



D.M. JAMIL
Vice President

Duke Power
Catawba Nuclear Station
4800 Concord Road / CN01VP
York, SC 29745-9635

803 831 4251

803 831 3221 fax

August 30, 2005

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Subject: Duke Energy Corporation
Catawba Nuclear Station, Unit 1
Docket Number 50-413
Inservice Inspection Report and Steam
Generator Outage Summary Report for End
of Cycle 15 Refueling Outage

Please find attached the subject reports which provide the results of the inservice inspection effort and the steam generator inspection effort associated with the subject outage.

There are no regulatory commitments contained in this letter or its attachments.

If you have any questions concerning this material, please call L.J. Rudy at (803) 831-3084.

Very truly yours,

John W. Pitesa for

D.M. Jamil

LJR/s

Attachments

A047



Document Control Desk
Page 2
August 30, 2005

xc (with attachments):

W.D. Travers, Regional Administrator
U.S. Nuclear Regulatory Commission, Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

E.F. Guthrie, Senior Resident Inspector
U.S. Nuclear Regulatory Commission
Catawba Nuclear Station

S.E. Peters, Project Manager (addressee only)
U.S. Nuclear Regulatory Commission
Mail Stop O-8 G9
Washington, D.C. 20555-0001

**INSERVICE INSPECTION REPORT
CATAWBA - UNIT 1
2005 REFUELING OUTAGE
EOC 15 (OUTAGE 7)
NRC DOCUMENT CONTROL**

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 South Church Street Charlotte, NC 28201-1006
(Name and Address of Owner)

2. Plant: Catawba Nuclear Station, 4800 Concord Road, York, SC 29745
(Name and Address of Plant)

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

5. Commercial Service Date: 6/29/85 6. National Board Number for Unit 130

7. Components Inspected:

Component or Appurtenance	Manufacturer Installer	Manufacturer Installer Serial No.	State or Province No.	National Board No.
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.

FORM NIS-1 (Back)

8. Examination Dates December 31, 2003 to June 6, 2005
9. Inspection Period Identification: Third Period
10. Inspection Interval Identification: Second Interval
11. Applicable Edition of Section XI 1989 Addenda None
12. Date/Revision of Inspection Plan: September 9, 1999 / Revision 2

13. Abstract of Examinations and Test. 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) N/A Expiration Date N/A

Date 8/18/05 Signed Duke Energy Corp. By L. Kevin Payne
 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 of Province of NC employed by * The Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the components described in this Owners' Report during the period 12-31-03 to 8-18-05, 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 Owners' 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 Owners' Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

Robert McMill Commissions NC978
 Inspector's Signature National Board, State, Province, and Endorsements

Date 8-18-05

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

INSERVICE INSPECTION REPORT
CATAWBA – UNIT 1
2005 REFUELING OUTAGE

EOC15 (OUTAGE 7)

Location: 4800 Concord Road, York, South Carolina 29745

NRC Docket No. 50-413

National Board No. 130

Commercial Service Date: June 29, 1985

Owner: Duke Energy Corporation
526 South Church Street
Charlotte, NC 28201-1006

Revision 0

Prepared By:	<u><i>G. J. Hogge, Jr.</i></u>	Date	<u><i>8-15-2005</i></u>
Reviewed By:	<u><i>J. C. Cherry</i></u>	Date	<u><i>8/18/2005</i></u>
Approved By:	<u><i>L. Kevin Polyné</i></u>	Date	<u><i>8/18/05</i></u>

DISTRIBUTION LIST

- 1) Duke Energy Corporation
Quality Assurance Technical
Services (QATS) (Original)
- 2) Duke Energy Corporation
Inspection and Welding
Services (IWS) Catawba
- 3) NRC Document Control
- 4) The Hartford Steam Boiler
Inspection and Insurance
Company of Connecticut
c/o R. N. McGill (ANII)
Catawba Nuclear Station

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Revision</u>
1.0	General Information	0
2.0	Second Ten-Year Interval Inspection Status	0
3.0	Final Inservice Inspection Plan	0
4.0	Results of Inspections Performed	0
5.0	Owner's Report for Repair / Replacement Activities	0
6.0	Pressure Testing	0

1.0 General Information

This report describes the Inservice Inspection of Duke Energy Corporation's Catawba Nuclear Station Unit 1 during the 2005 Refueling Outage, also referred to as EOC 15 (Outage 7), which is the last outage in the Third Inspection Period of the Second Ten Year Interval.

Included in this report is 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	Westinghouse	30743	N/A	N/A
Pressurizer	Westinghouse	DCPT-1911	N/A	W18589
Steam Generator 1A	Babcock and Wilcox, Inc.	770101	N/A	151
Steam Generator 1B	Babcock and Wilcox, Inc.	769304	N/A	150
Steam Generator 1C	Babcock and Wilcox, Inc.	769302	N/A	147
Steam Generator 1D	Babcock and Wilcox, Inc.	769303	N/A	149
Reactor Coolant Pump 1A	Ionics, Inc.	1S-86P764	N/A	584
Reactor Coolant Pump 1B	Ionics, Inc.	2S-86P764	N/A	585
Reactor Coolant Pump 1C	Ionics, Inc.	3S-86P764	N/A	330
Reactor Coolant Pump 1D	Ionics, Inc.	4S-86P764	N/A	331

Identification Numbers (Continued)

Item	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Reactor Coolant System	Duke Power Co.	C-1NC	N/A	126
Safety Injection System	Duke Power Co.	C-1NI	N/A	128
Chemical and Volume Control System	Duke Power Co.	C-1NV	N/A	127
Auxiliary Feedwater System	Duke Power Co.	C-1CA	N/A	121
Feedwater System	Duke Power Co.	C-1CF	N/A	120
Refueling Water System	Duke Power Co.	C-1FW	N/A	91
Main Steam Supply to Auxiliary Equipment System	Duke Power Co.	C-1SA	N/A	114
Main Steam System	Duke Power Co.	C-1SM	N/A	122
Main Steam Vent to Atmosphere System	Duke Power Co.	C-1SV	N/A	96
Containment Spray System	Duke Power Co.	C-1NS	N/A	118
Steam Generator Blowdown System	Duke Power Co.	C-1BB	N/A	111
Steam Generator Wet Lay Up Recirculation System	Duke Power Co.	C-1BW	N/A	104
Diesel Generator Fuel Oil System	Duke Power Co.	C-1FD	N/A	100
Component Cooling System	Duke Power Co.	C-1KC	N/A	129
Residual Heat Removal System	Duke Power Co.	C-1ND	N/A	115
Turbine Exhaust System	Duke Power Co.	C-1TE	N/A	113

Identification Numbers (Continued)

Item	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Diesel Generator Starting Air System	Duke Power Co.	C-1VN	N/A	98
Diesel Generator Cooling Water System	Duke Power Co.	C-1KD	N/A	99
Spent Fuel Cooling System	Duke Power Co.	C-1KF	N/A	103
Diesel Generator Lube Oil System	Duke Power Co.	C-1LD	N/A	105
Nuclear Sampling System	Duke Power Co.	C-1NM	N/A	124
Containment Penetration Valve Injection Water System	Duke Power Co.	C-1NW	N/A	125
Nuclear Service Water System	Duke Power Co.	C-1RN	N/A	117
Diesel Generator Starting Air System	Duke Power Co.	C-1VG	N/A	95
Liquid Waste Recycle System	Duke Power Co.	C-1WL	N/A	119
Control Area Chilled Water System	Duke Power Co.	C-1YC	N/A	106
Seal Water Injection Filter	Pall Trinity Micro Corporation	1A 29652 1B 29653	N/A N/A	15626 15627
Volume Control Tank	Lamco Industries Inc.	452	N/A	183
Seal Water Heat Exchanger	Atlas Industrial Manufacturing Company	3620	N/A	2976
Regenerative Heat Exchanger	Joseph Oat Corporation	2255-1A1	N/A	869
Residual Heat Removal Heat Exchanger	Joseph Oat Corporation	1A 2267-3A 1B 2267-3B	N/A N/A	846 847
Containment Spray Heat Exchanger	Joseph Oat Corporation	1A 2636C 1B 2620	N/A N/A	3456 3430

Identification Numbers (Continued)

Item	Manufacturer or Installer	Manufacturer or Installer Serial No.	State or Province No.	National Board No.
Excess Letdown Heat Exchanger	Atlas Industrial Manufacturing Company	3196	N/A	2574
Residual Heat Removal Pump	Ingersol - Rand	1A 077645 1B 077646	N/A N/A	231 232
Containment Spray Pump	Bingham - Willamette	1A 230340 1B 230341	N/A N/A	213 214
Safety Injection Pump	Pacific Pumps	1A 49359 1B 49360	N/A N/A	232 233
Centrifugal Charging Pump	Pacific Pumps	1A 49778 1B 49779	N/A N/A	256 259
Seal Water Return Filter	Pall Trinity Micro Corporation	29006	N/A	15098

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 the 1989 Edition of ASME Section XI with no addenda including Appendix VII for ultrasonic inspections. In addition, ultrasonic examiners were qualified in accordance with ASME Section XI, Appendix VIII, and 1995 Edition with the 1996 Addenda through the Performance Demonstration Initiative (PDI).

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 Catawba Nuclear Station or copies may be obtained by contacting the Duke Energy Corporate Office in Charlotte, North Carolina

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

The certification records for WesDyne inspectors and the calibration records of WesDyne inspection equipment are included in the WesDyne Catawba Nuclear Power Plant Unit 1 10 Year Reactor Vessel Inservice Examination Report, on file at The Duke Energy 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.

Duke Energy Corporation, Catawba Nuclear Station, Unit 1 Docket Number 50-413, Request for Relief Serial Number (to be filed later), Limited Weld Coverage during End-of-Cycle 15 Refueling Outage.

PIP #C-05-01591 Pipe Support damage on 6" 1A KC Miniflow Line

Engineering Calculation #CNC-1201.01-00-0025 Evaluation of 1EOC15 ISI Indication in RV Nozzle 1D Hot Leg Weld

PIP #G-05-00271 ASME Section XI Class 2 Examinations on Seal Water Return Filter

1.4 Augmented and Elective Examinations

Augmented and elective examination information found within this Inservice Inspection Owner's Summary Report is not required by the ASME Section XI Code or; 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 are responsible for the third party inspections required by ASME Section XI.

Authorized Nuclear Inservice Inspector(s)

Name: R. N. McGill

Employer: The Hartford Steam Boiler Inspection & Insurance Company of Connecticut

Business Address: 200 Ashford Center North
Suite 205
Atlanta, GA 30338-4860
(800) 417-3721
www.hsbct.com

2.0 Second Ten Year Interval Inspection Status

The completion status of inspections required by the 1989 ASME Code Section XI, no 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 (Code Case N-491 applies) for Class 1, 2 and 3 Component Supports. Augmented and Elective Inspections are also included.

Class 1 Inspections

<i>Examination Category</i>	<i>Description</i>	<i>Inspections Required</i>	<i>Inspections Completed</i>	<i>Percentage Completed</i>	<i>Deferral Allowed¹</i>
B-A	Pressure Retaining Welds in Reactor Vessel	14	14	100%	Yes
B-B	Pressure Retaining Welds in Vessels Other than Reactor Vessels	5	5	100%	No
B-D	Full Penetration Welds of Nozzles in Vessels	36	36	100%	Partial
B-E	Pressure Retaining Partial Penetration Welds in Vessels	Reference Section 6.0 Of This Report			
B-F	Pressure Retaining Dissimilar Metal Welds	38	38	100%	No
B-G-1	Pressure Retaining Bolting Greater than 2 Inch Diameter	244	244	100%	Yes
B-G-2	Pressure Retaining Bolting 2 Inches and Less in Diameter	20	20	100%	No
B-H	Integral Attachments for Vessels	5	5	100%	No
B-J	Pressure Retaining Welds in Piping	225	225	100%	No

Class 1 Inspections (Continued)

Examination Category	Description	Inspections Required	Inspections Completed	Percentage Completed	Deferral Allowed¹
B-K-1	Integral Attachments for Piping, Pumps and Valves	None	N/A	N/A	N/A
B-L-1	Pressure Retaining Welds in Pump Casings	None	N/A	N/A	N/A
B-L-2	Pump Casings	0	0	0%*	Yes
B-M-1	Pressure Retaining Welds in Valve Bodies	1	1	100%	Yes
B-M-2	Valve Bodies	5	5	100%	Yes
B-N-1	Interior of Reactor Vessel	3	3	100%	No
B-N-2	Integrally Welded Core Support Structures and Interior Attachments to Reactor Vessels	2	2	100%	Yes
B-N-3	Removable Core Support Structures	1	1	100%	Yes
B-O	Pressure Retaining Welds in Control Rod Housings	3	3	100%	Yes
B-P	All Pressure Retaining Components	Reference Section 6.0 of this Report			
B-Q	Steam Generator Tubing	See note below			
F-A	Class 1 Component Supports F01.010, F01.011, F01.012, F01.040 & F01.050 (Code Case N-491)	72	72	100%	No

Note: Steam Generator Tubing is examined and documented by the Steam Generator Maintenance Group of the Nuclear Services Division as required by the Station Technical Specifications and is not included in this report.

