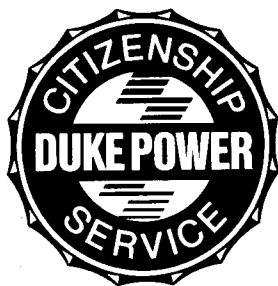


# INSERVICE INSPECTION REPORT

## Duke Power Company Oconee Nuclear Station Unit 2 Fourteenth Refueling Outage



50-270  
~~9502230044~~ 2/14/95

**INSERVICE INSPECTION REPORT**

**UNIT 2 OCONEE 1994 REFUELING  
OUTAGE 14**

**Location: Hwy 130/183, Seneca, South Carolina 29679**

**NRC Docket No. 50-270**

**Commercial Service Date: September 9, 1974**

**Owner: Duke Power Company  
526 S. Church St.  
Charlotte, N. C. 28201-1006**

**Revision 0**

**Prepared By:**

R. H. Rouse

**Date**

1/26/95

**Reviewed By:**

J. M. Rughman

**Date**

1/26/95

**Approved By:**

G. B. Barlow

**Date**

1/31/95

**Copy No.**

2

**Assigned To**

NRC Document Control

**Controlled**

X

**Uncontrolled**



FORM NIS-1 (back)

8. Examination Dates 6/21/93 to 11/16/94 9. Inspection Interval from 9/9/84 to 12/16/94  
10. Abstract of Examinations. Include a list of examinations and a statement concerning status of work required for current interval. See attached report.  
11. Abstract of Conditions Noted. See attached report.  
12. Abstract of Corrective Measures Recommended and Taken. See attached report.

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Date 1/31 19 95 Signed Duke Power Co. By [Signature]  
Owner

Certificate of Authorization No. (if applicable) N/A Expiration Date N/A

CERTIFICATE OF INSERVICE 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 N.C. and employed by \*The HSBI&I Co. of Hartford, P.N. have inspected the components described in this Owners Data Report during the period 6-21-93 to 11-16-94 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owners' Data Report in accordance with the requirements of the ASME code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owners' 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 2-6-95 19 95

[Signature]  
Inspector's Signature

Commissions NC 914  
National Board, State, Province and No.

\*The Hartford Steam Boiler Inspection & Insurance Co.  
200 Ashford Center North  
Suite 300  
Atlanta Ga., 30338

**CONTROLLED DISTRIBUTION**

**Copy No.**

**Assigned To**

Original

Duke Power Company Quality  
Assurance Technical Services

1

Oconee Component Engineering

2

NRC Document Control

**UNCONTROLLED DISTRIBUTION**

3

Hartford Steam Boiler Inspection  
and Insurance Company (AIA)  
c/o C. A. Ireland

4

L. A. Wiens  
Office of NRR  
USNRC  
Washington, DC 20555

## TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Revision</u>
1.	<i>General Information</i>	0
2.	<i>Summary of Inservice Inspections for Outage 14</i>	0
3.	<i>Second Ten Year Inspection Status</i>	0
4.	<i>Final Inservice Inspection Plan for Outage 14</i>	0
5.	<i>Results of Inspections Performed During Outage 14</i>	0
6.	<i>Reportable Indications</i>	0
7.	<i>Personnel, Equipment, and Material Certifications</i>	0
8.	<i>Corrective Action</i>	0
9.	<i>Reference Documents</i>	0
10.	<i>Class 1 and 2 Repairs and Replacements</i>	0

## 1.0 General Information

This report describes the Inservice Inspection of Duke Power Company's Oconee Nuclear Station Unit 2 during the 1994 Refueling Outage (also referred to as Outage 14), which is the last outage in the Third Inspection Period of the Second Ten Year Interval.

Included in this report are the final Inservice Inspection Plan, the inspection results for each item, a summary for each category of examination and corrective action taken when unacceptable conditions were found. In addition, there is a section included for repairs and replacements required since June 21, 1993.

## 1.1 Identification Numbers

<u>Item</u>	<u>Manufacturer or Installer</u>	<u>Manufacturer or Installer Serial No.</u>	<u>State or Province No.</u>	<u>National Board No.</u>
Reactor Vessel	Babcock & Wilcox	620-0003-51-52	N/A	N-101
Steam Generator A	Babcock & Wilcox	620-0003-55-1	N/A	N-103
Steam Generator B	Babcock & Wilcox	620-0003-55-2	N/A	N-104
Pressurizer	Babcock & Wilcox	620-0003-59	N/A	N-102

## 1.2 Authorized Nuclear Inservice Inspector(s)

Name: M. B. Chapman

Employer: The Hartford Steam Boiler Inspection & Insurance  
Company

Business Address: The Hartford Steam Boiler Inspection & Insurance Co.  
200 Ashford Center North  
Suite 300  
Atlanta, GA 30338

## 2.0 Summary of Inservice Inspection for Outage 14

The information shown below provides an abstract of ASME Section XI Class 1, Class 2, and Augmented Items scheduled and examined during Outage 14 at Oconee Nuclear Station Unit 2.

### 2.1 *Class 1 Inspection*

#### Examination Category B-A      Pressure Retaining Welds in Reactor Vessel

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B01.010	<i>Shell Welds</i>		
B01.011	Circumferential	0	0
B01.012	Longitudinal	0	0
B01.020	<i>Head Welds</i>		
B01.021	Circumferential	0	0
B01.022	Meridional Welds	0	0
B01.030	<i>Shell to Flange Welds</i>	1 <sup>1</sup>	1
B01.040	<i>Head to Flange Welds</i>	0	0
B01.050	<i>Repair Welds</i>		
B01.051	Beltline Region	N/A	N/A
<b>TOTALS</b>		1	1

<sup>1</sup>Weld 1RPV-WR19 was previously examined during Outage 9 (2/23/88); however, Duke failed to obtain at least 90% examination coverage and Request for Relief 93-01 was submitted to the NRC. This request was denied by the NRC based on the fact that Duke is capable of obtaining the required amount of examination coverage using supplemental techniques or scans. Weld 1RPV-WR19 was re-examined during Outage 14 in order to increase the examination coverage.



**Examination Category B-B Pressure Retaining Welds in Vessels Other than Reactor Vessels**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Pressurizer</i>		
B02.010	<i>Shell to Head Welds</i>		
B02.011	Circumferential	0	0
B02.012	Longitudinal	0	0
B02.020	<i>Head Welds</i>		
B02.021	Circumferential	NA	NA
B02.022	Meridional Welds	NA	NA
	<i>Steam Generator</i>		
B02.030	<i>Head Welds</i>		
B02.031	Circumferential	N/A	N/A
B02.032	Meridional	N/A	N/A
B02.040	<i>Tubesheet to Head Weld</i>	0	0
	<i>Heat Exchangers (Primary Side)</i>		
B02.050	<i>Head Welds</i>		
B02.051	Circumferential	0	0
B02.052	Meridional	NA	NA
B02.060	Tubesheet to Head Welds	0	0
<b>TOTALS</b>		0	0

**Examination Category B-D**

**Full Penetration Welds of Nozzles in Vessels  
Inspection Program B**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<b>Reactor Vessel</b>		
B03.090	Nozzle to Vessel Welds	0	0
B03.100	Nozzle Inside Radius Section	0	0
	<b>Pressurizer</b>		
B03.110	Nozzle to Vessel Welds	0	0
B03.120	Nozzle Inside Radius Section	0	0
	<b>Steam Generators (Primary Side)</b>		
B03.130	Nozzle to Vessel Welds	0	0
B03.140	Nozzle Inside Radius Section	0	0
	<b>Heat Exchangers (Primary Side)</b>		
B03.150	Nozzle to Vessel Welds	0	0
B03.160	Nozzle Inside Radius Section	0	0
<b>TOTALS</b>		0	0

**Examination Category B-E**

**Pressure Retaining Partial Penetration Welds  
in Vessels**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B04.010	<b>Partial Penetration Welds</b>		
B04.011	Vessel Nozzles	NA	NA
B04.012	Control Rod Drive Nozzles	0	0
B04.013	Instrumentation Nozzles	0	0
	<b>Pressurizer</b>		
B04.020	Heater Penetration Welds	NA	NA
<b>TOTALS</b>		0	0

## Examination Category B-F

## Pressure Retaining Dissimilar Metal Welds

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B05.010	Nominal Pipe Size $\geq 4$ " Nozzle to Safe End Butt Welds	0	0
B05.011	Nominal Pipe Size $< 4$ " Nozzle to Safe End Butt Weld	NA	NA
B05.012	Nozzle to Safe End Socket Welds	NA	NA
	<i>Pressurizer</i>		
B05.020	Nominal Pipe Size $\geq 4$ " Nozzle to Safe End Butt Welds	0	0
B05.021	Nominal Pipe Size $< 4$ " Nozzle to Safe End Butt Weld	NA	NA
B05.022	Nozzle to Safe End Socket Welds	NA	NA
	<i>Steam Generators</i>		
B05.030	Nominal Pipe Size $\geq 4$ " Nozzle to Safe End Butt Welds	NA	NA
B05.031	Nominal Pipe Size $< 4$ " Nozzle to Safe End Butt Weld	NA	NA
B05.032	Nozzle to Safe End Socket Welds	NA	NA
	<i>Heat Exchangers</i>		
B05.040	Nominal Pipe Size $\geq 4$ " Nozzle to Safe End Butt Welds	NA	NA

**Examination Category B-F (Continued)**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B05.042	Nozzle to Safe End Socket Welds	NA	NA
	<i>Piping</i>		
B05.050	Nominal Pipe Size $\geq 4$ " Dissimilar Metal Butt Welds	0	0
B05.051	Nominal Pipe Size $< 4$ " Dissimilar Metal Butt Welds	0	0
B05.052	Dissimilar Metal Socket Welds	NA	NA
<b>TOTALS</b>		0	0

**Examination Category B-G-1 Pressure Retaining Bolting, Greater Than 2" in Diameter**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B06.010	Closure Head Nuts	0	0
B06.020	Closure Studs (in place)	NA	NA
B06.030	Closure Studs, (when removed)	0	0
B06.040	Threads in Flange	1 (Supplemental Examination <sup>2</sup> )	1 (Supplemental Examination)
B06.050	Closure Washers, Bushings	0	0
	<i>Pressurizer</i>		
B06.060	Bolts and Studs	0	0
B06.070	Flange Surface (when connection disassembled)	1	0 (connection not disassembled)

<sup>2</sup> This examination was performed in an attempt to increase the examination volume to at least 90%. Credit has already been applied towards meeting the required percentages; therefore credit will not be applied during this outage.

