |
|---|---|---|
| B-P | System Hydrostatic Test (IWB-5222) | 1[1] |

Table 6-2 shows a completion status of pressure tests conducted during the third period of the third ten-year interval

***Table 6-2***

| *Examination Category* | *Test Requirement* | *Total Examinations Required For This Period* | *Total Examinations Credited For This Period* | *(%) Examinations Complete For This Period* |
|---|---|---|---|---|
| B-E | System Hydrostatic Test (IWB-5222) | 1 | 1 | 100% |
| | | | | |
| B-P | System Leakage Test (IWB-5221) | 1 | 1 | 100% |
| B-P | System Hydrostatic Test (IWB-5222) | 6 | 1[6] | 100% |
| | | | | |
| C-H | System Inservice/Functional Test (IWC-5221) | 10 | 10 | 100% |

[1] Reference Relief Requests Serial No. 04-ON-012 and Serial No. 04-ON-013 for Category B-P Hydrostatic test zones.

The Class 1 (Category B-P) hydrostatic test is required once during each 10-year interval. Table 6-3 shows the completion data of the Class 1 (Category B-P) hydrostatic test conducted during refueling cycle EOC22. This test was for the isolated area between two closed valves and was not part of the Class 1 Leakage Test boundary that is required each refueling outage. Therefore, one test was not conducted to satisfy two different interval requirements.

| Table 6-3 Detailed Class 1 Listing | | | |
|---|---|---|---|
| **Zone Number** | **Boundary Dwg** | **EOC22 Completion Status** | **EOC22 VT-2 Examination Date** |
| OZ1H-1A | O-ISIH-101A-1.4 | Complete | 5/12/2005 |

*First Period / Fourth Interval Summary*

This summary is a pressure test completion status for the first period of the fourth ten-year interval. Table 6-4 shows the pressure tests completed from refueling outage EOC-21 through refueling outage EOC-22. There was no through-wall leakage observed during these pressure tests.

| Table 6-4 | | |
|---|---|---|
| ***Examination Category*** | ***Test Requirement*** | ***Total Examinations Credited For This Outage*** |
| B-P | System Leakage Test (IWB-5220) | 1 |
| | | |
| C-H | System Leakage Test (IWC-5220) | 40 |

Table 6-5 shows a completion status of pressure tests conducted during the first period of the fourth ten-year interval

| Table 6-5 | | | | |
|---|---|---|---|---|
| ***Examination Category*** | ***Test Requirement*** | ***Total Examinations Required For This Period*** | ***Total Examinations Credited For This Period*** | ***(%) Examinations Complete For This Period*** |
| B-P | System Leakage Test (IWB-5220) | 2 | 1 | 50% |
| | | | | |
| C-H | System Leakage Test (IWC-5220) | 55 | 40 | 72.73% |

The Class 1 (Category B-P) leakage test is required each refueling outage. Table 6-6 shows the completion data of the Class 1 (Category B-P) leakage test conducted during refueling cycle EOC22.

***Table 6-6 Detailed Class 1 Listing***

| Zone Number | Boundary Dwg | EOC22 Completion Status | EOC22 VT-2 Examination Date | Code Case(s) Used |
|---|---|---|---|---|
| OZ1L-1A | O-ISIL4-100A-1.1 | Complete | 5/12/2005 | None |
| | O-ISIL4-100A-1.2 | Complete | 5/12/2005 | None |
| | O-ISIL4-100A-1.3 | Complete | 5/12/2005 | None |
| | O-ISIL4-101A-1.1 | Complete | 5/12/2005 | None |
| | O-ISIL4-101A-1.4 | Complete | 5/12/2005 | None |
| | O-ISIL4-102A-1.1 | Complete | 5/12/2005 | None |
| | O-ISIL4-110A-1.1 | Complete | 5/12/2005 | None |
| | O-ISIL4-110A-1.4 | Complete | 5/12/2005 | None |
| | O-ISIL4-102A-1.3 | Complete | 5/12/2005 | None |
| OZ1L-1Z | O-ISIL4-101A-1.4 | Complete | 5/12/2005 | None |
| OZ1L-1AA | O-ISIL4-101A-1.4 | Complete | 5/12/2005 | None |
| OZ1L-16 | O-ISIL4-101A-1.4 | Complete | 5/11/2005 | None |

The Class 2 (Category C-H) leakage tests are required each period. Table 6-7 shows the completion data of the Class 2 (Category C-H) leakage tests conducted during refueling cycle EOC22.