¹ Deferral of inspection to the end of the interval, as allowed by ASME Section XI Table IWB-2500-1. These examination categories are exempt from percentage requirements per IWB-2412 (a), Inspection Program B.

* No pumps were disassembled during the Second Inspection Interval.

Class 2 Inspections

Examination Category	Description	Inspections Required	Inspections Completed	Percentage Completed
C-A	Pressure Retaining Welds in Pressure Vessels	24	24 (See Note 1 below) (See Note 3 on Page 4)	100%
C-B	Pressure Retaining Nozzle Welds in Vessels	9	7 (See Note 2 below) (See Note 3 on Page 4)	77.78%
C-C	Integral Attachments for Vessels, Piping, Pumps and Valves	55	55	100%
C-D	Pressure Retaining Bolting Greater than 2 in. In Diameter	None	N/A	N/A
C-F-1	Pressure Retaining Welds in Austenitic Stainless Steel or High Alloy Piping	257	257	100%
C-F-2	Pressure Retaining Welds in Carbon or Low Alloy Steel Piping	55	55	100%
C-G	Pressure Retaining Welds in Pumps and Valves	20	20	100%
C-H	All Pressure Retaining Components	REFERENCE SECTION 6.0 OF THIS REPORT		
F-A	Class 2 Component Supports F01.020, F01.021, F01.022, F01.040 & F01.050 (Code Case N-491)	270	270 (See Note 3 on Page 4)	100%

Note 1: 12 Regenerative Heat Exchanger welds were not examined during the Second Inspection Interval. See Request for Relief # 03-001 and SER, dated February 17, 2005. A copy of Request for Relief #03-001, dated May 22, 2003 and the Safety Evaluation Report (SER), dated February 17, 2005 are included in this section of the report.

Note 2: Weld ID. Numbers 1ANSHX-3-N1 and 1ANSHX-3-N2 were not examined during EOC15, due to the installation of a new 1A NS Heat Exchanger during EOC15.

Note 3: 100% of the required examinations have been performed for the required inspections initially identified in the Ten Year Inservice Inspection Plan. One (1) late identified component (The Chemical and Volume Control System Seal Water Return Filter) was discovered not to have been included in the Non-Exempt Class 2 Examination Schedule. PIP # G-05-00271 was generated to document this omission and a corrective action assigned to include the required examinations. The Chemical and Volume Control System Seal Water Return Filter required inspections will be scheduled and performed in accordance with PIP #G-05-00271. A copy of the PIP is included in this section of the report.

Augmented/Elective Inspections

<i>Description</i>	<i>Percentage Complete</i>
Postulated Pipe Failure – Main Steam System	100% of requirements for Outage 7/EOC15
NI Cold Leg Accumulator Welds subject to Unanalyzed Thermal Transients	100% of requirements for Outage 7/EOC15



GARY R. PETERSON
Vice President
Catawba Nuclear Station

Duke Power
CN01VP / 4800 Concord Rd.
York, SC 29745

803 831 4251
803 831 3221 fax
grpeters@duke-energy.com

May 22, 2003

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Subject: Duke Energy Corporation
Catawba Nuclear Station, Units 1 and 2
Docket Numbers 50-413 and 50-414
Request for Relief Number 03-001
Relief from Volumetric Examination Requirements on
Regenerative Heat Exchangers

Pursuant to 10 CFR 50.55a(a)(3)(ii), please find attached Request for Relief 03-001. This request seeks relief from Section XI requirements of the ASME Boiler and Pressure Vessel Code, 1989 Edition with no Addenda.

Specifically, this request seeks relief from performing volumetric examinations on the Unit 1 and Unit 2 Regenerative Heat Exchangers as required by Table IWC-2500-1, Examination Category C-A, Pressure Retaining Welds in Pressure Vessels, because compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Catawba is requesting NRC review and approval of this request at your earliest convenience. The NRC has previously reviewed and approved a similar request for McGuire Nuclear Station, Units 1 and 2 on December 2, 1999 (TAC Numbers MA3756 and MA3757).

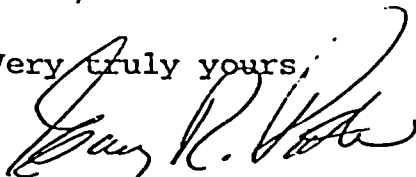
The attachment to this letter contains all technical information necessary in support of this request for relief.

There are no regulatory commitments contained in this letter or its attachment.

If you have any questions concerning this material, please call L.J. Rudy at (803) 831-3084.

Document Control Desk
Page 2
May 22, 2003

Very truly yours,



Gary R. Peterson

LJR/s

Attachment

xc (with attachment):

L.A. Reyes, Regional Administrator
U.S. Nuclear Regulatory Commission, Region II
Atlanta Federal Center
61 Forsyth St., SW, Suite 23T85
Atlanta, GA 30303

E.F. Guthrie, Senior Resident Inspector
U.S. Nuclear Regulatory Commission
Catawba Nuclear Station

R.E. Martin, Senior Project Manager (addressee only)
U.S. Nuclear Regulatory Commission
Mail Stop 08-H12
Washington, D.C. 20555-0001

Document Control Desk

Page 3

May 22, 2003

bxc (with attachment):

G.D. Gilbert

L.J. Rudy

R.K. Rhyne

A.J. Hogge, Jr.

K.E. Nicholson

R.N. McGill

RGC File

Document Control File 801.01

ELL-EC050

NCMPA-1

NCEMC

PMPA

SREC

Proposed Relief in Accordance with 10 CFR 50.55a (a)(3)(ii)
Inservice Inspection Hardship

Duke Energy Corporation
Catawba Nuclear Station – Unit 1 and 2
Second 10-Year Interval – Inservice Inspection Plan
(CNS-1 began on June 29, 1995 and CNS-2 began on August 19, 1996)
ASME Section XI Code – 1989 Edition with No Addenda

I.D. Number	I. System/ Component for Which Relief is Requested: Area or Weld to be Examined	II. & III. Code Requirement from Which Relief is Requested: 100% of the weld length Exam Category Item No. Fig. No.	IV. Basis for Relief	V. Alternate Examinations or Testing	VI. Justification for the Granting of Relief	VII. Implementation Schedule
1REGHX-SH1-HD1	Regenerative Heat Exchanger Head-to-Shell Weld	Exam Category C-A Item No. C01.020.007 (Unit 1) IWC-2500-1(a)	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
2REGHX-SH1-HD1	Regenerative Heat Exchanger Head-to-Shell Weld	Exam Category C-A Item No. C01.020.004 (Unit 2) IWC-2500-1(a)	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
1REGHX-SH1-HD2	Regenerative Heat Exchanger Head-to-Shell Weld	Exam Category C-A Item No. C01.020.008 (Unit 1) IWC-2500-1(a)	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
2REGHX-SH1-HD2	Regenerative Heat Exchanger Head-to-Shell Weld	Exam Category C-A Item No. C01.020.005 (Unit 2) IWC-2500-1(a)	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
1REGHX-SH2-HD1	Regenerative Heat Exchanger Head-to-Shell Weld	Exam Category C-A Item No. C01.020.009 (Unit 1) IWC-2500-1(a)	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
2REGHX-SH2-HD1	Regenerative Heat Exchanger Head-to-Shell Weld	Exam Category C-A Item No. C01.020.006 (Unit 2) IWC-2500-1(a)	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
1REGHX-SH2-HD2	Regenerative Heat Exchanger Head-to-Shell Weld	Exam Category C-A Item No. C01.020.010 (Unit 1) IWC-2500-1(a)	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"

I.D. Number	System / Component for Which Relief is Requested: Area or Weld to be Examined	Code Requirement from Which Relief is Requested: 100% of the weld length Exam Category Item No. Fig. No.	Basis for Relief	Alternate Examinations or Testing	Justification for the Granting of Relief	Implementation Schedule
2REGHX-SH2-HD2	Regenerative Heat Exchanger Head-to-Shell Weld	Exam Category C-A Item No. C01.020.007 (Unit 2) IWC-2500-1(a)	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
1REGHX-SH3-HD1	Regenerative Heat Exchanger Head-to-Shell Weld	Exam Category C-A Item No. C01.020.011 (Unit 1) IWC-2500-1(a)	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
2REGHX-SH3-HD1	Regenerative Heat Exchanger Head-to-Shell Weld	Exam Category C-A Item No. C01.020.008 (Unit 2) IWC-2500-1(a)	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
1REGHX-SH3-HD2	Regenerative Heat Exchanger Head-to-Shell Weld	Exam Category C-A Item No. C01.020.012 (Unit 1) IWC-2500-1(a)	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
2REGHX-SH3-HD2	Regenerative Heat Exchanger Head-to-Shell Weld	Exam Category C-A Item No. C01.020.009 (Unit 2) IWC-2500-1(a)	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
1REGHX-SH1-TS	Regenerative Heat Exchanger Tubesheet-to-Shell Weld	Exam Category C-A Item No. C01.030.002 (Unit 1) IWC-2500-2	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
2REGHX-SH1-TS	Regenerative Heat Exchanger Tubesheet-to-Shell Weld	Exam Category C-A Item No. C01.030.002 (Unit 2) IWC-2500-2	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
1REGHX-SH2-TS	Regenerative Heat Exchanger Tubesheet-to-Shell Weld	Exam Category C-A Item No. C01.030.003 (Unit 1) IWC-2500-2	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
2REGHX-SH2-TS	Regenerative Heat Exchanger Tubesheet-to-Shell Weld	Exam Category C-A Item No. C01.030.003 (Unit 2) IWC-2500-2	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
1REGHX-SH3-TS	Regenerative Heat Exchanger Tubesheet-to-Shell Weld	Exam Category C-A Item No. C01.030.004 (Unit 1) IWC-2500-2	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
2REGHX-SH3-TS	Regenerative Heat Exchanger Tubesheet-to-Shell Weld	Exam Category C-A Item No. C01.030.004 (Unit 2) IWC-2500-2	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"

I.D. Number	System / Component for Which Relief Is Requested: Area or Weld to be Examined	Code Requirement from Which Relief Is Requested: 100% of the weld length Exam Category Item No. Fig. No.	Basis for Relief	Alternate Examinations or Testing	Justification for the Granting of Relief	Implementation Schedule
1REGHX-TS-SH1	Regenerative Heat Exchanger Tubesheet-to-Shell Weld	Exam Category C-A Item No. C01.030.005 (Unit 1) IWC-2500-2	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
2REGHX-TS-SH1	Regenerative Heat Exchanger Tubesheet-to-Shell Weld	Exam Category C-A Item No. C01.030.005 (Unit 2) IWC-2500-2	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
1REGHX-TS-SH2	Regenerative Heat Exchanger Tubesheet-to-Shell Weld	Exam Category C-A Item No. C01.030.006 (Unit 1) IWC-2500-2	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
2REGHX-TS-SH2	Regenerative Heat Exchanger Tubesheet-to-Shell Weld	Exam Category C-A Item No. C01.030.006 (Unit 2) IWC-2500-2	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
1REGHX-TS-SH3	Regenerative Heat Exchanger Tubesheet-to-Shell Weld	Exam Category C-A Item No. C01.030.007 (Unit 1) IWC-2500-2	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"
2REGHX-TS-SH3	Regenerative Heat Exchanger Tubesheet-to-Shell Weld	Exam Category C-A Item No. C01.030.007 (Unit 2) IWC-2500-2	See Paragraph "A"	See Paragraph "B"	See Paragraph "C"	See Paragraph "D"

IV. Basis for Relief

Paragraph A:

Due to high radiation dose rates in the area of the Regenerative Heat Exchanger, it is station management's request that these welds not be examined. To complete the examination(s) on the Regenerative Heat Exchanger, an estimated 9,975 mrem of exposure would be received for each unit.