Examination Category B-G-1 Continued)

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B06.080	Nuts , Bushings and Washers	0	0
	<i>Steam Generators</i>		
B06.090	Bolts and Studs	NA	NA
B06.100	Flange Surface (when connection disassembled)	NA	NA
B06.110	Nuts , Bushings and Washers	NA	NA
	<i>Heat Exchangers</i>		
B06.120	Bolts and Studs	NA	NA
B06.130	Flange Surface (when connection disassembled)	NA	NA
B06.140	Nuts , Bushings and Washers	NA	NA
	<i>Piping</i>		
B06.150	Bolts and Studs	NA	NA
B06.160	Flange Surface (when connection disassembled)	NA	NA
B06.170	Nuts , Bushings and Washers	NA	NA
	<i>Pumps</i>		
B06.180	Bolts and Studs	0	0
B06.190	Flange Surface (when connection disassembled)	0	0
B06.200	Nuts , Bushings and Washers	0	0
	<i>Valves</i>		
B06.210	Bolts and Studs	NA	NA
B06.220	Flange Surface (when connection disassembled)	NA	NA
B06.230	Nuts , Bushings and Washers	NA	NA
<b>TOTALS</b>		2	1

Examination Category B-G-2 Pressure Retaining Bolting, 2" and Less in Diameter

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B07.010	Bolts, Studs, and Nuts	NA	NA
	<i>Pressurizer</i>		
B07.020	Bolts, Studs, and Nuts	0	0
	<i>Steam Generators</i>		
B07.030	Bolts, Studs, and Nuts	0	0
	<i>Heat Exchangers</i>		
B07.040	Bolts, Studs, and Nuts	NA	NA
	<i>Piping</i>		
B07.050	Bolts, Studs, and Nuts	NA	NA
	<i>Pumps</i>		
B07.060	Bolts, Studs, and Nuts	NA	NA
	<i>Valves</i>		
B07.070	Bolts, Studs, and Nuts	0	0
	<i>CRD Housings</i>		
B07.080	Bolts, Studs, and Nuts	0	0
<b>TOTALS</b>		0	0

**Examination Category B-H Integral Attachments for Vessels**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B08.010	Integrally Welded Attachments	0	0
	<i>Pressurizer</i>		
B08.020	Integrally Welded Attachments	0	0
	<i>Steam Generators</i>		
B08.030	Integrally Welded Attachments	0	0
	<i>Heat Exchangers</i>		
B08.040	Integrally Welded Attachments	NA	NA
<b>TOTALS</b>		0	0

**Examination Category B-J Pressure Retaining Welds in Piping**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B09.010	Nominal Pipe Size $\geq 4''$		
B09.011	Circumferential Welds	0	0
B09.012	Longitudinal Welds <sup>3</sup>	0	0
B09.020	Nominal Pipe Size $< 4''$		
B09.021	Circumferential Welds	0	0
B09.022	Longitudinal Welds	NA	NA

<sup>3</sup> Longitudinal welds that intersect circumferential welds are examined as required by Table IWB 2500-1, Category B-J. However, for reporting purposes, the totals do not reflect the number of longitudinal welds examined during this outage.

Examination Category B-J (Continued)

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B09.030	Branch Pipe Connection Welds		
B09.031	Nominal Pipe Size $\geq 4''$	0	0
B09.032	Nominal Pipe Size $< 4''$	0	0
B09.040	Socket Welds	0	0
<b>TOTALS</b>		0	0

Examination Category B-K-1 Integral Attachments for Piping, Pumps and Valves

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Piping</i>		
B10.010	Integrally Welded Attachments	0	0
	<i>Pumps</i>		
B10.020	Integrally Welded Attachments	0	0
	<i>Valves</i>		
B10.030	Integrally Welded Attachments	NA	NA
<b>TOTALS</b>		0	0



Examination Category B-L-1, B-M-1 Pressure Retaining Welds in Pump Casings and Valve Bodies  
 B-L-2, B-M-2 Pump Casings and Valve Bodies

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Pumps</i>		
B12.010	Pump Casing Welds	0	0
B12.020	Pump Casing	0	0
B12.030	Valves, Nominal Pipe Size <4" Valve Body Welds	NA	NA
B12.031	Valves, Nominal Pipe Size ≥4" Valve Body Welds	NA	NA
B12.040	Valve Body, Exceeding 4" Nominal Pipe Size	0	0
<b>TOTALS</b>		0	0

Examination Category B-N-1 Interior of Reactor Vessel  
 B-N-2 Integrally Welded Core Support Structures and Interior Attachments to Reactor Vessels  
 B-N-3 Removable Core Support Structures

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B13.010	Vessel Interior	0	0
	<i>Reactor Vessel (BWR)</i>		
B13.020	Interior Attachments	NA	NA
B13.021	Core Support Structure	NA	NA
	<i>Reactor Vessel (PWR)</i>		
B12.030	Core Support Structure	0	0
<b>TOTALS</b>		0	0

**Examination Category B-O**

**Pressure Retaining Welds in Control Rod Housings**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B14.010	Welds in CRD Housing	0	0
<b>TOTALS</b>		0	0

**Examination Category B-P**

**All Pressure Retaining Components**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Reactor Vessel</i>		
B15.010	Pressure Retaining Boundary	1	1
B15.011	Pressure Retaining Boundary	0	0
	<i>Pressurizer</i>		
B15.020	Pressure Retaining Boundary	1	1
B15.021	Pressure Retaining Boundary	0	0
	<i>Steam Generators</i>		
B15.030	Pressure Retaining Boundary	2	2
B15.031	Pressure Retaining Boundary	0	0
	<i>Heat Exchangers</i>		
B15.040	Pressure Retaining Boundary	2	2
B15.041	Pressure Retaining Boundary	0	0
	<i>Piping</i>		
B15.050	Pressure Retaining Boundary	10	10

**Examination Category B-P (Continued)**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B15.051	Pressure Retaining Boundary	0	0
	<i>Pumps</i>		
B15.060	Pressure Retaining Boundary	4	4
B16.061	Pressure Retaining Boundary	0	0
	<i>Valves</i>		
B15.070	Pressure Retaining Boundary	Covered in B15.050	Covered in B15.050
B15.071	Pressure Retaining Boundary	Covered in B15.051	Covered in B15.051
<b>TOTALS</b>		20	20

**Examination Category B-Q Steam Generator Tubing**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
B16.010	Steam Generator Tubing in Straight Tube Design	See footnote <sup>4</sup>	See footnote <sup>4</sup>
B16.020	Steam Generator Tubing in U-Tube Design	NA	NA
<b>TOTALS</b>		NA	NA

<sup>4</sup> Steam Generator Tubing is examined and documented by the Diversified Services Group of the Electric System Support Department as required by the Station Technical Specifications and is not included in this report.

### F1.1 Component Supports

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
F1.01	Reference Section 4.0 of this report	0	0
<b>TOTALS</b>		0	0

### 2.2 Class 2 Inspections

#### Examination Category C-A Pressure Retaining Welds in Pressure Vessel

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
C01.010	Shell Circumferential Weld	0	0
C01.020	Head Circumferential Welds	0	0
C01.030	Tubesheet to Shell Weld	0	0
<b>TOTALS</b>		0	0

**Examination Category C-B      Pressure Retaining Nozzle Welds in Vessels**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
C02.010	Nozzles in Vessels $\leq 1/2$ " Nominal Thickness	0	0
C02.020	Nozzles in Vessels $> 1/2$ " Nominal Thickness	NA	NA
C02.021	Nozzle to Shell (or Head Welds)	0	0
C2.022	Nozzle Inside Radius Section	0	0
<b>TOTALS</b>		0	0

**Examination Category C-C      Pressure Retaining Nozzle Welds in Vessels**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Pressure Vessels</i>		
C03.010	Integrally Welded Attachments	0	0
	<i>Piping</i>		
C03.040	Integrally Welded Attachments	0	0
	<i>Pumps</i>		
C03.070	Integrally Welded Attachments	NA	NA
	<i>Valves</i>		
C03.100	Integrally Welded Attachments	NA	NA
<b>TOTALS</b>		0	0

**Examination Category C-D Pressure Retaining Bolting Greater Than 2" in Diameter**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Pressure Vessels</i>		
C04.010	Bolts and Studs	NA	NA
	<i>Piping</i>		
C04.020	Bolts and Studs	NA	NA
	<i>Pumps</i>		
C04.030	Bolts and Studs	NA	NA
	<i>Valves</i>		
C04.040	Bolts and Studs	NA	NA
<b>TOTALS</b>		NA	NA

**Examination Category C-F Pressure Retaining Welds in Piping**

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
C05.010	Piping Welds $\leq 1/2"$ Nominal Wall Thickness		
C05.011	Circumferential Weld	0	0
C05.012	Longitudinal Welds <sup>5</sup>	0	0
C05.020	Piping Welds $> 1/2"$ Nominal Wall Thickness		
C05.021	Circumferential Welds	0	0
C05.022	Longitudinal Welds	0	0
C05.030	Pipe Branch Connections		
C05.031	Circumferential Welds	0	0
C05.032	Longitudinal Welds	0	0
<b>TOTALS</b>		0	0

<sup>5</sup> Longitudinal welds that intersect circumferential welds were examined as required by Table IWC-2500-1, Category C-F. However, for reporting purposes, the totals do not reflect the number of longitudinal welds examined during this outage.