***Table 6-7 Detailed Class 2 Listing***

| | Zone Number | Boundary Dwg | EOC22 Completion Status | EOC22 VT-2 Examination Date | Code Case(s) Used |
|---|---|---|---|---|---|
| 1 | IZ1L-10 | O-ISIL4-101A-1.3 | Complete | 5/3/2005 | None |
| 2 | IZ1L-11 | O-ISIL4-101A-1.3 | Complete | 5/3/2005 | None |
| 3 | IZ1L-12 | O-ISIL4-101A-1.3 | Not Yet Tested | N/A | None |
| 4 | IZ1L-13 | O-ISIL4-101A-1.3 | Not Yet Tested | N/A | None |
| 5 | IZ1L-14A | O-ISIL4-101A-1.3 | Complete | 4/27/2005 | None |
| 6 | IZ1L-14B | O-ISIL4-101A-1.3 | Complete | 4/27/2005 | None |
| 7 | IZ1L-20 | O-ISIL4-101A-1.3 | Not Yet Tested | N/A | None |
| 8 | IZ1L-21 | O-ISIL4-104A-1.2 | Complete | 5/6/2005 | None |
| 9 | IZ1L-22 | O-ISIL4-101A-1.3 | Not Yet Tested | N/A | None |
| | | O-ISIL4-102A-1.1 | Not Yet Tested | N/A | None |
| | | O-ISIL4-102A-1.2 | Not Yet Tested | N/A | None |
| | | O-ISIL4-104A-1.2 | Not Yet Tested | N/A | None |
| 10 | IZ1L-24 | O-ISIL4-102A-1.1 | Not Yet Tested | N/A | None |
| | | O-ISIL4-103A-1.1 | Not Yet Tested | N/A | None |
| 11 | IZ1L-25 | O-ISIL4-102A-1.1 | Not Yet Tested | N/A | None |
| | | O-ISIL4-103A-1.1 | Not Yet Tested | N/A | None |
| | | | Not Yet Tested | N/A | None |
| 12 | IZ1L-27B | O-ISIL4-102A-1.1 | Complete | 5/6/2005 | None |

| Table 6-7 Detailed Class 2 Listing | | | | | |
|---|---|---|---|---|---|
| | Zone Number | Boundary Dwg | EOC22 Completion Status | EOC22 VT-2 Examination Date | Code Case(s) Used |
| 13 | IZ1L-4 | O-ISIL4-101A-1.1 | Not Yet Tested | N/A | None |
| 14 | IZ1L-40 | O-ISIL4-109A-1.1 | Not Yet Tested | N/A | None |
| 15 | IZ1L-41 | O-ISIL4-109A-1.1 | Not Yet Tested | N/A | None |
| 16 | IZ1L-48 | O-ISIL4-122A-1.1 | Not Yet Tested | N/A | None |
| | | O-ISIL4-122A-1.2 | Not Yet Tested | N/A | None |
| | | O-ISIL4-122A-1.3 | Not Yet Tested | N/A | None |
| | | O-ISIL4-122B-1.1 | Not Yet Tested | N/A | None |
| 17 | IZ1L-5 | O-ISIL4-101A-1.1 | Not Yet Tested | N/A | None |
| | | O-ISIL4-101A-1.3 | Not Yet Tested | N/A | None |
| 18 | OZ1L-14B | O-ISIL4-101A-1.4 | Complete | 4/27/2005 | None |
| 19 | OZ1L-15 | O-ISIL4-101A-1.4 | Complete | 5/12/2005 | None |
| 20 | OZ1L-16 | O-ISIL4-101A-1.4 | Complete | 5/11/2005 | None |
| 21 | OZ1L-17 | O-ISIL4-101A-1.2 | Complete | 5/11/2005 | None |
| 22 | OZ1L-17B | O-ISIL4-101A-1.2 | Complete | 4/27/2005 | None |
| 23 | OZ1L-18 | O-ISIL4-101A-1.2 | Complete | 5/6/2005 | None |
| 24 | OZ1L-19A | O-ISIL4-101A-1.5 | Complete | 4/22/2005 | None |
| | | O-ISIL4-104A-1.1 | Complete | 4/22/2005 | None |
| 25 | OZ1L-19B | O-ISIL4-101A-1.5 | Complete | 4/22/2005 | None |
| 26 | OZ1L-1A | O-ISIL4-101A-1.1 | Complete | 5/12/2005 | None |
| | | O-ISIL4-101A-1.5 | Complete | 5/12/2005 | None |
| 27 | OZ1L-2 | O-ISIL4-101A-1.1 | Complete | 5/12/2005 | None |
| 28 | OZ1L-21 | O-ISIL4-102A-1.1 | Complete | 5/6/2005 | None |
| | | O-ISIL4-102A-1.2 | Complete | 5/6/2005 | None |
| 29 | OZ1L-23 | O-ISIL4-101A-1.2 | Complete | 5/6/2005 | None |
| | | O-ISIL4-102A-1.1 | Complete | 5/6/2005 | None |
| | | O-ISIL4-102A-1.2 | Complete | 5/6/2005 | None |
| 30 | OZ1L-26 | O-ISIL4-102A-1.2 | Partial | 5/6/2005 | None |
| 31 | OZ1L-27A | O-ISIL4-102A-1.2 | Not Yet Tested | N/A | None |
| 32 | OZ1L-27B | O-ISIL4-102A-1.2 | Complete | 5/6/2005 | None |
| 33 | OZ1L-28 | O-ISIL4-102A-1.2 | Complete | 5/6/2005 | None |
| 34 | OZ1L-29 | O-ISIL4-102A-1.2 | Complete | 5/6/2005 | None |
| 35 | OZ1L-29A | O-ISIL4-102A-1.2 | Complete | 5/6/2005 | None |
| | | O-ISIL4-102A-1.3 | Complete | 5/6/2005 | None |
| 36 | OZ1L-3 | O-ISIL4-101A-1.1 | Complete | 5/12/2005 | None |
| 37 | OZ1L-30 | O-ISIL4-102A-1.2 | Complete | 5/6/2005 | None |
| 38 | OZ1L-30A | O-ISIL4-102A-1.2 | Complete | 5/6/2005 | None |
| | | O-ISIL4-102A-1.3 | Complete | 5/6/2005 | None |
| 39 | OZ1L-31A | O-ISIL4-102A-1.3 | Complete | 4/9/2005 | None |
| 40 | OZ1L-31B | O-ISIL4-102A-1.3 | Complete | 4/9/2005 | None |
| 41 | OZ1L-31C | O-ISIL4-102A-1.3 | Complete | 4/9/2005 | None |
| 42 | OZ1L-34 | O-ISIL4-104A-1.1 | Complete | 4/14/2005 | None |
| 43 | OZ1L-39 | O-ISIL4-104A-1.1 | Not Yet Tested | N/A | None |