Listed below is a break down of the examination tasks and their respective estimates as developed by the Catawba ALARA Staff and Inservice Inspection Coordinator. The estimates assume dose rates at the time of the examination will be comparable to dose rates measured during previous outages.

The average radiation level in the vicinity of the regenerative heat exchanger is 700 mrem per hour. To achieve this dose rate, the letdown line must be isolated prior to peroxide injection (induced crud burst). Also a successful flush of the letdown line and Regenerative Heat Exchanger using water from the Reactor Make-up Water Storage Tank would be required. Both of these initiatives are routinely performed each outage.

Activity	Man-Hours	Average Dose Rate	Activity Exposure Estimate (mrem)
Erect / Remove Scaffold	3	700	2,100
Remove / Restore Insulation	2.5	700	1,750
Weld Prep (assumes no grinding)	2.5	700	1,750
NDE	6	700	4,200
RP Support	0.25	700	175
Estimated Exposure Total			9,975

The use of temporary shielding in the area of the heat exchanger has been considered. However, preliminary evaluations using typical methods and materials suggest that the amount of exposure incurred during installation and removal would be equal to or greater than the amount of exposure saved.

In addition, structural steel supporting the heat exchangers would have to be removed to facilitate the examination process on 6 of the 12 welds or perform a limited coverage examination. The estimate shown above does not include removal and replacement of any structural steel.

Given there is no alternative volumetric or surface exam available due to similar radiation concerns, in lieu of implementing the requirements of Examination Category C-A, it is proposed that the Pressure Testing currently being performed under Examination Category C-H, "All Pressure Retaining Components" (Visual Examination, VT-2) be considered as a basis for approval of this request.

V. Alternate Examinations or Testing

Paragraph B:

None

VI. Justification for the Granting of Relief

Paragraph C:

Approval of the alternative testing provided by this relief request would significantly reduce unnecessary radiological exposure to plant personnel when complying with the volumetric examination requirements, without decreasing the confidence level in the operability of the Regenerative Heat Exchanger.

The alternative testing would not result in a reduction of the level of quality and safety for the following reasons:

1. The Regenerative Heat Exchanger and associated system piping, having been designed and constructed to meet the Class 2 requirements of the 1974 edition of ASME Section III, have a low probability of failure throughout their design life. It was fabricated from austenitic stainless steel (Type 304 / 316). This material is resistant to base and weld metal degradation of the heat exchanger in the primary reactor coolant environment. The 12 welds for each unit of Catawba are not dissimilar metal welds and thus are not subjected to primary water stress corrosion cracking associated with other materials. Oxygen levels in the primary system are strictly limited, thereby greatly reducing the susceptibility to intergranular stress corrosion cracking. Furthermore, there has been no industry operating experience that has identified these stainless materials as susceptible to significant corrosion in the primary water environment.
2. Thermal fatigue has been considered in the design of the heat exchanger. No thermal cycling, stratification, or striping conditions have ever been identified to invalidate the qualification of the heat exchanger. While flow induced vibration of the connected letdown piping has been observed in the past, the structural integrity of the twelve shell to head and tubesheet welds is not affected. Vibrational forces originating at the orifices are attenuated at the HX by the configuration and distance between the orifices and HX. Furthermore, past modifications have minimized the vibration levels in the letdown piping. Based on industry operating and plant specific experience, there are no known degradation mechanisms identified for these welds.
3. Catawba Technical Specifications place conservative limits on the amount of reactor coolant leakage allowed during system operation. The reactor coolant leak detection system is in place to detect any variation in the reactor coolant inventory, including the water present in both the tube and shell side of the Regenerative Heat Exchanger, as well as its associated piping. Any weld failure would be detected by the reactor coolant leak detection system, and procedures and automatic system actions are in place to ensure that the heat exchanger would be isolated.
4. Regenerative Heat Exchanger is isolable from the reactor coolant system by valves either operated from the control room and/or receives automatic closure signals. The shell side of the heat exchanger is isolable from the reactor coolant system by two fail closed, air operated gate valves in series. These valves are provided a safety signal to automatically close on a Pressurizer Low-Level setpoint, which would be present with a significant leak from a Regenerative HX Shell-to-Head or Shell-to-Tubesheet weld failure. The tube side is isolable from the high pressure charging system by two motor operated gate valves in series, which are controlled from the Control Room and/or automatically close on a Safety Injection Signal (SS), which would be present with a significant HX weld leak. Regenerative Heat Exchanger is located inside the Containment Building, which is designed to contain any leakage.
5. Visual examinations associated with Pressure Testing of the Regenerative Heat Exchangers during the latest refueling outages for Unit 1 (EOC12) and Unit 2 (EOC11) did not identify any evidence of weld leakage.

VII. Implementation Schedule

Paragraph D:

During the second 10-year inspection interval, the Regenerative Heat Exchanger Pressure Testing examinations are scheduled and will be performed in accordance with the requirements of Table IWC-2500-1, Examination Category C-H, "All Pressure Retaining Components". The Pressure Testing examination schedules are shown below.

Catawba Unit 1

Test	Zone	Inspection Date	End of Cycle	Period
Leak Test	1NV-001L-B	01/03/98	10	1 st Period
Leak Test	1NV-001L-B	11/19/00	12	2 nd Period
Hydro Test	1NV-001H-B	To Be Done	14 and 15	3 rd Period

Catawba Unit 2

Test	Zone	Inspection Date	End of Cycle	Period
Leak Test	2NV-001L-B	10/18/98	9	1 st Period
Leak Test	2NV-001L-B	10/20/01	11	2 nd Period
Hydro Test	2NV-001H-B	To Be Done	13 and 14	3 rd Period

VIII. Other Information

Catawba Unit 1 Examination Category C-A

There are twenty-six (26) welds that make up the total population for this examination category, all of which are scheduled for examination during the current 10-year inspection interval. With the elimination of twelve (12) Regenerative Heat Exchanger weld examinations sought by this relief request, the Table IWC-2412-1 code requirement to complete 100% of the total number of examinations within a category by the end of an interval will not be met.

Excluding the twelve (12) Regenerative Heat Exchanger welds, the remaining fourteen (14) weld examinations will be performed in this category. Based on the original category total population, the end of interval completion percentage will be $(26-12) / 26 = 14 / 26 = 53.85\%$, not 100 % as required in Table IWC-2412-1.

Relief is requested from the above requirements of Paragraph IWC-2412 and Table IWC-2412-1.

Catawba Unit 2 Examination Category C-A

There are twenty-nine (29) welds that make up the total population for this examination category, all of which are scheduled for examination during the current 10-year inspection interval. With the elimination of twelve (12) Regenerative Heat Exchanger weld examinations sought by this relief request, the Table IWC-2412-1 code requirement to complete 100% of the total number of examinations within a category by the end of an interval will not be met.

Excluding the twelve (12) Regenerative Heat Exchanger welds, the remaining seventeen (17) weld

examinations will be performed in this category. Based on the original category total population, the end of interval completion percentage will be $(29-12) / 29 = 17 / 29 = 58.62\%$, not 100 % as required in Table IWC-2412-1.

Relief is requested from the above requirements of Paragraph IWC-2412 and Table IWC-2412-1.

The following individuals contributed to the development of this relief request.

Roy Riddle (ALARA Specialist, Catawba) developed dose estimates for Regenerative Heat Exchanger.

Hugh Mason and Bill Callaway (Plant Engineering, Catawba) contributed justification for granting of relief.

Andy Hogge and Jimmy Cherry (Inservice Inspection Plan Management, GO) developed the relief request and addressed code requirements.

Attachments:

1. Sub-Assembly and Details Drawing of Regenerative Heat Exchanger (Catawba Unit 1)
2. Sub-Assembly and Details Drawing of Regenerative Heat Exchanger (Catawba Unit 2)

Prepared By:

James T. Cherry Date

4/16/03

Approved By:

R. Kevin Rhyme Date

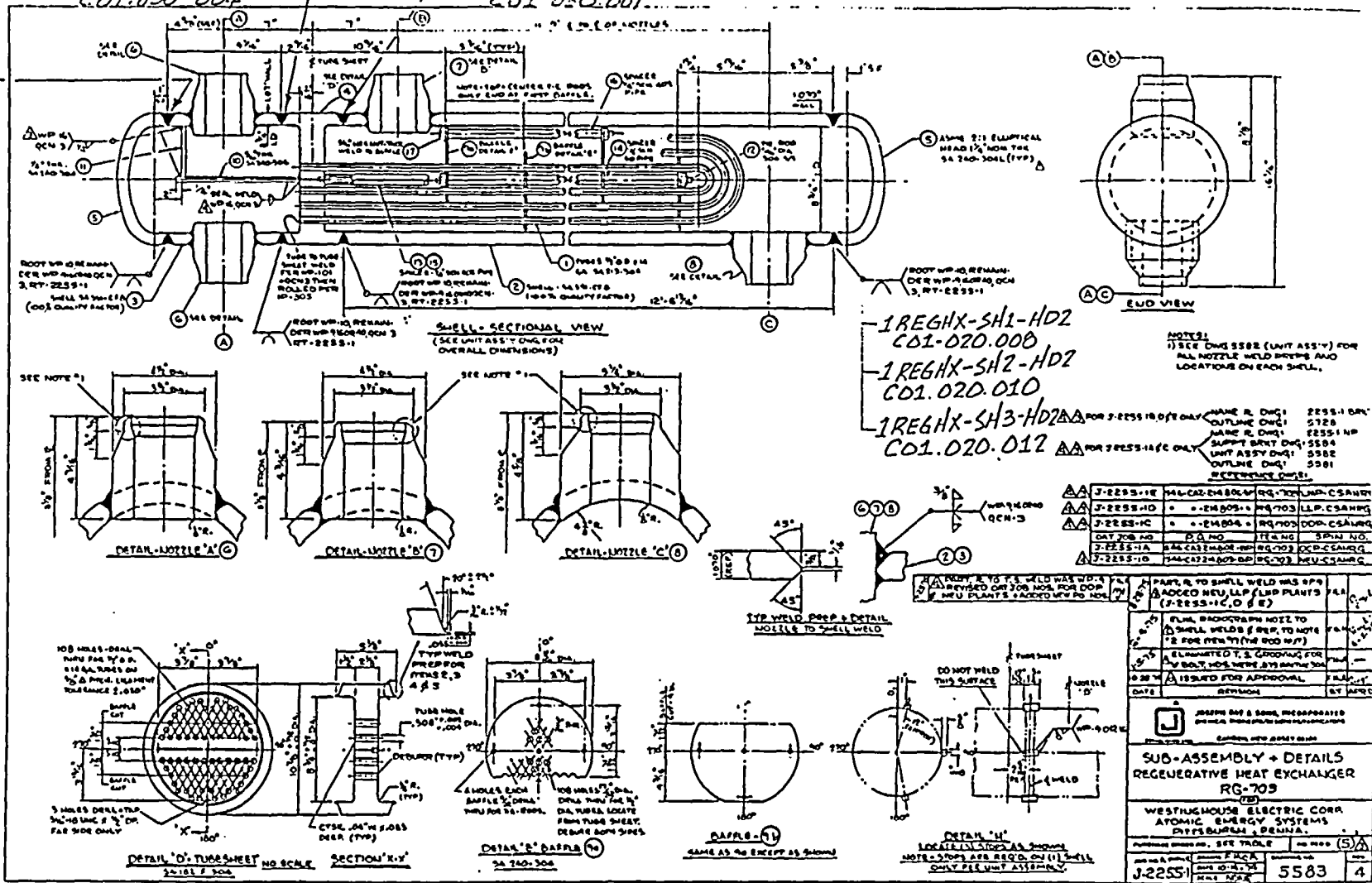
4/16/03

1 REGHX-SH1-HD1
 CO1 020.007
 1 REGHX-SH2-HD1
 CO1 020.009
 1 REGHX-SH3-HD1
 CO1 020.011

1 REGHX-SH1-TS
 CO1 030.002
 1 REGHX-SH2-TS
 CO1 030.003
 1 REGHX-SH3-TS
 CO1 030.004

1 REGHX-TS-SH1
 CO1 030.005
 1 REGHX-TS-SH2
 CO1 030.006
 1 REGHX-TS-SH3
 CO1 030.007

FOR INFORMATION
 ONLY



1 REGHX-SH1-HD2
 CO1 020.008
 1 REGHX-SH2-HD2
 CO1 020.010
 1 REGHX-SH3-HD2
 CO1 020.012

ITEM NO.	QTY	DESCRIPTION	UNIT	REVISION
1	1	NAME R. DWG: 2255-1 DRW		
2	1	OUTLINE DWG: 5728		
3	1	SUPPORT BRYT DWG: 5584		
4	1	UNIT ASSY DWG: 5582		
5	1	OUTLINE DWG: 5581		
6	1	REFERENCE DWG:		