Examination Category C-G Pressure Retaining Welds in Pumps and Valves

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Pumps</i>		
C06.010	Pump Casing Welds	NA	NA
	<i>Valves</i>		
C06.020	Valve Body Welds	NA	NA
<b>TOTALS</b>		NA	NA

Examination Category C-H All Pressure Retaining Components

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
	<i>Pressure Vessel</i>		
C07.010	Pressure Retaining Boundary	0	0
C07.011	Pressure Retaining Boundary	0	0
	<i>Piping</i>		
C07.020	Pressure Retaining Boundary	1	1
C07.021	Pressure Retaining Boundary	22	20 <sup>6</sup>
	<i>Pumps</i>		
C07.030	Pressure Retaining Boundary	0	0
C07.031	Pressure Retaining Boundary	5	5
	<i>Valves</i>		
C07.040	Pressure Retaining Boundary	Covered in C07.020	Covered in C07.020
C07.041	Pressure Retaining Boundary	Covered in C07.021	Covered in C07.021
<b>TOTALS</b>		28	26

<sup>6</sup> Reference PIP 2-O95-0061 in Section 9 of this report

## F1.2 Component Supports

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
F1.02	Reference Section 4.0 of this report	0	0
<b>TOTALS</b>		0	0

## 2.3 Augmented Inspections

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
E01.001	Reactor Coolant Pump Flywheel	4	4
E02.001	Steam Generator Tube Examinations	Ref. footnote for Item No. B16.010	Ref. footnote for Item No. B16.010
E03.001	Alternate Examinations	0	0
E04.001	HPI Safe End Examinations	0	0
E05.001	Augmented Pressurizer Surge Line Examinations	0	0
E06.001	Augmented Weld Inspection	0	0
E07.001	Thermal Stress Piping (NRC Bulletin 88-08)	0	0
E08.001	Pressurizer Spray Piping Thermal Transient Inspection (Ref. PIR 1-O89-0003)	0	0
E09.001	Auxiliary Feedwater Header Water Hammer Examinations (PSC21-82)	0	0



## Augmented Inspections (Continued)

<i>Item Number</i>	<i>Description</i>	<i>Total Scheduled During Outage</i>	<i>Total Examined During Outage</i>
E10.001	Pressurizer Sensing/ Sampling Nozzle Safe Ends	0	0
<b>TOTALS</b>		4	4

A detailed description of each examination listed in Sections 2.1 through 2.3 are located in Section 3 of this report. Results of each examination are located in Section 4 of this report.

### 3.0 Second Ten Year Inspection Status

The completion status of inspections required by the 1980 ASME Section XI Code, including Addenda through Winter 1980, 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, and in Table IWC-2500-1 for Class 2 Inspections. Augmented inspections are also included.

#### Class 1 Inspections

<u>Examination Category</u>	<u>Description</u>	<u>Inspections Required</u>	<u>Inspections Completed</u>	<u>Percentage Completed</u>	<u>Deferral Allowed</u> <sup>7</sup>
B-A	Pressure Retaining Welds in Reactor Vessel	8 Welds	8 Welds	100%	Yes
B-B	Pressure Retaining Welds in Vessels Other than Reactor Vessel	15 Welds	15 Welds	100%	No
B-D	Full Penetration Welds of Nozzles in Vessels	58 Inspections	58 Inspections	100%	Partial
B-E	Pressure Retaining Partial Penetration Welds in Vessels	31 Welds	31 Welds	100%	No
B-F	Pressure Retaining Dissimilar Metal Welds	38 Welds	38 Welds	100%	No
B-G-1	Pressure Retaining Bolting Greater than 2 Inch Diameter	552 Items	552 Items	100%	Yes
B-G-2	Pressure Retaining Bolting 2 Inches and Less in Diameter	40 Connections	40 Connections	100%	No
B-H	Integral Attachment for Vessels	12 Attachments	12 Attachments	100%	No
B-J	Pressure Retaining Welds in Piping	94 Welds	94 Welds	100%	No

<sup>7</sup> 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)

<u>Examination Category</u>	<u>Description</u>	<u>Inspections Required</u>	<u>Inspections Completed</u>	<u>Percentage Completed</u>	<u>Deferral Allowed</u>
B-K-1	Integral Attachments for Piping, Pumps and Valves	3 Attachments	3 Attachments	100%	No
B-L-1	Pressure Retaining Welds in Pump Casings	1 Weld	1 Weld	100%	Yes
B-L-2	Pump Casings	1 Casing	1 Casing	100%	Yes
B-M-1	Pressure Retaining Welds in Valve Bodies	None	N/A	N/A	N/A
B-M-2	Valve Body > 4 in. Nominal Pipe Size	2 Valves	2 Valves	100%	Yes
B-N-1	Interior of Reactor Vessel	3 Items	3 Items	100%	No
B-N-2	Integrally Welded Core Support Structures and Interior Attachments to Reactor Vessels	None	N/A	N/A	N/A
B-N-3	Removable Core Support Structures	1 Item	1 Item	100%	Yes
B-O	Pressure Retaining Welds in Control Rod Housings	3 Housings	3 Housings	100%	Yes
B-P	All Pressure Retaining Components				No
	System Leakage Test	139 Components	139 Components	100%	
	System Hydrostatic Test	20 Components	20 Components	100%	
B-Q	Steam Generator Tubing	As stated in Station Technical Specifications	100% Station Technical Specifications Met		N/A
F1.01	Class 1 Component Supports	85 Supports	85 Supports	100%	No

## Class 2 Inspections

<u>Examination Category</u>	<u>Description</u>	<u>Inspections Required</u>	<u>Inspections Completed</u>	<u>Percentage Completed</u>	<u>Deferral Allowed</u>
C-A	Pressure Retaining Welds in Pressure Vessels	10 Welds	10 Welds	100%	No
C-B	Pressure Retaining Nozzle Welds in Vessels	5 Welds	5 Welds	100%	No
C-C	Integral Attachments for Vessels, Piping, Pumps and Valves	54 Attachments	54 Attachments	100%	No
C-D	Pressure Retaining Bolting Exceeding 2 Inches in Diameter	1 Item	1 Item	100%	No
C-F	Pressure Retaining Welds in Piping	264 Welds	264 Welds	100%	No
C-G	Pressure Retaining Welds in Pumps and Valves	None	N/A	N/A	N/A
C-H	All Pressure Retaining Components				No
	System or Component Functional Test	32 Components	32 Components	100%	
	System Hydrostatic Test	57 Components	55 Components	96% (Ref. footnote 6)	
F1.02	Class 2 Component Supports	385 Supports	385 Supports	100%	No

## Augmented Inspections

<u>Description</u>	<u>Percentage Complete</u>
Reactor Coolant Pump Flywheels	100% of Technical Specifications met
Make-Up and High Pressure Injection Nozzle Safe-Ends	100% of requirements
Core Flood 2A Dump Valve Flange To Head Weld	100% of requirements
Core Flood Tank 2A Support Attachment Weld	100% of requirements
Thermal Stress Piping	100% of requirements

#### 4.0 Final Inservice Inspection Plan For Outage 14

The final ISI Plan shown in this section lists all ASME Section XI Class 1 and ASME Section XI Class 2, and Augmented examinations credited for Outage 14 at Oconee Nuclear Station Unit 2.