| Table 6-7 Detailed Class 2 Listing | | | | | |
|---|---|---|---|---|---|
| | Zone Number | Boundary Dwg | EOC22 Completion Status | EOC22 VT-2 Examination Date | Code Case(s) Used |
| 44 | OZ1L-42A | O-ISIL4-110A-1.1 | Complete | 5/12/2005 | None |
| 45 | OZ1L-42B | O-ISIL4-110A-1.1 | Complete | 5/12/2005 | None |
| 46 | OZ1L-44 | O-ISIL4-110A-1.1 | Not Yet Tested | N/A | None |
| | | O-ISIL4-121D-1.2 | Not Yet Tested | N/A | None |
| | | O-ISIL4-122A-1.1 | Not Yet Tested | N/A | None |
| 47 | OZ1L-6 | O-ISIL4-109A-1.1 | Complete | 5/6/2005 | None |
| 48 | OZ1L-64 | O-ISIL4-124B-1.2 | Complete | 5/12/2005 | None |
| 49 | OZ1L-65 | O-ISIL4-124B-1.4 | Complete | 5/12/2005 | None |
| 50 | OZ1L-7 | O-ISIL4-101A-1.2 | Complete | 4/26/2005 | None |
| | | O-ISIL4-101A-1.3 | Complete | 4/26/2005 | None |
| 51 | OZ1L-7B | O-ISIL4-101A-1.3 | Complete | 4/27/2005 | None |
| | | O-ISIL4-102A-1.2 | Complete | 4/5/2005 | None |
| 52 | OZ1L-89 | O-ISIL4-116C-1.1 | Complete | 4/20/2005 | None |
| 53 | OZ1L-9 | O-ISIL4-101A-1.3 | Complete | 5/6/2005 | None |
| | | O-ISIL4-102A-1.2 | Complete | 5/6/2005 | None |
| 54 | OZ1L-90 | O-ISIL4-116C-1.1 | Complete | 4/20/2005 | None |
| 55 | OZ1L-91 | O-ISIL4-116C-1.1 | Complete | 4/24/2005 | None |

| Section 6 Prepared By: | Date: |
|---|---|
| Jim Boughman | 6/8/05 |

| Section 6 Reviewed By: | Date: |
|---|---|
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