REV.	DATE	DESCRIPTION	BY	CHKD.
1		ISSUED FOR APPROVAL		
2		REVISION		

SUB-ASSEMBLY + DETAILS		REGENERATIVE HEAT EXCHANGER	
RG-703		(70)	
WESTINGHOUSE ELECTRIC CORP.			
ATOMIC ENERGY SYSTEMS			
PITTSBURGH, PENNSA.			
DESIGNED BY	CHKD BY	NO. REV.	DATE
J-2255-11		5583	

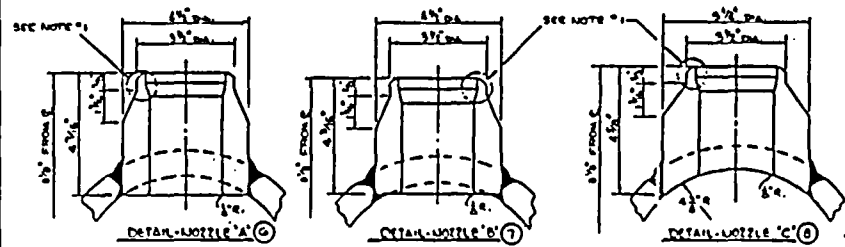
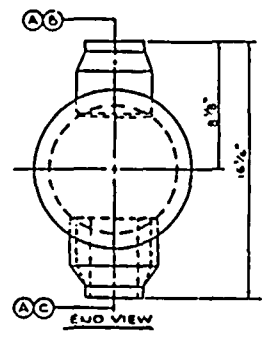
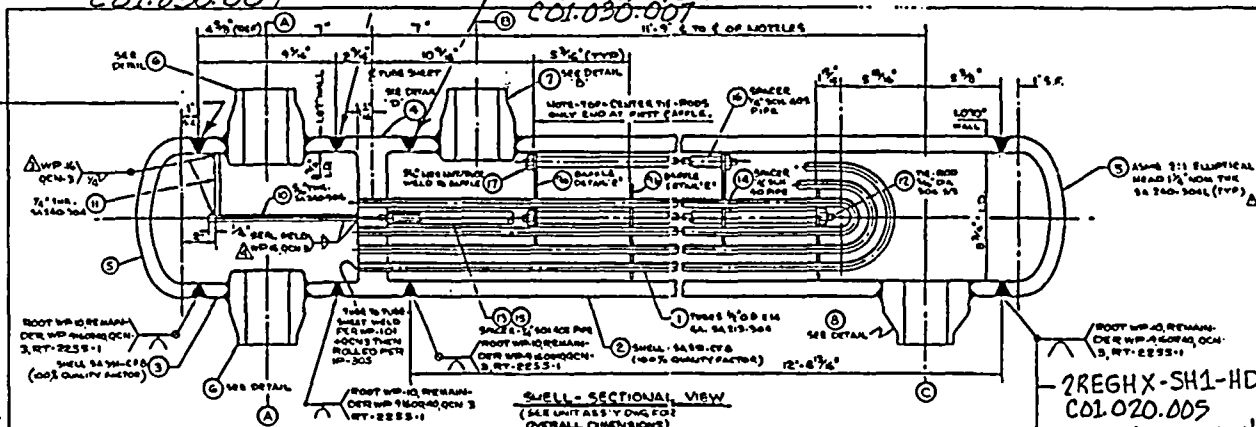
CATAWB A UNIT 1..
 SERIAL# 03-001

FOR INFORMATION ONLY

2 REGHX-SH1-HD1
COI.020.004
2 REGHX-SH2-HD1
COI.020.006
2 REGHX-SH3-HD1
COI.020.008

2 REGHX-SH1-TS
COI.030.002
2 REGHX-SH2-TS
COI.030.003
2 REGHX-SH3-TS
COI.030.004

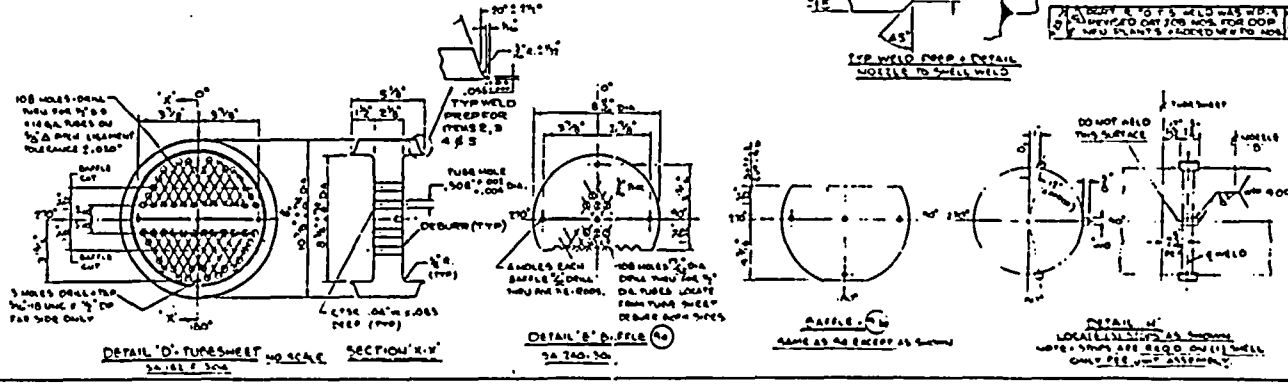
2 REGHX-SH1
COI.030.005
2 REGHX-TS-SH2
COI.030.006
2 REGHX-TS-SH3
COI.030.007



2 REGHX-SH1-HD2
COI.020.005
2 REGHX-SH2-HD2
COI.020.007
2 REGHX-SH3-HD2
COI.020.009

NOTE: 1) SEE DIM 5588 (UNIT ASS'Y) FOR ALL NOZZLE WELD SPOTS AND LOCATIONS ON EACH SHELL.

NAME R. DIM:	2255-1 BM
OUTLINE DIM:	2255-1 HP
SUPPLY BENT DIM:	5584
UNIT ASS'Y DIM:	5588
OUTLINE DIM:	5581
REFERENCE DIM:	



J-2255-1E	VAL. CAL. 24806	RG-703	IND. CSAMP
J-2255-1D	• 24805	RG-703	LLP. CSAMP
J-2255-1C	• 24804	RG-703	ODP. CSAMP
QAT. JOB NO.	P. D. NO.	TR. NO.	SPIN. NO.
J-2255-1A	VAL. CAL. 24805	RG-703	ODP. CSAMP
J-2255-1B	VAL. CAL. 24806	RG-703	IND. CSAMP

PART # TO SHELL WELD HAS APP. APPROVED WELD LIP FOR PLANTS (J-2255-1C, D, E)	
PLANT PHOTOGRAPH WELD TO SHELL WELD IS SET TO 100% FOR PLANT (1/4 ROD W/7)	
ELIMINATED T. S. GROOVING FOR BOLT HOLES HERE AS THE VAL. IS ISSUED FOR ADDITIONAL DIVISION	
DATE	10/7/74

WESTINGHOUSE ELECTRIC CORP. ATOMIC ENERGY SYSTEMS DIVISION, PITTSBURGH, PENN.	
SUB-ASSEMBLY + DETAILS REGENERATIVE HEAT EXCHANGER RG-703	
J-2255-1	5583

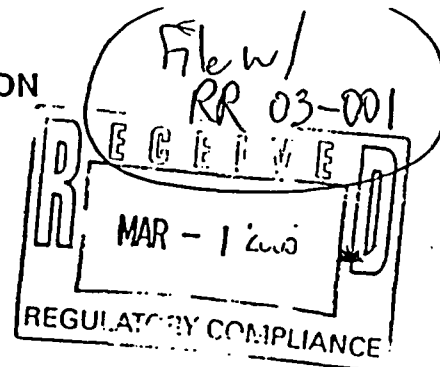
CATHWBA UNIT 2.

SERIAL #03-001
ATTACHMENT 2



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 17, 2005



Mr. D. M. Jamil
Vice President
Catawba Nuclear Station
Duke Energy Corporation
4800 Concord Road
York, SC 29745

SUBJECT: CATAWBA NUCLEAR STATION, UNITS 1 AND 2 RE: REQUEST FOR RELIEF 03-001, SECOND 10-YEAR INTERVAL INSERVICE INSPECTION PROGRAM PLAN (TAC NOS. MB9141 AND MB9142)

Dear Mr. Jamil:

By letters dated May 22, 2003, and September 8, 2004, Duke Energy Corporation, the licensee for Catawba Nuclear Station (Catawba), Units 1 and 2, submitted a request for relief, Relief Request No. 03-001, from the requirements of the American Society of Mechanical Engineers, Boiler and Pressure Vessel Code, Section XI, 1989 Edition with no addenda. Specifically, the licensee requested relief associated with the Code-required 100 percent volumetric examination of the regenerative heat exchanger head-to-shell and tubesheet-to-shell welds. The licensee's proposed alternative is to perform visual VT-2 examinations during Code-required system leakage tests in lieu of the volumetric examinations for the second 10-year inservice inspection (ISI) intervals at Catawba, Units 1 and 2.

The Nuclear Regulatory Commission (NRC) staff, with technical assistance from its contractor, the Pacific Northwest National Laboratory, has reviewed the information provided for this relief request. The enclosed Safety Evaluation contains the NRC staff's evaluation and conclusions. Based on the information provided in the relief request, the NRC staff concludes that compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. Therefore, the proposed alternative is authorized pursuant to Title 10 of the *Code of Federal Regulations*, Section 50.55a(a)(3)(ii) for the second ISI intervals at Catawba, Units 1 and 2.

Sincerely,

John A. Nakoski, Chief, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-413 and 50-414

Enclosure: As stated

cc w/encl: See next page

cc:

Mr. Lee Keller, Manager
Regulatory Compliance
Duke Energy Corporation
4800 Concord Road
York, South Carolina 29745

Ms. Lisa F. Vaughn
Duke Energy Corporation
Mail Code - PB05E
422 South Church Street
P.O. Box 1244
Charlotte, North Carolina 28201-1244

Ms. Anne Cottingham, Esquire
Winston and Strawn
1400 L Street, NW
Washington, DC 20005

North Carolina Municipal Power
Agency Number 1
1427 Meadowwood Boulevard
P.O. Box 29513
Raleigh, North Carolina 27626

County Manager of York County
York County Courthouse
York, South Carolina 29745

Piedmont Municipal Power Agency
121 Village Drive
Greer, South Carolina 29651

Ms. Karen E. Long
Assistant Attorney General
North Carolina Department of Justice
P.O. Box 629
Raleigh, North Carolina 27602

NCEM REP Program Manager
4713 Mail Service Center
Raleigh, North Carolina 27699-4713

North Carolina Electric Membership Corp.
P.O. Box 27306
Raleigh, North Carolina 27611

Senior Resident Inspector
U.S. Nuclear Regulatory Commission
4830 Concord Road
York, South Carolina 29745

Mr. Henry Porter, Assistant Director
Division of Waste Management
Bureau of Land and Waste Management
Dept. of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201-1708

Mr. R.L. Gill, Jr., Manager
Nuclear Regulatory Issues
and Industry Affairs
Duke Energy Corporation
526 South Church Street
Mail Stop EC05P
Charlotte, North Carolina 28202

Saluda River Electric
P.O. Box 929
Laurens, South Carolina 29360

Mr. Peter R. Harden, IV, Vice President
Customer Relations and Sales
Westinghouse Electric Company
6000 Fairview Road
12th Floor
Charlotte, North Carolina 28210

Ms. Mary Olson
Director of the Southeast Office
Nuclear Information and Resource Service
729 Haywood Road, 1-A
P.O. Box 7586
Asheville, North Carolina 28802

Catawba Nuclear Station, Units 1 & 2

Page 2 of 2

cc:

Mr. T. Richard Puryear
Owners Group (NCEMC)
Duke Energy Corporation
4800 Concord Road
York, South Carolina 29745

Mr. Richard M. Fry, Director
Division of Radiation Protection
NC Dept. of Environment, Health,
and Natural Resources
3825 Barrett Drive
Raleigh, North Carolina 27609-7721

Mr. Henry Barron
Group Vice President, Nuclear Generation
and Chief Nuclear Officer
P.O. Box 1006-EC07H
Charlotte, NC 28201-1006

Diane Curran
Harmon, Curran, Spielberg &
Eisenberg, LLP
1726 M Street, NW
Suite 600
Washington, DC 20036



UNITED STATES
NUCLEAR REGULATORY COMMISSION.
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

REQUEST FOR RELIEF NUMBER 03-001

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

DUKE ENERGY CORPORATION

DOCKET NOS. 50-413 AND 50-414

1.0 INTRODUCTION

The Nuclear Regulatory Commission (NRC) staff, with technical assistance from its contractor, the Pacific Northwest National Laboratory (PNNL), has reviewed and evaluated the information provided by Duke Energy Corporation (Duke, the licensee) in its letter dated May 22, 2003, that proposed its Second 10-Year Interval Inservice (ISI) Inspection Program Plan Request for Relief No. 03-001 for Catawba Nuclear Station (Catawba), Units 1 and 2. The licensee provided additional information by letter dated September 8, 2004.