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

##### A. Items examined by NDE methods

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
Drawing Number	=	Location and/or Detail Drawing
Locs.	=	Location
Insp. Req.	=	Examination Technique - Magnetic Particle, Dye Penetrant, etc.
Proc. Numbers	=	Examination Procedures
Material Type/Grade	=	General Description of Material
Diam./Thick	=	Diameter/Thickness
Calib. Block	=	Calibration Block Number
Comments	=	General and/or Detail Description

PROGRAM: NISIRUNB-QAISI02  
 FILE: CO07133  
 PLANT: OCONEE UNIT 2  
 KEY: ITEM NUMBER B01

DUKE POWER COMPANY

PAGE 1  
 DATE 01/24/95

PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 2 INSERVICE INSPECTION LISTING - OUTAGE 14

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B01.030.001A	2RPV-WR19	ISI-OCN2-001	_____	UT	NDE-650	CS	12.000	50304	PC 7 TO 8 , 0 TO 180 DEG. FROM FLANGE SURFACE
B01.030.001B	2RPV-WR19	ISI-OCN2-001	_____	UT	NDE-650	CS	12.000	50304	PC 7 TO 8 , 180 TO 0 DEG. FROM FLANGE SURFACE

PROGRAM: NISIRUNB-QAISI02  
 FILE: CO07133  
 PLANT: OCONEE UNIT 2  
 KEY: ITEM NUMBER B06

DUKE POWER COMPANY

PAGE 2  
 DATE 01/24/95

PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 2 INSERVICE INSPECTION LISTING - OUTAGE 14

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP. PROC. REQ. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
B06.040.001	2RPV-LIGAMENTS	B&W 151997E	_____	UT NDE-640	CS	12.500	40387	THREADS IN RPV FLG. STUD HOLES 1 THRU 13 AND 17 THRU 33
B06.040.001A	2RPV-LIGAMENTS	B&W 151997E	_____	UT NDE-640	CS	12.500	40387	THREADS IN RPV FLG. STUD HOLES 14 THRU 16 AND 34 THRU 60
B06.070.001	2PZR-MW-FLANGE	B&W 149776	_____	VTI QAL-13	CS	02.80 14.900	-----	1" AREA SURROUNDING EACH STUD HOLE IF DISASSEMBLED REF 20CN-0285



PROGRAM: NISIRUNB QAISI02  
 FILE: C007133  
 PLANT: OCONEE UNIT 2  
 KEY: ITEM NUMBER E01

DUKE POWER COMPANY

PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
 OCONEE 2 INSERVICE INSPECTION LISTING - OUTAGE 14

PAGE 3  
 DATE 01/24/95

ITEM NUMBER	ID. NUMBER	DRAWING NUMBERS	LOCS.	INSP REQ.	PROC. NUMBERS	MATERIAL TYPE/GRADE	DIAM./ THICK	CALIB BLOCK	COMMENTS
E01.001.001	2RCP-2A1	OM-201D-38		UT	ISI-117 NDE-900	CS	72.00 09.500		RC PUMP 2A1 FLYWHEEL
E01.001.002	2RCP-2A2	OM-201D-38		UT	ISI-117 NDE-900	CS	72.00 09.500		RC PUMP 2A2 FLYWHEEL
E01.001.003	2RCP-2B1	OM-201D-38		UT	ISI-117 NDE-900	CS	72.00 09.500		RC PUMP 2B1 FLYWHEEL
E01.001.004	2RCP-2B2	OM-201D-38		UT	ISI-117 NDE-900	CS	72.00 09.500		RC PUMP 2B2 FLYWHEEL

**B. Items examined by Pressure Testing**

- Item Number = ASME Section XI Tables IWB-2500-1  
(Class 1), IWC-2500-1 (Class 2)
- Drawing Number = Number of the Flow Diagram
- Revision = Revision of the Flow Diagram
- Test = Type of Pressure Test
- Comp = Vessel, Piping or Pump
- Comp Name = Example: Reactor Vessel, etc.; for piping -  
System designation will be used
- Req. Insp = Type inspection performed, i.e., VT2
- Req. Proc = Required inspection procedure
- Comments = General and/or Detail Description

OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS A (CATEGORY B-P) REQUIREMENTS  
FOR OUTAGE NUMBER 14

ITEM NO.	DRAWING	REV.	TEST	FCA NO.	SYSTEM NAME	REQ. INSP	REQ. PROC	COMMENTS
B15.010.001	OFD-100A-2.1	14	LEAK	N/A	UNIT 2 REACTOR	VT-2	QAL-15	
B15.020.001	OFD-100A-2.2	08	LEAK	N/A	PRESSURIZER	VT-2	QAL-15	
B15.030.001	OFD-100A-2.1	14	LEAK	N/A	STEAM GENERATOR 2A	VT-2	QAL-15	
B15.030.002	OFD-100A-2.1	14	LEAK	N/A	STEAM GENERATOR 2B	VT-2	QAL-15	
B15.040.001	OFD-101A-2.1	15	LEAK	N/A	LETDOWN COOLER 2A	VT-2	QAL-15	
B15.040.002	OFD-101A-2.1	15	LEAK	N/A	LETDOWN COOLER 2B	VT-2	QAL-15	
B15.050.001	OFD-100A-2.1	14	LEAK	N/A	RC SYSTEM	VT-2	QAL-15	
B15.050.001A	OFD-100A-2.2	08	LEAK	N/A	RC SYSTEM	VT-2	QAL-15	
B15.050.002	OFD-101A-2.1	15	LEAK	N/A	HPI SYSTEM	VT-2	QAL-15	
B15.050.003	OFD-101A-2.4	14	LEAK	20CN-0209	HPI SYSTEM	VT-2	QAL-15	
B15.050.004	OFD-102A-2.1	07	LEAK	N/A	LPI SYSTEM	VT-2	QAL-15	
B15.050.005	OFD-102A-2.2	10	LEAK	N/A	LPI SYSTEM	VT-2	QAL-15	

OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS A (CATEGORY B-P) REQUIREMENTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>REV</u>	<u>TEST</u>	<u>FCA NO.</u>	<u>SYSTEM NAME</u>	<u>REQ. INSP</u>	<u>REQ. PROC</u>	<u>COMMENTS</u>
B15.050.006	OFD-102A-2.3	03	LEAK	N/A	LPI SYSTEM	VT-2	QAL-15	
B15.050.007	OFD-110A-2.1	11	LEAK	N/A	CA SYSTEM	VT-2	QAL-15	
B15.050.009	OFD-100A-2.3	04	LEAK	N/A	RC SYSTEM	VT-2	QAL-15	
B15.050.010	OFD-110A-2.4	02	LEAK	N/A	CA SYSTEM	VT-2	QAL-15	
B15.060.001	OFD-100A-2.1	14	LEAK	N/A	RCP-2A1	VT-2	QAL-15	
B15.060.002	OFD-100A-2.1	14	LEAK	N/A	RCP-2A2	VT-2	QAL-15	
B15.060.003	OFD-100A-2.1	14	LEAK	N/A	RCP-2B1	VT-2	QAL-15	
B15.060.004	OFD-100A-2.1	14	LEAK	N/A	RCP-2B2	VT-2	QAL-15	

OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS B (CATEGORY C-H) REQUIREMENTS  
FOR OUTAGE NUMBER 14

ITEM NO.	DRAWING	REV	TEST	FCA NO.	SYSTEM NAME	REQ. INSP	REQ. PROC	COMMENTS
C07.020.005	OFD-101A-2.2	08	LEAK	2OCN-0286	HPI SYSTEM	VT-2	QAL-15	Hydro performed in lieu of functional test.
C07.021.001	OFD-100A-2.1	14	HYDRO	2OCN-0286	RC SYSTEM	VT-2	QAL-15	
C07.021.002	OFD-100A-2.2	08	HYDRO	2OCN-0286	RC SYSTEM	VT-2	QAL-15	
C07.021.004	OFD-101A-2.2	08	HYDRO	2OCN-0286	HPI SYSTEM	VT-2	QAL-15	
C07.021.005	OFD-101A-2.3	06	HYDRO	2OCN-0286	HPI SYSTEM	VT-2	QAL-15	
C07.021.006	OFD-101A-2.4	17	HYDRO	2OCN-0286	HPI SYSTEM	VT-2	QAL-15	Item was not completed prior to end of interval - ref. PIP#2-095-0061.
C07.021.008	OFD-102A-2.1	09	HYDRO	2OCN-0286	LPI SYSTEM	VT-2	QAL-15	
C07.021.010	OFD-102A-2.3	03	HYDRO	2OCN-0286	LPI SYSTEM	VT-2	QAL-15	
C07.021.011	OFD-103A-2.1	02	HYDRO	2OCN-0286	BS SYSTEM	VT-2	QAL-15	Open Flow Path Test performed on containment spray heads 9/28/90.
C07.021.012	OFD-104A-1.1	12	HYDRO	2OCN-0286	SF SYSTEM	VT-2	QAL-15	
C07.021.014	OFD-106E-2.1	00	HYDRO	2OCN-0286	DW SYSTEM	VT-2	QAL-15	
C07.021.015	OFD-107A-2.1	05	HYDRO	2OCN-0286	CS SYSTEM	VT-2	QAL-15	
C07.021.016	OFD-107A-2.2	04	HYDRO	2OCN-0286	CS SYSTEM	VT-2	QAL-15	Item was not completed prior to end of interval - ref. PIP#2-095-0061.

OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS B (CATEGORY C-H) REQUIREMENTS  
FOR OUTAGE NUMBER 14

ITEM NO.	DRAWING	REV	TEST	FCA NO.	SYSTEM NAME	REQ. INSP	REQ. PROC	COMMENTS
C07.021.017	OFD-107B-2.1	03	HYDRO	20CN-0286	LWD SYSTEM	VT-2	QAL-15	
C07.021.021	OFD-116A-2.1	01	HYDRO	20CN-0286	IA SYSTEM	VT-2	QAL-15	
C07.021.022	OFD-116C-2.1	03	HYDRO	20CN-0286	H SYSTEM	VT-2	QAL-15	
C07.021.031	OFD-124B-2.2	06	HYDRO	20CN-0286	LPS SYSTEM	VT-2	QAL-15	
C07.021.033	OFD-127B-2.2	09	HYDRO	20CN-0286	N SYSTEM	VT-2	QAL-15	
C07.021.034	OFD-137A-2.2	03	HYDRO	20CN-0286	BA SYSTEM	VT-2	QAL-15	
C07.021.035	OFD-137B-1.2	07	HYDRO	20CN-0286	IA SYSTEM	VT-2	QAL-15	
C07.021.036	OFD-144A-2.2	08	HYDRO	20CN-0286	CC SYSTEM	VT-2	QAL-15	
C07.021.037	OFD-144A-2.3	03	HYDRO	20CN-0286	CC SYSTEM	VT-2	QAL-15	
C07.021.039	OFD-110A-2.4	02	HYDRO	20CN-0286	CA SYSTEM	VT-2	QAL-15	
C07.031.004	OFD-101A-2.3	03	HYDRO	20CN-0286	HPI PUMP 2A	VT-2	QAL-15	
C07.031.005	OFD-101A-2.3	03	HYDRO	20CN-0286	HPI PUMP 2B	VT-2	QAL-15	
C07.031.006	OFD-101A-2.3	03	HYDRO	20CN-0286	HPI PUMP 2C	VT-2	QAL-15	

PAGE NO. 3  
01/23/95

OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS B (CATEGORY C-H) REQUIREMENTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>REV</u>	<u>TEST</u>	<u>FCA NO.</u>	<u>SYSTEM NAME</u>	<u>REQ. INSP</u>	<u>REQ. PROC</u>	<u>COMMENTS</u>
C07.031.007	OFD-103A-2.1	02	HYDRO	20CN-0286	RBS PUMP 2A	VT-2	QAL-15	
C07.031.008	OFD-103A-2.1	02	HYDRO	20CN-0286	RBS PUMP 2B	VT-2	QAL-15	

PAGE NO. 1  
01/23/95

OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS C (CATEGORY D-A) REQUIREMENTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>REV</u>	<u>TEST</u>	<u>FCA NO.</u>	<u>SYSTEM NAME</u>	<u>REQ. INSP</u>	<u>REQ. PROC</u>	<u>COMMENTS</u>
D01.012.008	OFD-109A-1.1	06	HYDRO	20CN-0286	LWD SYSTEM	VT-2	QAL-15	



OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS C (CATEGORY D-B) REQUIREMENTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>REV</u>	<u>TEST</u>	<u>FCA NO.</u>	<u>SYSTEM NAME</u>	<u>REQ. INSP</u>	<u>REQ. PROC</u>	<u>COMMENTS</u>
D02.012.004	OFD-121A-2.8	06	HYDRO	20CN-0286	C SYSTEM	VT-2	QAL-15	
D02.012.006	OFD-121B-2.5	11	HYDRO	20CN-0286	FDW SYSTEM	VT-2	QAL-15	
D02.012.007	OFD-121D-2.1	12	HYDRO	20CN-0286	FDW SYSTEM	VT-2	QAL-15	
D02.012.008	OFD-121D-1.2	06	HYDRO	20CN-0286	FDW SYSTEM	VT-2	QAL-15	
D02.012.015	OFD-133A-2.2	07	HYDRO	20CN-0286	CCW SYSTEM	VT-2	QAL-15	Item was not completed prior to end of interval - ref. PIP#2-095-0061.



PROGRAM: NISIRUND-CAISI04  
FILE: C007133  
PLANT: OCONEE UNIT 2  
KEY: ITEM NUMBER B06

DUKE POWER COMPANY

PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 2 INSERVICE INSPECTION RESULTS - OUTAGE 14

PAGE 2  
DATE 01/24/95

ITEM NUMBER	ID NUMBER	INSPECTION DATE	INSPECTION STATUS	INSPECTION LIMITED	GEO. REF.	COMMENTS
B06.040.001	2RPV-LIGAMENTS	10/13/94	CLR	-	-	SUPPLEMENTAL EXAM RFO #14
B06.040.001A	2RPV-LIGAMENTS	10/13/94	CLR	-	N	SUPPLEMENTAL EXAM RFO #14
B06.070.001	2PZR-MW-FLANGE	__/__/__		-	-	CONNECTION NOT DISASSEMBLED

PROGRAM: NISIRUND QAI5I04  
FILE: C007133  
PLANT: OCONEE UNIT 2  
KEY: ITEM NUMBER E01

DUKE POWER COMPANY

PRE-SERVICE AND IN-SERVICE INSPECTION SYSTEM  
OCONEE 2 INSERVICE INSPECTION RESULTS - OUTAGE 14

ITEM NUMBER =====	ID NUMBER =====	INSPECTION DATE =====	INSPECTION STATUS =====	INSPECTION LIMITED =====	GEO. REF. =====	COMMENTS =====
E01.001.001	2RCP-2A1	10/11/94	CLR	L	N	_____
E01.001.002	2RCP-2A2	10/11/94	CLR	L	N	_____
E01.001.003	2RCP-2B1	10/11/94	CLR	L	N	_____
E01.001.004	2RCP-2B2	10/14/94	CLR	L	N	_____

**B. Items examined by Pressure Testing**

Item Number = ASME Section XI Tables IWB-2500-1  
(Class 1), IWC-2500-1 (Class 2)

Drawing = Number of the Flow Diagram

Examination Date = Latest examination date

Condition = Partial or Complete test

Status = Clear, Recordable or Reportable

Comments = General and/or Detail Description

OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS A (CATEGORY B-P) RESULTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>DATE LAST EXAMINED</u>	<u>CONDITION</u>	<u>STATUS</u>	<u>COMMENTS</u>
B15.010.001	OFD-100A-2.1	11/15/94	COMPLETE	CLEAR	
B15.020.001	OFD-100A-2.2	11/15/94	COMPLETE	CLEAR	
B15.030.001	OFD-100A-2.1	11/15/94	COMPLETE	CLEAR	
B15.030.002	OFD-100A-2.1	11/15/94	COMPLETE	CLEAR	
B15.040.001	OFD-101A-2.1	11/15/94	COMPLETE	CLEAR	
B15.040.002	OFD-101A-2.1	11/15/94	COMPLETE	CLEAR	
B15.050.001	OFD-100A-2.1	11/15/94	COMPLETE	CLEAR	
B15.050.001A	OFD-100A-2.2	11/15/94	COMPLETE	RECORDABLE	
B15.050.002	OFD-101A-2.1	11/15/94	COMPLETE	CLEAR	
B15.050.003	OFD-101A-2.4	11/15/94	COMPLETE	RECORDABLE	
B15.050.004	OFD-102A-2.1	11/15/94	COMPLETE	CLEAR	
B15.050.005	OFD-102A-2.2	11/15/94	COMPLETE	CLEAR	

OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS A (CATEGORY B-P) RESULTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>DATE LAST EXAMINED</u>	<u>CONDITION</u>	<u>STATUS</u>	<u>COMMENTS</u>
B15.050.006	OFD-102A-2.3	11/15/94	COMPLETE	CLEAR	
B15.050.007	OFD-110A-2.1	11/15/94	COMPLETE	CLEAR	
B15.050.009	OFD-100A-2.3	11/15/94	COMPLETE	CLEAR	
B15.050.010	OFD-110A-2.4	11/15/94	COMPLETE	CLEAR	
B15.060.001	OFD-100A-2.1	11/15/94	COMPLETE	CLEAR	
B15.060.002	OFD-100A-2.1	11/15/94	COMPLETE	CLEAR	
B15.060.003	OFD-100A-2.1	11/15/94	COMPLETE	CLEAR	
B15.060.004	OFD-100A-2.1	11/15/94	COMPLETE	CLEAR	

OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS B (CATEGORY C-H) RESULTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>DATE LAST EXAMINED</u>	<u>CONDITION</u>	<u>STATUS</u>	<u>COMMENTS</u>
C07.020.005	OFD-101A-2.2	07/13/93	COMPLETE	CLEAR	Hydro performed in lieu of functional test.
C07.021.001	OFD-100A-2.1	06/20/93	COMPLETE	RECORDABLE	
C07.021.002	OFD-100A-2.2	05/03/93	COMPLETE	CLEAR	
C07.021.004	OFD-101A-2.2	08/03/94	COMPLETE	CLEAR	
C07.021.005	OFD-101A-2.3	11/13/94	COMPLETE	CLEAR	
C07.021.006	OFD-101A-2.4	11/13/94	PARTIAL	CLEAR	Item was not completed prior to end of interval - ref. PIP#2-095-0061.
C07.021.008	OFD-102A-2.1	11/02/94	COMPLETE	CLEAR	
C07.021.010	OFD-102A-2.3	11/09/94	COMPLETE	CLEAR	
C07.021.011	OFD-103A-2.1	11/02/94	COMPLETE	CLEAR	Open Flow Path Test performed on containment spray heads 9/28/90.
C07.021.012	OFD-104A-1.1	10/15/94	COMPLETE	CLEAR	
C07.021.014	OFD-106E-2.1	11/07/94	COMPLETE	CLEAR	
C07.021.015	OFD-107A-2.1	11/07/94	COMPLETE	CLEAR	



OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS B (CATEGORY C-H) RESULTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>DATE LAST EXAMINED</u>	<u>CONDITION</u>	<u>STATUS</u>	<u>COMMENTS</u>
C07.021.016	OFD-107A-2.2	/ /	NOT TESTED		Item was not completed prior to end of interval - ref. PIP#2-095-0061.
C07.021.017	OFD-107B-2.1	11/16/94	COMPLETE	CLEAR	
C07.021.021	OFD-116A-2.1	11/16/94	COMPLETE	CLEAR	
C07.021.022	OFD-116C-2.1	11/16/94	COMPLETE	CLEAR	
C07.021.031	OFD-124B-2.2	10/27/94	COMPLETE	CLEAR	
C07.021.033	OFD-127B-2.2	11/16/94	COMPLETE	CLEAR	
C07.021.034	OFD-137A-2.2	10/27/94	COMPLETE	CLEAR	
C07.021.035	OFD-137B-1.2	11/07/94	COMPLETE	CLEAR	
C07.021.036	OFD-144A-2.2	11/07/94	COMPLETE	CLEAR	
C07.021.037	OFD-144A-2.3	11/01/94	COMPLETE	CLEAR	
C07.021.039	OFD-110A-2.4	11/10/94	COMPLETE	CLEAR	
C07.031.004	OFD-101A-2.3	08/03/94	COMPLETE	CLEAR	

OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS B (CATEGORY C-H) RESULTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>DATE LAST EXAMINED</u>	<u>CONDITION</u>	<u>STATUS</u>	<u>COMMENTS</u>
C07.031.005	OFD-101A-2.3	08/03/94	COMPLETE	CLEAR	
C07.031.006	OFD-101A-2.3	11/13/94	COMPLETE	CLEAR	
C07.031.007	OFD-103A-2.1	11/02/94	COMPLETE	CLEAR	
C07.031.008	OFD-103A-2.1	11/02/94	COMPLETE	CLEAR	

PAGE NO. 1  
01/23/95

OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS C (CATEGORY D-A) RESULTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>DATE LAST EXAMINED</u>	<u>CONDITION</u>	<u>STATUS</u>	<u>COMMENTS</u>
D01.012.008	OFD-109A-1.1	10/26/94	COMPLETE	CLEAR	

OCONEE UNIT NUMBER 2 - 2nd INTERVAL  
CLASS C (CATEGORY D-B) RESULTS  
FOR OUTAGE NUMBER 14

<u>ITEM NO.</u>	<u>DRAWING</u>	<u>DATE LAST EXAMINED</u>	<u>CONDITION</u>	<u>STATUS</u>	<u>COMMENTS</u>
D02.012.004	OFD-121A-2.8	10/07/94	COMPLETE	RECORDABLE	
D02.012.006	OFD-121B-2.5	06/05/93	COMPLETE	CLEAR	
D02.012.007	OFD-121D-2.1	11/03/94	COMPLETE	CLEAR	
D02.012.008	OFD-121D-1.2	11/04/94	COMPLETE	CLEAR	
D02.012.015	OFD-133A-2.2	06/14/93	PARTIAL	CLEAR	Item was not completed prior to end of interval - ref. PIP#2-095-0061.

- 5.2 Limited examinations (i.e., less than 90% of the required examination volume obtained) identified during Outage 14 are shown below.

<u>Item Number</u>	<u>Request for Relief Serial Number</u>
None	None

6.0 Reportable Indications

Outage 14 had no reportable indications.

## 7.0 Personnel, Equipment and Material Certifications

All personnel who performed or evaluated the results of inservice inspections from June 21, 1993 to November 16, 1994 at Oconee Nuclear Station, Unit 2, were certified in accordance with the requirements of 1980 Edition of ASME Section XI with Addenda through Winter 1980. The appropriate certification records for each Duke Power Company inspector are on file at Oconee Nuclear Station or in the Corporate offices in Charlotte, North Carolina. The certification records for the Babcock & Wilcox Nuclear Technologies (BWNT) inspectors are on file at the BWNT offices in Lynchburg, Virginia.

Records of periodic calibration of Duke Power Company inspection equipment are on file at Oconee Nuclear Station or in the Corporate offices in Charlotte, North Carolina. Records of periodic calibration of BWNT inspection equipment are on file at the BWNT offices in Lynchburg, Virginia.

8.0 Corrective Action

The following Problem Investigation Process (PIP) Reports were generated during Outage 14:

<u>PIP Serial No.</u>	<u>Description</u>	<u>Date Issued</u>
2-O95-0061	All of the required hydrostatic test and the associated VT-2 examinations were not performed as required by the ISI Plan.	1/10/95



9.0 Reference Documents

The following reference documents apply to the inservice inspection performed during Outage 14 at Oconee 2.

Request for Relief 94-GO-002 - Request to use Code Case N-522. Item numbers affected are as follows:

C07.021.014	C07.021.015	C07.021.017	C07.021.021
C07.021.022	C07.021.035	C07.021.036	

PIP 2-O95-0061 - All of the required hydrostatic test and the associated VT-2 examinations were not performed as required by the ISI Plan. The incomplete Item Numbrers are as follows:

C07.021.006	C07.021.016	D02.012.015
-------------	-------------	-------------

DUKE POWER COMPANY

Request for Relief From  
Inservice Inspection Requirement

Station: Oconee, McGuire and Catawba

Unit: Oconee 1, 2 and 3; McGuire 1 and 2; Catawba 1 and 2

Requesting Department: Nuclear Generation

Reference Code: ASME Boiler and Pressure Vessel Code, Section XI  
1980 Edition through Winter 1980 Addenda (Second Inspection Interval) &  
1989 Edition with no Addenda (Third Inspection Interval) for Oconee Units 1, 2  
and 3;  
1986 Edition with no Addenda for McGuire Unit 1;  
1989 Edition with no Addenda for McGuire Unit 2;  
1980 Edition through Winter 1981 Addenda for Catawba Units 1 and 2.

I. Component for which exemption is requested:

a. Name and Identification Number:

This request is for all of the remaining Interval hydrostatic testing for piping that penetrates a containment vessel, when the piping and isolation valves that are part of the containment system are Class 2 but the balance of the piping system is outside the scope of Section XI. This request is for system hydrostatic tests to be performed prior to the end of each inspection interval as follows:

Oconee 1, 2 and 3 - Second and Third Ten Year Inspection Intervals  
McGuire 1 and 2 - Second Ten Year Inspection Interval  
Catawba 1 and 2 - First Ten Year Inspection Interval

b. Function:

Containment integrity.

c. ASME Section XI Code Class: 2

d. Construction Code and Class (If Applicable):

Oconee - ANSI B31.1 - 1967 & ANSI B31.7 - 1968  
McGuire - ASME Section III - 1971 through Winter 1971 Addenda  
Catawba - ASME Section III - 1974 through Summer 1974 Addenda

e. Valve Category (If Applicable): N/A

II. Reference Code Requirement that has been determined to be impractical:

System hydrostatic test per IWC-5222; Category C-H; Items C7.40 and C7.80.

III. Basis for Requesting Relief:

Consistent with the philosophy of ASME Code Case N-522, this request is based on performing a 10 CFR 50, Appendix J test in lieu of the Interval hydrostatic pressure test, when the piping and isolation valves that are part of the containment system are Class 2 but the balance of the piping system is outside the scope of ASME Boiler & Pressure Vessel Code, Section XI. The only reason that the penetration piping is classified as Class 2 is because of its function as part of the containment pressure boundary. The remaining portion of the system is non nuclear related and the integrity of the system in relation to its primary function is not within the scope of Section XI. Since containment integrity is the only safety related function performed, it is logical to test the penetration portion of the system to the Appendix J criteria.

ASME Code Case N-522 has been approved by the ASME Boiler & Pressure Vessel Code Committee and the Board on Nuclear Codes and Standards as an acceptable alternative to the rules of the ASME Boiler & Pressure Vessel Code, Section XI. ASME Code Case N-522 has also been published in ASME Code Cases: Nuclear Components, 1992 Edition, Supplement No.7.

IV. Alternate Examination:

Class 2 piping and isolation valves that are part of the containment system, but the balance of the piping system is outside the scope of Section XI, shall be examined under the rules of 10CFR 50, Appendix J.

V. Implementation Schedule:

Immediate implementation.

Evaluated By: J. M. Baughman Date 6/13/94

Evaluated By: J. Borkow Date 6/13/94

Today's Date : 01/24/95  
Time : 09:26  
Page No.: 1  
PIP Serial No. : 2-095-0061

MSE Serial No. : 2-095-0061  
LER Serial No.:  
Other Rpt. No.:

OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form

I. Problem ID

Occurred Time/Date: 01/10/95 Discovered Time/Date: 01/10/95

Unit(s) : 2	Status at Time Discovered:	Unit 1	Unit 2	Unit 3
	Mode:	N/A	1	N/A
	% Power:	N/A	100	N/A

Unit Status Remarks: operating

System(s) Affected:

- 1). HPI = Other High Pressure Injection Equip.
- 2). CCW = Condenser Circulating Water
- 3). CS = Coolant Storage

Problem Found While Working With Work Order No.: NA

Location of Problem - Bldg: Elev: Column Line:  
Location Remarks: aux & turb bld and part of pen #29 in RB

Method Used To Discover Problem:

Reviewing pressure test data on areas identified by ISI/GO

Brief Problem Description:

3 pipe sections lacked vt-2 pressure tested during 3rd period

Detailed Problem Description:

Three sections of piping that were required to be ISI vt-2 pressure tested during the 3rd period of the 2nd interval (which ended Dec 16, 1994) were not identified to be tested and consequentially the VT-2 examinations were not performed. The three areas are as follows: 1) HPI piping from valve 2hp-241 to penetration #8...this is part of the normal HPI injection...all the piping is in the aux bld. 2) CCW piping from 2CCW-88 to 2CCW-416 which is the emerg FDW Pump Turbine Oil Cooler cooling supply line...this piping is in the turbine bld. 3) CS piping at penetration #29 specifically 2CS-5 to 2CS-6.