2.0 REGULATORY EVALUATION

ISI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code Class 1, 2, and 3 components is performed in accordance with Section XI of the ASME Code and applicable addenda as required by Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a(g), except where specific relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i). 10 CFR 50.55a(a)(3) states that alternatives to the requirements of paragraph (g) may be used, when authorized by the NRC, if: (i) the proposed alternatives would provide an acceptable level of quality and safety or (ii) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) shall meet the requirements, except the design and access provisions and the pre-service examination requirements, set forth in the ASME Code, Section XI, "Rules for Inservice Inspection (ISI) of Nuclear Power Plant Components," to the extent practical within the limitations of design, geometry, and materials of construction of the components. The regulations require that inservice examination of components and system pressure tests conducted during the first 10-year interval and subsequent intervals comply with the requirements in the latest edition and addenda of Section XI of the ASME Code incorporated by reference in 10 CFR 50.55a(b) 12 months prior to the start of the 120-month interval, subject to the limitations and modifications listed therein. The applicable Code of record for the second

Enclosure

10-year ISI for Catawba, Units 1 and 2 is the 1989 Edition of the ASME B&PV Code, Section XI. The Catawba, Unit 1 second 10-year ISI interval began on June 29, 1995, and Catawba, Unit 2 second 10-year ISI interval began on August 19, 1996.

3.0 TECHNICAL EVALUATION

The ASME Code, Examination Category C-A, Items C1.20 and C1.30, requires essentially 100 percent volumetric examination, as defined by Figures IWC-2500-1 and -2, of the length of Class 2 head circumferential and tubesheet-to-shell welds for the regenerative heat exchanger.

The licensee proposed to eliminate the Code-required 100 percent volumetric examination of the Catawba, Units 1 and 2 regenerative heat exchanger head-to-shell and tubesheet-to-shell welds because of the high radiation exposure that the examiners receive. An estimated 9.975 man-rem of exposure would be received for each unit. Furthermore, Duke proposed that the pressure testing currently being performed under Examination category C-H, "All Pressure Retaining Components" Visual Examination, VT-2 and monitoring of these vessels for leakage during normal plant operations be considered as a basis for approval of its request for relief.

The regenerative heat exchanger and associated system piping, designed and constructed to meet the Class 2 requirements of the 1974 edition of ASME Section III, have a low probability of failure throughout their design life. The regenerative heat exchanger was fabricated from austenitic stainless steel (Type 304/316) and is resistant to base and weld metal degradation in the primary reactor coolant environment. The licensee strictly limits oxygen levels and contaminants in the primary system, thereby greatly reducing the susceptibility to stress corrosion cracking. Industry operating experience does not indicate that these stainless materials are susceptible to significant corrosion in the primary water environment.

The Catawba Technical Specifications place limits on the amount of reactor coolant leakage allowed during system operation, and Catawba has a system in place to detect any variation in the reactor coolant inventory, including the water present in both the tube and shell side of the regenerative heat exchanger, as well as its associated piping. Therefore, any weld failure would be detected by the reactor coolant leak detection system, and procedures and automatic system actions are in place to ensure that the heat exchanger would be isolated. The regenerative heat exchanger is isolable from the reactor coolant system by valves operated from the control room and/or automatic closure signals. The licensee performs the Code-required system leakage test and the VT-2 visual examination each outage. During the latest refueling outages for Unit 1 (EOC12) and Unit 2 (EOC11), the VT-2 visual examinations did not reveal any evidence of leakage.

The NRC staff determined that, based on its review of the licensee's submittal, to require the licensee to perform the ASME Code-required examinations on the subject components of the regenerative heat exchanger would be a hardship without a compensating increase in quality and safety. Furthermore, the NRC staff determined that the licensee's proposed alternative provides reasonable assurance of the continued structural integrity of the regenerative heat exchangers for both Catawba, Units 1 and 2.

4.0 CONCLUSION

The Catawba, Units 1 and 2 Request for Relief No. 03-001 from the Code requirements has been reviewed by the NRC staff, with the assistance of its contractor, PNNL.

The attached Technical Letter Report provides PNNL's evaluation of these requests for relief. The NRC staff has reviewed the TLR and adopts the evaluations and recommendations for authorizing the licensee's request for relief.

For Request for Relief 03-001, the NRC staff has concluded that compliance with the Code requirements would result in a hardship or unusual difficulty without a compensating increase in quality and safety. The alternative proposed by the licensee provides reasonable assurance of the continued leak tightness or structural integrity of the subject component. Therefore, Request for Relief 03-001, is authorized pursuant to 10 CFR 50.55a(a)(3)(ii) for the second 10-year ISI interval at Catawba, Units 1 and 2. All other requirements of the ASME Code, Section XI for which relief has not been specifically requested remain applicable, including third party review by the Authorized Nuclear Inservice Inspector.

Attachment: As stated

Principal Contributor: T. McLellan

Date: February 17, 2005



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001
TECHNICAL LETTER REPORT

ON THE SECOND 10-YEAR INTERVAL INSERVICE INSPECTION

REQUEST FOR RELIEF 03-001

DUKE ENERGY CORPORATION

CATAWBA NUCLEAR STATION, UNITS 1 AND 2

DOCKET NUMBERS: 50-413 AND 50-414

1.0 INTRODUCTION

By letter dated May 22, 2003, the licensee, Duke Energy Corporation, submitted Request for Relief 03-001 from requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, *Rules for Inservice Inspection of Nuclear Power Plant Components*. In response to an NRC Request for Additional Information, the licensee provided clarification and component drawings in a letter dated September 8, 2004. This request was submitted as part of the inservice inspection (ISI) program for the second 10-year inservice inspection (ISI) intervals at Catawba Nuclear Station, Units 1 and 2 (Catawba 1-2). The Pacific Northwest National Laboratory (PNNL) has evaluated the subject request for relief in the following section.

2.0 REGULATORY REQUIREMENTS

Inservice inspection of the ASME Code Class 1, 2, and 3 components is to be performed in accordance with Section XI of the ASME *Boiler and Pressure Vessel Code* (B&PV Code), and applicable addenda, as required by Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50.55a(g), except where specific relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i). The regulation at 10 CFR 50.55a(a)(3) states that alternatives to the requirements of paragraph (g) may be used, when authorized by the U.S. Nuclear Regulatory Commission (NRC), if the licensee demonstrates that (i) the proposed alternatives would provide an acceptable level of quality and safety or (ii) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) shall meet the requirements, except the design and access provisions and the preservice examination requirements, set forth in the ASME Code, Section XI, "Rules for Inservice Inspection (ISI) of Nuclear Power Plant Components," to the extent practical within the limitations of design, geometry, and materials of construction of the components. The regulations require that inservice examination of components and system pressure tests conducted during the first 10-year interval and subsequent intervals comply with the requirements in the latest edition and addenda of Section XI of the ASME Code, which was incorporated by reference in 10 CFR 50.55a(b) 12 months prior to the start of the 120-month interval, subject to the limitations and modifications listed therein. The code of record for

June 29, 1995 (Unit 1) and August 19, 1996 (Unit 2), is the 1989 Edition of Section XI of the ASME Boiler and Pressure Vessel Code.

3.0 EVALUATION

The information provided by Duke Energy Corporation in support of the request for relief from Code requirements has been evaluated and the basis for disposition is documented below.

3.1 Request for Relief 03-001, Examination Category C-A, Items C1.20 and C1.30, Pressure Retaining Welds in Pressure Vessels, Regenerative Heat Exchanger

Code Requirement: Examination Category C-A, Items C1.20 and C1.30, require essentially 100% volumetric examination, as defined by Figures IWC-2500-1 and -2, of the length of Class 2 head circumferential and tubesheet-to-shell welds. "Essentially 100%," as clarified by ASME Code Case N-460, is greater than 90% coverage of the examination volume, or surface area, as applicable.

Licensee's Proposed Alternative to Code: Based on the hardship of examining these welds, the licensee has proposed an alternative, in accordance with 10CFR50.55a(a)(3)(ii), to the Code-required 100% volumetric examination of Catawba 1-2 regenerative heat exchanger head-to-shell and tubesheet-to-shell welds. The licensee's alternative is to perform visual VT-2 examinations during Code-required system leakage tests in lieu of the volumetric examinations.

Licensee's Basis for Alternative (as stated):

Due to high radiation dose rates in the area of the regenerative heat exchanger, it is station managements' request that these welds not be examined. To complete the examinations on the regenerative heat exchanger, an estimated 9.975 man-rem of exposure would be received for each unit.

Listed below is a break-down of the examination tasks and their respective estimates [of exposure] as developed by the Catawba ALARA Staff and Inservice Inspection Coordinator. The estimates assume dose rates at the time of examination will be comparable to dose rates measured during previous outages.

The average radiation level in the vicinity of the regenerative heat exchanger is 700 millirem per hour. To achieve this dose rate, the letdown line must be isolated prior to peroxide injection (induced crud burst). Also, a successful flush of the letdown line and regenerative heat exchanger using water from the reactor make-up water storage tank would be required. Both of these initiatives are routinely performed each outage.

Activity	Man-Hours	Average Dose Rate	Activity Exposure Estimate (mrem)
Erect/Remove scaffold	3	700	2100
Remove/Restore Insulation	2.5	700	1750
Weld Prep (assumes no grinding)	2.5	700	1750
NDE	6	700	4200
RP Support	0.25	700	175
Estimated Total Exposure			9975

The use of temporary shielding in the area of the heat exchanger has been considered. However, preliminary evaluations using typical methods and materials suggest that the amount of exposure incurred during installation and removal would be equal to or greater than the amount of exposure saved.

In addition, structural steel supporting the heat exchangers would have to be removed to facilitate the examination process on 6 of the 12 welds, or perform a limited coverage examination. The estimate shown above does not include removal and replacement of any structural steel.

Given there is no alternative volumetric or surface exam available due to similar radiation concerns, in lieu of implementing the requirements of Examination Category C-A, it is proposed that the pressure testing currently being performed under Examination category C-H, "All Pressure Retaining Components" (Visual Examination, VT-2) be considered as a basis for approval of this request.

Approval of the alternative testing provided by this relief request would significantly reduce unnecessary radiological exposure to plant personnel when complying with the volumetric examination requirements, without decreasing the confidence level in the operability of the Regenerative Heat Exchanger.

The alternative testing would not result in a reduction of the level of quality and safety for the following reasons:

1. The Regenerative Heat Exchanger and associated system piping, having been designed and constructed to meet the Class 2 requirements of the 1974 edition of ASME Section III, have a low probability of failure throughout their design life. It was fabricated from austenitic stainless steel (Type 304/316). This material is resistant to base and weld metal degradation of the heat exchanger in the primary reactor coolant environment. The 12 welds for each unit of Catawba are not dissimilar metal welds and thus are not subjected to primary water stress corrosion cracking associated with other materials. Oxygen levels in the primary system are strictly limited, thereby greatly reducing the susceptibility to intergranular stress corrosion cracking. Furthermore, there has been no industry operating experience

that has identified these stainless materials as susceptible to significant corrosion in the primary water environment.