The error occurred during identification of what remaining portions of piping needed ASME ISI VT-2 pressure testing for the 3rd period of the 2nd interval (during 1993). For the CS and CCW portions both were hydro pressure tested, but only a few welds of each section were vt-2 examined. These pressure test were performed for modification work and only tested the new welds and were not intended to be the test for the ten year ISI vt-2 test.

Today's Date : 01/24/95  
Time : 09:26  
Page No.: 2  
PIP Serial No. : 2-095-0061

MSE Serial No. : 2-095-0061  
LER Serial No.:  
Other Rpt. No. :

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

The HPI section is located on the Oconee piping Flow Diagram (OFD) in an area where three different ISI vt-2 pressure test were performed. The OFDs used to identify what remained to be tested should have had these three sections of piping marked. The person assigned to mark the OFDs failed to look at the test packages to determine if they were 10 year ISI test or just for replacement welds, assumed they were 10 year ISI test, and processed the OFDs as not remaining to be tested. The HPI section was probably just overlooked and identified with the three larger adjacent sections which testing was completed. (Note: The person marking the OFDs is no longer a Duke employee.)

The paperwork for the HPI piping pressure testing has been issued and should be performed shortly. The CS piping has been tested per containment J testing and was satisfactory. The CCW section has been pressurized twice this period but not all the piping was examined. However, this will be sufficient until the next opportunity is available to perform a valid VT-2 examination on these CS and CCW portions.

Originated by: VBDIXON Group: MCE Date: 01/16/95

Other Units/Components/Systems/Areas Affected (Y,N,U): NO

Immediate Corrective Actions:

An evaluation of the three sections was made. The HPI section was in operation and could be tested immediately and the test package was initiated. The CS section was determined to have been tested per the J testing for containment penetrations and that test was almost the same as the VT-2 that would have been performed. The J Test will suffice until the next refueling outage when the required VT<sub>2</sub> test can be performed. The CCW piping has been pressurized to hydro pressures twice already this period due to 2 modifications. The replacement hydro test will suffice until the line can be isolated and pressurized so all the piping can be VT-2 examined.

The system for tracking the third interval is different and has a few more enhancements to avoid such errors as these.

Originated by: VBDIXON Group: MCE Date: 01/16/95

Corrective Action Work Order No.:

Problem Identified By: VBDIXON Group: MCE Date: 01/16/95  
Problem Entered By : VBDIXON Group: MCE Date: 01/16/95

Today's Date : 01/24/95  
Time : 09:26  
Page No.: 3  
PIP Serial No. : 2-095-0061

MSE Serial No. : 2-095-0061  
LER Serial No.:  
Other Rpt. No. :

**OCONEE NUCLEAR STATION**  
**Problem Investigation Process**  
**Problem Investigation Form**

II. Significance

Is the Problem Significant? Y      Action Category: 2  
Significance Code: 12 - Needing higher attention, det. by SRG  
MSE No.: 2-095-0061      LER No.:      Other Report No.:  
OEP No.:

Event Code(s) :  
1). F8 = Testing

Screening Remarks:

Presently, missed ISI VT-2 inspections are potentially reportable, and should be screened as a MSE. This PIP is not an Operability concern.

Originated by: KWGEORGE      Group: MCE      Date: 01/18/95

Screened By: KWGEORGE      Group: MCE      Date: 01/18/95

Operability:      Status: CLOSED  
Sys/Comp PRESENT Operable?(Y,N,C,E): Y      Rqd Mode:  
Resp. Grp for Present Operability :      Due Date: / /  
Evaluated By : HDUMEYER      Group : SRG      Act Date: 01/19/95

Comments:

Sys/Comp PAST Operable ?(Y,N,C,E) : Y      Status: CLOSED  
Resp. Grp for Past Operability :      Due Date: / /  
Evaluated By : HDUMEYER      Group : SRG      Act Date: 01/19/95

Comments:

Reportability:  
Problem Reportable? (Y,N,E) : N  
Reportable Per:  
Responsible Group for Reportability:      Due Date: / /  
Evaluated By : HDUMEYER      Group : SRG      Act Date: 01/19/95

Comments:

Notifications Made:  
Regulatory Agency Contactee :

Today's Date : 01/24/95  
Time : 09:26  
Page No. : 4  
PIP Serial No. : 2-095-0061

MSE Serial No. : 2-095-0061  
LER Serial No. :  
Other Rpt. No. :

**OCONEE NUCLEAR STATION  
Problem Investigation Process  
Problem Investigation Form**

Duke Power Company Contactor : Date : / /  
Date NRC Res. Inspector Notified: / /  
Date Notified VP or Sta. Mgr. : / /  
Date Notified NS Duty Engineer : / /

Investigation Report:

Resp. Group for Invest. Report : Date : / /  
Investigator : Group: Act Date : / /  
Date Due to V.P. or Station Mgr.: / /  
Date Regulatory Agency Rpt. Due : / /  
  
Date Investigation Report Apprvd: / /

NRC Cause Code(s) :

Responsible Group(s) for Proposed Resolution :

	Original	Current	#
	Due Date	Due Date	Ext.
1). MCE = Mech/Civil Eq. Eng.	02/09/95	02/09/95	0

Responsible Group for Cause Code Evaluation : MCE Due Date: 02/09/95

Responsible Group for Overall PIP Approval : SRG Due Date: / /

**III. Problem Evaluation**

System(s) Affected :

- 1). HPI = Other High Pressure Injection Equip.
- 2). CCW = Condenser Circulating Water
- 3). CS = Coolant Storage

Affected Equipment:	Comp.	Manufacturer
WMS Equipment ID No.	Code	Name

Most Probable Group Causing Event : Status: OPEN  
Group INPO Cause Code(s) :

Cause(s) of Problem:

Is Cause Determination Complete (y,n) : No  
Assigned To : VBDIXON / TKROYAL Mgmt Exception: No  
Orig Due Date : 02/09/95 Curr Due Date: 02/09/95 # of Ext.: 0







Today's Date : 01/24/95  
Time : 09:26  
Page No.: 7  
PIP Serial No. : 2-095-0061

MSE Serial No. : 2-095-0061  
LER Serial No.:  
Other Rpt. No. :

**OCONEE NUCLEAR STATION**  
**Problem Investigation Process**  
**Problem Investigation Form**

**V. Final and Overall PIP Approval**

Criterion XVI Review:

XVI Status : Required - Not Under Review Yet                      GO PIP No. :  
Assigned To:                      /                      Due Date:    /    /  
Approved By:                      Group:                      Date:        /    /

Overall PIP Approval:

Assigned To:                      /                      Due Date:    /    /  
Approved By:                      Group: SRG                      Date:        /    /

Microfilm Roll/Frame :                      /

Supplemental Concurrences - These do not affect PIP Closure

Concurrences associated with External Commitments

RGC Concurrence By :                      Date:        /    /

End of the Document FOR PIP No.: 2-095-0061  
The Status of this PIP No. is : OPEN

10.0 Class 1 and 2 Repairs and Replacements

As required by ASME Section XI 1980 Edition, a record of the Class 1 and 2 Repairs and Replacements for work performed from June 21, 1993 through November 16, 1994 is provided and is included in this section of the report. The individual work control documents are on file at Oconee Nuclear Station.

REPAIR/REPLACEMENT LOG

ASME SECTION XI-1980

OCONEE NUCLEAR STATION

UNIT 2 RFO # 14

INTERVAL COVERED: FROM: 6-21-93

TO: 11-16-94

PREPARED BY: CR Henson DATE 11-17-94  
CHECKED BY: WmC Clue DATE 11-17-94  
REVIEWED BY: Pat Hoobz DATE 11-17-94

TRANSMITTED TO  
QA MANAGER TECHNICAL SERVICES

BY: T. J. Colman DATE 11-22-94

WORK ORDER	ASME CLASS	DESCRIPTION
93006170	2	Replaced plug/disc 2HP-31
93022958	1	Replaced B/B BOLTING 2LP-48
92016722	2	Replaced flange bolting 2HPI FE-161
93038276	2	Replaced B/B nut 2MS-82
93033111	1	Replaced bolting CRDM #64
93033110	1	Replaced bolting CRDM #67
92098997	1	Replaced valve 2RC-66
92098850	1	Replaced valve 2RC-68
93034619	2	Replaced bolting 2A OTSG AFDW riser #1
93017296	2	Replaced bolting 2B OTSG AFDW riser #7
93039929	2	Replaced bolting 2B OTSG AFDW riser #5
93040165	2	Replaced bolting 2A OTSG upper secondary manway
93035094	2	Replaced bolting 2B LPI pump discharge flange
93034787	2	Replaced bolting 2A OTSG AFDW riser #7
93034786	2	Replaced bolting 2A OTSG AFDW riser #6
93034776	2	Replaced bolting 2A OTSG AFDW riser #2
93033204	2	Replaced bolting 2A OTSG FDW riser #6
93034777	2	Replaced bolting 2A OTSG AFDW riser #3
93034779	2	Replaced bolting 2A OTSG AFDW riser #5
93039541	2	Replaced disc valve 2MS-35
92098848	1	Replaced valve 2RC-67 and leak off line nut

WORK ORDER	ASME CLASS	DESCRIPTION
93033565	2	Replaced B/B nut valve 2HP-62
93039919	1	Replaced bolting CRDM nozzle location C11
93032267	1	Replaced bolting CRDM nozzle location G7
93031883	1	Replaced bolting auxillary flanges 2A2 RCP
93031088	2	Replaced bolting BWST flange
94058487	1	Replaced B/B bolting 2HP-153
94046968	2	Replaced valve and in-line bolting 2FDW-317
94077043	1	Replaced bolting CRDM nozzle #50
94077033	1	Replaced bolting CRDM nozzle #17
94077034	1	Replaced bolting CRDM nozzle #5
94077039	1	Replaced bolting CRDM nozzle #45
94030753	2	Replaced valve and in-line bolting 2CCW-113
94030973	2	Replaced valve and in-line bolting 2BS-11
94023345	2	Replaced flange and bolting BWST
94077032	1	Replaced bolting CRDM nozzle #18
94077030	1	Replaced bolting CRDM nozzle #52
94043957	2	Replaced valve 2FDW-143
94077042	1	Replaced bolting CRDM nozzle #14
94077046	1	Replaced bolting CRDM nozzle #57
94059913	1	Stabilized/Plugged tubes 2A OTSG
94059746	1	Stabilized/Plugged tubes 2B OTSG

WORK ORDER	ASME	DESCRIPTION
94031669	2	Replaced valve 2BS-16
94051490	2	Replaced valve 2HP-21
94021743	2	Removed N-16 TANK added piping
94080651	1	Replaced bolting CRDM nozzle #28
94081551	1	Replaced bolting CRDM nozzle #63
94081237	1	Replaced bolting CRDM nozzle #23
93022962	2	Machined valve body gasket surface to remove defects valve 2LP-15
93039929	2	Base metal repair to FDW header flange 2B OTSG
94056458	2	Repaired by welding disc guide valve 2LPSW-565
94032917	2	Replaced valve 2LP-30
94030698	2	Replaced valve 2CC-76
94027719	2	Replaced valve 2CC-77
94056435	2	Replaced valve 2HP-145
94082333	2	Machined valve 2CC-8 gasket surface to repair leak
94051495	2	Replaced pipe between valves 2BA-171 and 2BA-172
94027801	2	Replaced valve 2HP-102
94045894	2	Replaced valve 2HP-363
94055352	2	Replaced valve 2HP-97 upgraded to class B
94046968	2	Replaced valve 2FDW-317
94027825	2	Replaced valve 2HP-101



WORK ORDER	ASME CLASS	DESCRIPTION
94030758	2	Replaced valve 2CCW-113
94043926	2	Replaced valve 2FDW-142
94043972	2	Replaced valve 2FDW-209
94046566	1	Replaced valve 2LP-46
94043989	2	Replaced valve 2FDW-208
94043957	2	Replaced valve 2FDW-143
94030973	2	Replaced valve 2BS-11
94051490	2	Replaced valve 2HP-21
94080782	1	Replaced 2A letdown cooler with spare cooler SR# 44773-1
94046433	2	Replaced RBCU cooling coils and associated piping
94054662	1	Replaced valves 2HP-3 and 2HP-4 and associated piping
94043972	2	Replaced valve 2FDW-141

WORK ORDER	ASME CLASS	DESCRIPTION
93037355	UNK	Adjusted setting on variable spring support 2-03-0-551-H48
93036478	UNK	Adjusted setting on variable spring support 2-01A-1-1-0-1401B-H1
93035351	UNK	Installed new u-bolt S/R # 2-01A-0-1481A-H5B
93034755	UNK	Adjusted rod eye nut S/R # 2-01A-0-1481A-H6B
93034804	UNK	Adjusted rod eye nut S/R # 2-01A-0-1481A-H3B
93034768	UNK	Retorqued loose anchor S/R # 2-03-148A-H6108
93036542	UNK	Installed new snubber reservoir and seals S/R # 2-50-0-1479A-H12
93032595	UNK	Rebuilt hyd. snubber S/R # 2-01A-3-0-1401B-R9
93033003	UNK	Installed new remote reservoir fittings on S/R # 2-50-1066A-RCPM-2B1-SS1
93027454	UNK	Installed new bolting S/R # 2-63-1439A-H5437
93026658	UNK	Installed new anchors on S/R # 2-04A-0-1439B-R9
93029267	UNK	Installed bolting on S/R # 2-04A-0-1439B-R9
93035349	UNK	Installed new u-bolt S/R # 2-51A-0-1479A-H12A
93041333	UNK	Welded shims on S/R # 2-01A-0-1401B-R13
93034809	UNK	Welded shims on S/R # 2-51A-0-1479A-H4B
93041086	UNK	Replaced plate on S/R # 2-01A-0-1401B-R10

WORK ORDER	ASME CLASS	DESCRIPTION
93039282	UNK	Replaced damaged structural members on S/R'S 2-04A-0-1439B-H16 2-51A-1439B-DE071
92013257	UNK	Installed new anchors on S/R # 2-01A-0-1441- -R9-3
92099310	UNK	Installed new snubbers on S/R'S 2-01A-0-1441-DE060 (B) 2-01A-1403D-DE084
92099128	UNK	Rebuilt snubber S/R # 2-50-0-1479A-H1A
92099128	UNK	Installed new hydraulic snubbers S/R'S 2-51A-1-0-1444-SR150 2-13-7-0-1400A-SR1 2-03A-1480A-H1B 2-01A-0-1481B-H2A
93032997	UNK	Installed new hyd. snubber S/R # 2-50-0-1480A-H8
93039539	UNK	Adjusted spring can S/R # 2-01A-0-1401B-H10
93032769	UNK	Welded shim S/R # 2-07A-6-0-1402A-H7
93032768	UNK	Installed threaded rod S/R # 2-07A-1400A-DE016
93039145	UNK	Adjusted constant support S/R # 2-03A-0-1479A- H2B
93033004	UNK	Installed new pipe clamp and reservoir S/R # 2-50-0-1479A-H1A
93033762	UNK	Installed bolting S/R # 2-64-1479D-H6441
93021768	UNK	Installed spacer washers S/R # 2-57-0-1481A-H20
93021761	UNK	Installed support rod S/R # 2-57-0-1481A-H11
93017809	UNK	Permanently Removed S/R # 2-14B-1400A-JEJ-2203

WORK ORDER	ASME CLASS	DESCRIPTION
93017809	UNK	Modified S/R'S 2-14B-0-437B-JEJ-1707 2-14B-1-0-1439-H13 2-14B-1437A-DE140 2-14B-1437A-DE139 2-14B-1437A-JJ-0112 2-14B-1437A-JJ-0312 2-14B-1437A-JJ-0111
93017809	UNK	Modified S/R'S 2-14B-1-0-1439B-DE182 2-14B-1436A-DE118 2-14B-0-1436A-H22
92012453	UNK	Shimed/welded S/R # 2-53B-5-0-1439B-H58A
94024506	UNK	Shimed/welded S/R # 2-14B-1400R-H4038
93045300	UNK	Installed new S/R'S 2-14B-1407A-H4147 2-14B-1407A-H4143
93014856	UNK	Upgraded to QA 1 and modified to new sketches S/R'S 2-64-1435A-H5019 2-64-1435A-H5020 2-64-1435A-H5466 2-64-1435A-H5467
94031337	UNK	Modified S/R'S 2-03A-1-0-1400A-H73 2-03A-1-0-1400A-H82 2-03A-1-0-1400A-H98 2-03A-1-0-1400A-H105 2-03A-1-0-1400A-H106 2-03A-1-0-1400A-H120
94057013	UNK	Permanently removed S/R # 2-51A-1-0-1444-DE097
94051490	UNK	Permanently removed S/R # 2-51A-3-0-1439A-SR75

WORK ORDER	ASME CLASS	DESCRIPTION
94043101	UNK	Installed new S/R'S 2-50-1481A-H6522 H6523 H6524 H6533 H6534 H6535 H6519 H6520 H6521 H6532
94021743	UNK	Permanently removed S/R # 51A-0-1478A-GPD-H0051  Modified S/R # 2-51A-0-1478A-H13C
94046893	UNK	Adjusted spring can S/R # 2-01A-4-0-1403D-H9
94043623	UNK	Modified S/R'S 1-GH-RS-7273-03 1-GH-RS-7374-05 1-GH-RS-7374-06
93020640	UNK	Modified S/R # 2-31A-3-0-1444-H85
94054667	UNK	Welded shim S/R # 2-51A-1478A-H6392
94043623	UNK	Installed new S/R'S 2-14B-435K-H5478 2-14B-435K-H5479 2-14B-1435A-H5480 2-14B-1435A-H5481 2-14B-1435A-H5483 2-14B-501D-H5484 2-14B-1435A-H5485 2-14B-1435A-H5486 2-15-1437A-H5487 2-14B-1435A-H5482

WORK ORDER	ASME CLASS	DESCRIPTION
94046433	UNK	Modified S/R'S 2-14B-0-1479A-H11E H11B H11C H11F H9 H12 H17D H17C
94062890	UNK	Installed new S/R # 2-14-1478F-H6536
94082654	UNK	Modified S/R'S 2-64-1478D-H6514 2-64-0-1478D-3005 2-64-1478D-H6515