2. Thermal fatigue has been considered in the design of the heat exchanger. No thermal cycling, stratification, or striping conditions have ever been identified to invalidate the qualification of the heat exchanger. While flow induced vibration of the connected letdown piping has been observed in the past, the structural integrity of the twelve shell to head and tubesheet welds is not affected. Vibrational forces originating at the orifices are attenuated at the HX by the configuration and distance between the orifices and HX. Furthermore, past modifications have minimized the vibration levels in the letdown piping. Based on industry operating and plant specific experience, there are no known degradation mechanisms identified for these welds.
3. Catawba Technical Specifications place conservative limits on the amount of reactor coolant leakage allowed during system operation. The reactor coolant leak detection system is in place to detect any variation in the reactor coolant inventory, including the water present in both the tube and shell side of the Regenerative Heat Exchanger, as well as its associated piping. Any weld failure would be detected by the reactor coolant leak detection system, and procedures and automatic system actions are in place to ensure that the heat exchanger would be isolated.
4. Regenerative Heat Exchanger is isolable from the reactor coolant system by valves either operated from the control room and/or automatic closure signals. The shell side of the heat exchanger is isolable from the reactor coolant system by two fail closed, air operated gate valves in series. These valves are provided a safety signal to automatically close on a Pressurizer Low-Level setpoint, which would be present with a significant leak from a Regenerative HX Shell-to-Head or Shell-to-Tubesheet weld failure. The tube side is isolable from the high pressure charging system by two motor operated gate valves in series, which are controlled from the Control Room and/or automatically close on a Safety Injection Signal (SS), which would be present with a significant HX weld leak. Regenerative Heat Exchanger is located inside the Containment Building, which is designed to contain any leakage.
5. Visual examinations associated with Pressure Testing of the Regenerative Heat Exchangers during the latest refueling outages for Unit 1 (EOC12) and Unit 2 (EOC11) did not identify any evidence of weld leakage.

Response to Request for Additional Information (as stated):

ASME Section XI, Paragraph IWC-1222(b), applies to component connections nominal pipe size four inches and smaller (including nozzles, socket fittings, and other connections) in vessels, piping, pumps, valves, and other components. Chemical and Volume Control System piping welded to the Regenerative Heat Exchanger Nozzles is three inches in diameter. Therefore, these nozzle-to-shell welds are exempt from volumetric and/or surface examination requirements per IWC-1222.

All Category C-A welds identified in Request for Relief 03-001 were volumetrically inspected by radiography during vessel fabrication. A weld repair was performed by the

vessel manufacturer on the Catawba Unit 1 vessel, shell number 2, girth weld number 2. The repair was limited to one area contained within one four-inch RT film interval (4-5). In addition, a weld repair was performed on the Catawba Unit 2 vessel, shell number 3, girth weld number 1. The repair was limited to one area contained within two four-inch film intervals (4-5 and 5-6). The weld repair areas were re-examined by radiography and found to be acceptable. The remaining welds on the Catawba Unit 1 and 2 vessels were found to be radiographically acceptable during the fabrication process without performing weld repair activities.

All other Category C-A welds on Class 2 vessels have been reviewed and confirmed to be examined in accordance with Code requirements.

The regenerative heat exchanger is isolable from the Reactor Coolant System by valves either operated from the control room or by valves that receive automatic closure signals. The shell side of the heat exchanger is isolable from the Reactor Coolant System by two fail-closed, air operated gate valves in series. These valves are provided a safety signal to automatically close on a pressurizer low level, which would be present with a significant leak from a regenerative heat exchanger shell-to-head or shell-to-tubesheet weld failure. The tube side is isolable from the high pressure charging system by two motor operated gate valves in series, which are controlled from the control room and/or which automatically close on a safety injection signal. A safety injection signal would occur with a significant heat exchanger weld leak.

Evaluation: The Code requires that essentially 100% of the length of all Class 2 vessel shell-to-head and tubesheet-to-shell welds be volumetrically examined once during each ISI interval. This includes examination of 24 welds on the regenerative heat exchangers (RHXs) at Catawba 1-2 (12 welds per heat exchanger at each unit). However, because of the manner in which these heat exchangers operate, particulates from the reactor coolant system accumulate in low-flow regions of the vessels during normal service conditions. This causes the vessels and surrounding area to become highly radioactive. To require the licensee to examine the subject heat exchanger welds would present a significant hardship due to excessive personnel radiation exposure.

The RHXs at Catawba 1-2 are Class 2 and consist of a shell and tube design with three separate vessels stacked vertically and piped in series. The licensee considers all three vessels to be one heat exchanger. Each component possesses a head-to-shell and shell-to-tubesheet weld on either end, for a total of 12 welds per heat exchanger. The RHX is part of the plant chemical and volume control system, and is designed to recover heat from the letdown stream by reheating the charging stream during normal operation. The letdown stream flows through the shell of the regenerative heat exchanger and the charging stream flows through the tubes. The unit is made of austenitic stainless steel, and is of all-welded construction. Other than the subject shell-to-head and tubesheet-to-shell welds, no other welds are required by Code to be examined by volumetric or surface methods. This is because Class 2 inlet and outlet nozzle welds on the RHXs are less than NPS 4-inches in diameter, which are exempt from all examinations except visual VT-2 during pressure tests. The licensee estimates that approximately 10 man-Rem of radiation exposure will be incurred during examination of these welds on each heat exchanger at Catawba 1-2. This is due to activities associated with the

examination such as erection and removal of scaffolding, insulation removal and replacement, surface preparation of the welds, and the actual examination process.

Several potential forms of degradation have been considered for these welds, however, no aggressive mechanisms can be identified that may challenge the structural integrity of the RHXs, based on materials of construction and operating environments. It is concluded that, once the subject shell and head welds have been thoroughly examined during preservice or prior inservice inspections, failure probabilities are very low, and that exposure of plant personnel to the high levels of radiation to support continued volumetric examinations is unwarranted.

In addition, the RHXs can be quickly isolated from the primary coolant system by valves if leakage is detected. Furthermore, in a brief review of international databases¹ and readily available literature to-date, no service-induced pressure boundary failures have been experienced for shell and/or head welds on this type of RHX. Therefore, Duke's proposal to continue to perform visual VT-2 examinations during system leakage tests, and to monitor these vessels for leakage during normal plant operations, provides reasonable assurance that the RHXs will continue to function as designed at Catawba 1-2.

To require the Code volumetric examinations of the subject RHX shell welds would subject the licensee to a significant hardship, with no compensating increase in quality or safety. Therefore, pursuant to 10 CFR 50.55a(a)(3)(ii), it is recommended that the licensee's proposed alternative found in Request for Relief 03-001 be authorized for the second interval at Catawba 1-2.

4.0 CONCLUSIONS

For Request for Relief 03-001, it has been shown that compliance with the Code requirements would result in a hardship or unusual difficulty with no compensating increase in quality or safety. The alternative proposed by the licensee provides reasonable assurance of the continued leakage or structural integrity of the subject component. Therefore, for Request for Relief 03-001, it is recommended that the licensee's alternative be authorized pursuant to 10 CFR 50.55a(a)(3)(ii) for the second interval at Catawba 1-2.

1. Databases searched include:

NUREG/CR-5779 (1992), a survey of operating experience with non-power cycle heat exchangers performed by Oak Ridge National Laboratory based on three data sources: 1) LERs through 1991, 2) the Nuclear Plant Reliability Data System (NPRDS) which is now the Equipment Performance and Information Exchange (EPIX), and 3) Nuclear Power Experience.

PIPExp™, a commercially available database which lead in 2002 to the establishment of the OECD/Nuclear Energy Agency Pipe Failure Data Exchange (OPDE) project. As an international cooperative effort, OPDE is supported by 12 countries and 19 organizations as a forum for component failure data exchange and analysis.

EGG-SSRE-9639 (1991). This report by the Idaho National Engineering Laboratory (INEL) provides leak and rupture frequency estimates for heat exchanger shells. The estimates are based on reviews of information extracted from nuclear power experience. The raw data provided in an appendix to the report shows zero heat exchanger pressure boundary failures.

*Problem Investigation Process
General Office*

<u>PIP Serial No:</u> G-05-00271	<u>Action Category:</u> 4	<u>PIR No:</u>	<u>Other Report:</u>
-------------------------------------	------------------------------	----------------	----------------------

Problem Identification

Discovered Time/Date: 10:07 08/11/2005 Occurred Time/Date:

Unit(s) Affected:
Unit Mode %Power Unit Status Remarks

System(s) Affected:

Affected Equipment

(No Equipment Affected)

Location of Problem:
Bldg: Column Line: Elev:

Location Remarks:

Method Used to Discover Problem:

Brief Problem Description:
required ASME Section XI Class 2 examinations were not performed on the Seal Water Return Filter during the Second 10 Year Inspection interval.

Detail Problem Description:
During the Catawba Unit 1 Second 10 Year Inspection Interval Plan Development, it was determined that the Seal Water Return Filter was not a part of the NV System portion of ECCS. Therefore, this piece of equipment was originally evaluated to the Non-ECCS requirements of the ASME Section XI Code, 1989 Edition, Subsection IWC-1222 and was scheduled to be examined. During the first period in the inspection interval, all Class 2 Equipment was re-evaluated and the exemptions clarified in the 1989 Addenda as stated in ISITE-004 were applied. By applying these exemption clarifications, the Seal Water Return Filter was exempted and removed from the examination schedule. Later in the inspection interval, the NV System ECCS and Non-ECCS boundaries were re-defined thus making the Seal Water Return Filter part of the ECCS boundary. With this change in definition came a new set of exemptions contained in Subsection IWC-1221 and due to the size of the inlet and outlet lines, the Seal Water Return Filter could no longer be exempted. During the re-assessment of the ECCS boundaries, the required exams for the Seal Water Return Filter were not added to the examination schedule.

(Created for J C Cherry)
Originated By: TDM8384: MYERS, TIMOTHY D Team: RKR8391 Group: ISI Date: 08/11/2005

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:

	<u>Indiv</u>	<u>Team</u>	<u>Group</u>	<u>Date</u>
Item Identified By:	TDM8384	RKR8391	ISI	08/11/2005
Item Entered By:	TDM8384	RKR8391	ISI	08/11/2005

Problem Investigation Process
General Office

Screening
Screening Category: 4 Root Cause performed? No

OEP No:

Other Report Nos:

Event Codes:

U Other. Describe in Screening Remarks.

Screening Remarks:

This PIP documents the changes required in the second interval ISI Plan required due to a redefinition of the ECCS Boundary.

Last Updated By: TDM8384: MYERS, TIMOTHY D Team: RKR8391 Group: ISI Date: 08/11/2005

Explanation for "OTHER" Event Code

Assignments:

Responsible Groups(s) for Problem Evaluation: Responsible Group for Present Operability: N/A

Responsible Group for Report Support Info: N/A

Responsible Group for Reportability: N/A

Responsible Group for Overall PIP Approval: ISI INSERVICE INSPECTION

Screened By	Indiv	Team	Group	Date
Screened By:	TDM8384	RKR8391	ISI	08/11/2005

Present Operability

Responsible Group: Status:

Sys/Comp Operable? (Y,N,C,E,T):

Required Mode:

Comments:

No Current Signatures For This Section

Reportability

Responsible Group: Status:

Problem Reportable(Y,N,E):

Reportable Per:

Comments:

No Current Signatures For This Section

Investigation Report:

Problem Investigation Process
General Office

Responsible Group:

Act Date:

Investigator:

Group:

Due Date:

Date Due to VP or Sta. Mgr:

Date Regulatory or Agency Rpt Due:

Date Investigation Report Approved:

NRC Cause Codes:

Report Support Info:

Responsible Group:

Status:

No Current Signatures For This Section

Problem Evaluation

Event	Cause Code	Cause Description	Primary	Causing Groups
-------	------------	-------------------	---------	----------------

Problem Evaluation From:

N/A

Corrective Actions

CA Seq. No: 1

Resp Group	Status	Orig Group	Event Code	Prop CAC	Cause Code
ISI	Closed	ISI	U	P	R

Proposed Corrective Action:

Initiate Plan Addendum for the second interval Catawba Unit 1 ISI Plan to add the required examinations for the Seal Water Return Filter.

(Entered for J E Cherry)

Originated By: TDM8384: MYERS, TIMOTHY D Team: RKR8391 Group: ISI Date: 08/11/2005

Signature Type	Indiv	Team	Group	Date
Approval Assigned To:	RKR8391	RKR8391	ISI	08/11/2005
Ready For Approval:	TDM8384	RKR8391	ISI	08/17/2005
Approved By:	TDM8384	RKR8391	ISI	08/17/2005

General: Outage:

Mode:

Other Tracking Processes

Type Number Text

Actual Corrective Action:

Priority: 2

Actual CAC:

Status: ReadyForAccept

Due Date: 08/31/2005

Signature Type	Indiv	Team	Group	Date
Assigned To:	AJH8300	RKR8391	ISI	08/11/2005

Problem Investigation Process
General Office

Signature Type	Indiv	Team	Group	Date
Date:	08/31/2005			

Final and Overall PIP Approval

Responsible Group: ISI Status: Screened

Signature Type	Indiv	Team	Group	Date
Assigned To:			ISI	08/11/2005

Any Supplemental Concurrence Signatures Above Do Not Affect PIP Closure.

Closure Document Type Closure Document No

Attachments

Generic Applicability

Responsible Group: Status:
GO PIP No:

Assessment Remarks:
No Current Signatures For This Section

Failure Prevention Investigation

No FPI Records for this PIP.

Remarks

No Remarks for this PIP.

Maintenance Rule

No Maintenance Rule Records for this PIP.

End of the Document for PIP No: G-5-271
The status of this PIP is: Screened
The duration of this PIP was: 0 days

3.0 Final Inservice Inspection Plan

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

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), and Augmented Requirements
ID Number	=	Unique Identification Number
ISO / Dwg Numbers	=	Location and/or Detail Drawings
Proc	=	Examination Procedures
Insp Req	=	Examination Technique - Magnetic Particle, Dye Penetrant, etc.
Material / Sch	=	General Description of Material
Dia / Thk	=	Diameter / Thickness
Cal Blocks	=	Calibration Block Number
Comments	=	General and/or Detail Description

**CATEGORY B-A, Pressure Retaining Welds in
Reactor Vessel**

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

Plan Report
Page 1
08/04/2005

Shell Welds

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
**** Circumferential ****										
B01.011.001	1RPV-W03		CNM 1201.01-51	*	UT	CS	0.000	PDI-01		Circ Weld 02 to 03 Lower Head to Shell *Use WesDyne Procedure PDI-ISI-254.
	Circumferential	NC					5.300			
	Class A									RPV Lower Head to Shell
B01.011.002	1RPV-W04		CNM 1201.01-51	*	UT	CS	0.000	PDI-01		Circumferential Weld 03 to 04 Shell to Shell *Use WesDyne Procedure PDI-ISI-254.
	Circumferential	NC					8.600			
	Class A									RPV Shell to RPV Shell
B01.011.003	1RPV-W05		CNM 1201.01-51	*	UT	CS	0.000	PDI-01		Circumferential Weld 04 to 05 Shell to Shell *Use WesDyne Procedure PDI-ISI-254.
	Circumferential	NC					8.600			
	Class A									RPV Shell to RPV Shell
B01.011.004	1RPV-W06		CNM 1201.01-51	*	UT	CS	0.000	PDI-01		Circumferential Weld 05 to 06 Shell to Nozzle Belt *Use WesDyne Procedure PDI-ISI-254.
	Circumferential	NC					8.600			
	Class A									Shell to Nozzle Belt
Total B01.011 Items: 4										

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

Plan Report
Page 2
08/04/2005

**CATEGORY B-A, Pressure Retaining Welds in
Reactor Vessel**

Head Welds

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
**** Circumferential ****										
B01.021.001	1RPV-W01		CNM 1201.01-51	*	UT	CS	0.000	PDI-01		Circ Weld 01 to 02 Lower Head *Use WesDyne Procedure PDI-ISI-254.
	Circumferential	NC					5.300			
	Class A									RPV Lower Head to RPV Lower Head
Total B01.021 Items: 1										
**** Meridional ****										
B01.022.001	1RPV-W02-01		CNM 1201.01-51	*	UT	CS	0.000	PDI-01		Meridional Weld PC 02 302 Deg Lower Head *Use WesDyne Procedure PDI-ISI-254.
	Longitudinal	NC					5.300			
	Class A									RPV Lower Head to RPV Lower Head
B01.022.002	1RPV-W02-02		CNM 1201.01-51	*	UT	CS	0.000	PDI-01		Meridional Weld PC 02 242 Deg. RPV Lower Head *Use WesDyne Procedure PDI-ISI-254.
	Longitudinal	NC					5.300			
	Class A									RPV Lower Head to RPV Lower Head
B01.022.003	1RPV-W02-03		CNM 1201.01-51	*	UT	CS	0.000	PDI-01		Meridional Weld PC 02 182 Deg. RPV Lower Head *Use WesDyne Procedure PDI-ISI-254.
	Longitudinal	NC					5.300			
	Class A									RPV Lower Head to RPV Lower Head
B01.022.004	1RPV-W02-04		CNM 1201.01-51	*	UT	CS	0.000	PDI-01		Meridional Weld PC 02 122 Deg. RPV Lower Head *Use WesDyne Procedure PDI-ISI-254.
	Longitudinal	NC					5.300			
	Class A									RPV Lower Head to RPV Lower Head
B01.022.005	1RPV-W02-05		CNM 1201.01-51	*	UT	CS	0.000	PDI-01		Meridional Weld PC 02 62 Deg. RPV Lower Head *Use WesDyne Procedure PDI-ISI-254.
	Longitudinal	NC					5.300			
	Class A									RPV Lower Head to RPV Lower Head
B01.022.006	1RPV-W02-06		CNM 1201.01-51	*	UT	CS	0.000	PDI-01		Meridional Weld PC 02 2 Deg. RPV Lower Head *Use WesDyne Procedure PDI-ISI-254.
	Longitudinal	NC					5.300			
	Class A									RPV Lower Head to RPV Lower Head
Total B01.022 Items: 6										

**CATEGORY B-A, Pressure Retaining Welds in
Reactor Vessel**

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

Shell-to-Flange Weld

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
-------------	-----------	-----	-----------------	------	----------	---------	--------	-----	--------	----------

**** Shell-to-Flange ****

B01.030.001	1RPV-W07		CNM 1201.01-51	*	UT	CS	0.000	PDI-01		06 to 07 Nozzle Belt to Flange
	Circumferential	NC	CNM 1201.01-63				10.900			UT From Vessel ID
	Class A									*Use WesDyne Procedure PDI-ISI-254.
										RPV Nozzle Belt to RPV Flange

Total B01.030 Items:	1
Total B01 Items:	12

**CATEGORY B-D, Full Penetration Welds of
Nozzels in Vessels**

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

Plan Report

Page 4

08/04/2005

Reactor Vessel

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DI/THK	CAL	BLOCKS	COMMENTS
**** Nozzle-to-Vessel Welds ****										
B03.090.001	1RPV-W11		CNM 1201.01-51	*	UT	CS	61.500	PDI-01		Inlet Nozzle B to Shell 67 Deg. Loop A
	Circumferential	NC	CNM 1201.01-64				10.900			UT From Vessel ID
	Class A									*Use WesDyne Procedure PDI-ISI-254.
B03.090.001A	1RPV-W11		CNM 1201.01-51	*	UT	CS	61.500	PDI-01		Inlet Nozzle B to Shell 67 Deg. Loop A
	Circumferential	NC	CNM 1201.01-64				10.900			UT From Nozzle ID
	Class A									*Use WesDyne Procedure PDI-ISI-254-NZ.
B03.090.002	1RPV-W12		CNM 1201.01-51	*	UT	CS	61.500	PDI-01		Inlet Nozzle C to Shell 113 Deg. Loop B
	Circumferential	NC	CNM 1201.01-64				10.900			UT From Vessel ID
	Class A									*Use WesDyne Procedure PDI-ISI-254.
B03.090.002A	1RPV-W12		CNM 1201.01-51	*	UT	CS	61.500	PDI-01		Inlet Nozzle C to Shell 113 Deg. Loop B
	Circumferential	NC	CNM 1201.01-64				10.900			UT From Nozzle ID
	Class A									*Use WesDyne Procedure PDI-ISI-254-NZ.
B03.090.003	1RPV-W13		CNM 1201.01-51	*	UT	CS	61.500	PDI-01		Inlet Nozzle F to Shell 247 Deg. Loop C
	Circumferential	NC	CNM 1201.01-64				10.900			UT From Vessel ID
	Class A									*Use WesDyne Procedure PDI-ISI-254.
B03.090.003A	1RPV-W13		CNM 1201.01-51	*	UT	CS	61.500	PDI-01		Inlet Nozzle F to Shell 247 Deg. Loop C
	Circumferential	NC	CNM 1201.01-64				10.900			UT From Nozzle ID
	Class A									*Use WesDyne Procedure PDI-ISI-254-NZ.
B03.090.004	1RPV-W14		CNM 1201.01-51	*	UT	CS	61.500	PDI-01		Inlet Nozzle G to Shell 293 Deg. Loop D
	Circumferential	NC	CNM 1201.01-64				10.900			UT From Vessel ID
	Class A									*Use WesDyne Procedure PDI-ISI-254.
B03.090.004A	1RPV-W14		CNM 1201.01-51	*	UT	CS	61.500	PDI-01		Inlet Nozzle G to Shell 293 Deg. Loop D
	Circumferential	NC	CNM 1201.01-64				10.900			UT From Nozzle ID
	Class A									*Use WesDyne Procedure PDI-ISI-254-NZ.

**CATEGORY B-D, Full Penetration Welds of
Nozzels in Vessels**

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

Plan Report
Page 5
08/04/2005

Reactor Vessel

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DI/THK	CAL	BLOCKS	COMMENTS
B03.090.005	1RPV-W15		CNM 1201.01-51	*	UT	CS	52.900		PDI-01	Outlet Nozzle A to Shell 22 Deg. Loop A
	Circumferential	NC	CNM 1201.01-65				10.900			UT From Vessel ID
	Class A									*Use WesDyne Procedure PDI-ISI-254.
B03.090.005A	1RPV-W15		CNM 1201.01-51	*	UT	CS	52.900		PDI-01	Outlet Nozzle A to Shell 22 Deg. Loop A
	Circumferential	NC	CNM 1201.01-65				10.900			UT From Nozzle ID
	Class A									Ref. Request For Relief Serial Number 93-02 Ref. Request For Relief Serial Number 94-05 *Use WesDyne Procedure PDI-ISI-254-NZ.
B03.090.006	1RPV-W16		CNM 1201.01-51	*	UT	CS	52.900		PDI-01	Outlet Nozzle D to Shell 158 Deg. Loop B
	Circumferential	NC	CNM 1201.01-65				10.900			UT From Vessel ID
	Class A									*Use WesDyne Procedure PDI-ISI-254.
B03.090.006A	1RPV-W16		CNM 1201.01-51	*	UT	CS	52.900		PDI-01	Outlet Nozzle D to Shell 158 Deg. Loop B
	Circumferential	NC	CNM 1201.01-65				10.900			UT From Nozzle ID
	Class A									Ref. Request For Relief Serial Number 93-02 Ref. Request For Relief Serial Number 94-05 *Use WesDyne Procedure PDI-ISI-254-NZ.
B03.090.007	1RPV-W17		CNM 1201.01-51	*	UT	CS	52.900		PDI-01	Outlet Nozzle E to Shell 202 Deg. Loop C
	Circumferential	NC	CNM 1201.01-65				10.900			UT From Vessel ID
	Class A									*Use WesDyne Procedure PDI-ISI-254.
B03.090.007A	1RPV-W17		CNM 1201.01-51	*	UT	CS	52.900		PDI-01	Outlet Nozzle E to Shell 202 Deg. Loop C
	Circumferential	NC	CNM 1201.01-65				10.900			UT From Nozzle ID
	Class A									Ref. Request For Relief Serial Number 93-02 Ref. Request For Relief Serial Number 94-05 *Use WesDyne Procedure PDI-ISI-254-NZ.
B03.090.008	1RPV-W18		CNM 1201.01-51	*	UT	CS	52.900		PDI-01	Outlet Nozzle H to Shell 338 Deg. Loop D
	Circumferential	NC	CNM 1201.01-65				10.900			UT From Vessel ID
	Class A									*Use WesDyne Procedure PDI-ISI-254.
B03.090.008A	1RPV-W18		CNM 1201.01-51	*	UT	CS	52.900		PDI-01	Outlet Nozzle H to Shell 338 Deg. Loop D
	Circumferential	NC	CNM 1201.01-65				10.900			UT From Nozzle ID
	Class A									Ref. Request For Relief Serial Number 93-02 Ref. Request For Relief Serial Number 94-05 *Use WesDyne Procedure PDI-ISI-254-NZ.

**CATEGORY B-D, Full Penetration Welds of
Nozzels in Vessels**

Reactor Vessel

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

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

Plan Report
Page 6
08/04/2005

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ MAT/SCH	DIATHK CAL	BLOCKS	COMMENTS
Total B03.090 Items:		16						

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

Plan Report
Page 7
08/04/2005

**CATEGORY B-D, Full Penetration Welds of
Nozzels in Vessels**

Reactor Vessel

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
**** Nozzle Inside Radius Section ****									
B03.100.001	1RPV-W11		CNM 1201.01-51	*	VT-1	CS	61.500		Inlet Nozzle B to Shell 67 Deg. Loop A
	Circumferential	NC	CNM 1201.01-64				10.900		An EVT-1 examination shall be performed in lieu of UT per Code Case N-648-1.
Class A					RPV Inlet Nozzle to Shell				*Use WesDyne Procedure WDI-STD-088.
B03.100.002	1RPV-W12		CNM 1201.01-51	*	VT-1	CS	61.500		Inlet Nozzle C to Shell 113 Deg. Loop B
	Circumferential	NC	CNM 1201.01-64				10.900		An EVT-1 examination shall be performed in lieu of UT per Code Case N-648-1.
Class A					RPV Inlet Nozzle to Shell				*Use WesDyne Procedure WDI-STD-088.
B03.100.003	1RPV-W13		CNM 1201.01-51	*	VT-1	CS	61.500		Inlet Nozzle F to Shell 247 Deg. Loop C
	Circumferential	NC	CNM 1201.01-64				10.900		An EVT-1 examination shall be performed in lieu of UT per Code Case N-648-1.
Class A					RPV Inlet Nozzle to Shell				*Use WesDyne Procedure WDI-STD-088.
B03.100.004	1RPV-W14		CNM 1201.01-51	*	VT-1	CS	61.500		Inlet Nozzle G to Shell 293 Deg. Loop D
	Circumferential	NC	CNM 1201.01-64				10.900		An EVT-1 examination shall be performed in lieu of UT per Code Case N-648-1.
Class A					RPV Inlet Nozzle to Shell				*Use WesDyne Procedure WDI-STD-088.
B03.100.005	1RPV-W15		CNM 1201.01-51	*	VT-1	CS	52.900		Outlet Nozzle A to Shell 22 Deg. Loop A
	Circumferential	NC	CNM 1201.01-65				10.900		Ref. Request For Relief Serial Number 93-02
Class A					RPV Outlet Nozzle to Shell				Ref. Request for Relief Serial Number 94-05 An EVT-1 examination shall be performed in lieu of UT per Code Case N-648-1. *Use WesDyne Procedure WDI-STD-088.
B03.100.006	1RPV-W16		CNM 1201.01-51	*	VT-1	CS	52.900		Outlet Nozzle D to Shell 158 Deg. Loop B
	Circumferential	NC	CNM 1201.01-65				10.900		Ref. Request For Relief Serial Number 93-02
Class A					RPV Outlet Nozzle to Shell				Ref. Request for Relief Serial Number 94-05 An EVT-1 examination shall be performed in lieu of UT per Code Case N-648-1. *Use WesDyne Procedure WDI-STD-088.
B03.100.007	1RPV-W17		CNM 1201.01-51	*	VT-1	CS	52.900		Outlet Nozzle E to Shell 202 Deg. Loop C
	Circumferential	NC	CNM 1201.01-65				10.900		Ref. Request For Relief Serial Number 93-02
Class A					RPV Outlet Nozzle to Shell				Ref. Request for Relief Serial Number 94-05 An EVT-1 examination shall be performed in lieu of UT per Code Case N-648-1. *Use WesDyne Procedure WDI-STD-088.

**CATEGORY B-D, Full Penetration Welds of
Nozzels in Vessels**

Reactor Vessel

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

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

Plan Report

Page 8

08/04/2005

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
B03.100.008	1RPV-W18		CNM 1201.01-51	*	VT-1	CS	52.900			Outlet Nozzle H to Shell 338 Deg. Loop D
	Circumferential	NC	CNM 1201.01-65				10.900			Ref. Request For Relief Serial Number 93-02
	Class A									Ref. Request for Relief Serial Number 94-05
										An EVT-1 examination shall be performed in lieu of
										UT per Code Case N-648-1.
										*Use WesDyne Procedure WDI-STD-088.
<hr/>										
Total B03.100 Items:		8								

**CATEGORY B-D, Full Penetration Welds of
Nozzels in Vessels**

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

Plan Report
Page 9
08/04/2005

Pressurizer

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL BLOCKS	COMMENTS
**** Nozzle-to-Vessel Welds ****									
B03.110.001A	1PZR-W1		CNM 1201.01-175/1	NDE-640	UT	CS	24.500	50338	Pressurizer Surge Nozzle to Lower Head Weld
	Circumferential	NC	CNM 1201.01-175/2	NDE-820			2.550		Reference PIP #G-03-00289
	Class A								PZR Surge Nozzle to Lower Head
B03.110.004A	1PZR-W4A		CNM 1201.01-175/1	NDE-640	UT	CS	15.000	50338	Pressurizer Safety Nozzle to Upper Head Weld
	Circumferential	NC	CNM 1201.01-175/2	NDE-820			1.900		X-Y Quadrant Reference PIP #G-03-00289
	Class A								PZR Safety Nozzle to Upper Head
B03.110.005	1PZR-W4B		CNM 1201.01-175/1	NDE-640	UT	CS	15.000	50338	Pressurizer Safety Nozzle to Upper Head Weld
	Circumferential	NC	CNM 1201.01-175/2	NDE-820			1.900		W-X Quadrant
	Class A								PZR Safety Nozzle to Upper Head
B03.110.006A	1PZR-W4C		CNM 1201.01-175/1	NDE-640	UT	CS	15.000	50338	Pressurizer Safety Nozzle to Upper Head Weld
	Circumferential	NC	CNM 1201.01-175/2	NDE-820			1.900		W-Z Quadrant Reference PIP #G-03-00289
	Class A								PZR Safety Nozzle to Upper Head

Total B03.110 Items: 4

**CATEGORY B-D, Full Penetration Welds of
Nozzels in Vessels**

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

Steam Generators (Primary Side)

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL	BLOCKS	COMMENTS
**** Nozzle Inside Radius Section ****										
B03.140.005	1SGC-INLET		CNM 1201.01-609	NDE-680	UT	CS	39.000		50235	Steam Generator 1C Primary Inlet Nozzle
	Circumferential	NC	CNM 1201.01-618				6.125			(Inside Radius Section)
Class A										
B03.140.006	1SGC-OUTLET		CNM 1201.01-609	NDE-680	UT	CS	39.000		50235	Steam Generator 1C Primary Outlet Nozzle
	Circumferential	NC	CNM 1201.01-618				6.125			(Inside Radius Section)
Class A										
Total B03.140 Items:										2
Total B03 Items:										34

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

Plan Report
Page 12
08/04/2005

**CATEGORY B-F, Pressure Retaining Dissimilar
Metal Welds**

Reactor Vessel

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
**** NPS 4 or larger; Nozzle-to-Safe End Butt Welds ****										
B05.010.001	1RPV-W11-SE		CNM 1201.01-64	**	UT	SS-CS	27.500		*	RV Inlet Nozzle B to Safe End 67 Deg. Loop A
	Circumferential	NC	CN-1NC-024				2.200			UT from Nozzle Side
	Class A				Nozzle to					*NavShips Test Block S/N
	Dissimilar				Safe End					045202
										**Use WesDyne Procedure PDI-ISI-254-SE
										To be done with B05.130.012'
B05.010.001A	1RPV-W11-SE		CNM 1201.01-64	**	UT	SS-CS	27.500		*	RV Inlet Nozzle B to Safe End 67 Deg. Loop A
	Circumferential	NC	CN-1NC-024				2.200			UT from Pipe Side
	Class A				Nozzle to					*NavShips Test Block S/N
	Dissimilar				Safe End					045202
										**Use WesDyne Procedure PDI-ISI-254-SE
										To be done with B05.130.012A
B05.010.001B	1RPV-W11-SE		CNM 1201.01-64	NDE-35	PT	SS-CS	27.500			RV Inlet Nozzle B to Safe End 67 Deg. Loop A
	Circumferential	NC	CN-1NC-024				2.200			
	Class A				Nozzle to					
	Dissimilar				Safe End					
B05.010.002	1RPV-W12-SE		CNM 1201.01-64	**	UT	SS-CS	27.500		*	RV Inlet Nozzle C to Safe End 113 Deg. Loop B
	Circumferential	NC	CN-1NC-022				2.200			UT from Nozzle Side
	Class A				Nozzle to					*NavShips Test Block S/N
	Dissimilar				Safe End					045202
										**Use WesDyne Procedure PDI-ISI-254-SE
										To be done with B05.130.004
B05.010.002A	1RPV-W12-SE		CNM 1201.01-64	**	UT	SS-CS	27.500		*	RV Inlet Nozzle C to Safe End 113 Deg. Loop B
	Circumferential	NC	CN-1NC-022				2.200			UT from Pipe Side
	Class A				Nozzle to					*NavShips Test Block S/N
	Dissimilar				Safe End					045202
										**Use WesDyne Procedure PDI-ISI-254-SE
										To be done with B05.130.004A
B05.010.002B	1RPV-W12-SE		CNM 1201.01-64	NDE-35	PT	SS-CS	27.500			RV Inlet Nozzle C to Safe End 113 Deg. Loop B
	Circumferential	NC	CN-1NC-022				2.200			
	Class A				Nozzle to					
	Dissimilar				Safe End					
B05.010.003	1RPV-W13-SE		CNM 1201.01-64	**	UT	SS-CS	27.500		*	RV Inlet Nozzle F to Safe End 247 Deg. Loop C
	Circumferential	NC	CN-1NC-025				2.200			UT from Nozzle Side
	Class A				Nozzle to					*NavShips Test Block S/N 045202
	Dissimilar				Safe End					**Use WesDyne Procedure PDI-ISI-254-SE

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

Plan Report
Page 13
08/04/2005

**CATEGORY B-F, Pressure Retaining Dissimilar
Metal Welds**

Reactor Vessel

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL BLOCKS	COMMENTS
B05.010.003A	1RPV-W13-SE Circumferential Class A Dissimilar	NC	CNM 1201.01-64 CN-1NC-025	**	UT	SS-CS	27.500 2.200	*	RV Inlet Nozzle F to Safe End 247 Deg. Loop C UT from Pipe Side *NavShips Test Block S/N 045202 **Use WesDyne Procedure PDI-ISI-254-SE To be done with B05.130.016A
B05.010.003B	1RPV-W13-SE Circumferential Class A Dissimilar	NC	CNM 1201.01-64 CN-1NC-025	NDE-35	PT	SS-CS	27.500 2.200		RV Inlet Nozzle F to Safe End 247 Deg. Loop C Nozzle to Safe End
B05.010.004	1RPV-W14-SE Circumferential Class A Dissimilar	NC	CNM 1201.01-64 CN-1NC-023	**	UT	SS-CS	27.500 2.200	*	RV Inlet Nozzle G to Safe End 293 Deg. Loop D UT from Nozzle Side *NavShips Test Block S/N 045202 **Use WesDyne Procedure PDI-ISI-254-SE To be done with B05.130.008
B05.010.004A	1RPV-W14-SE Circumferential Class A Dissimilar	NC	CNM 1201.01-64 CN-1NC-023	**	UT	SS-CS	27.500 2.200	*	RV Inlet Nozzle G to Safe End 293 Deg. Loop D UT from Pipe Side *NavShips Test Block S/N 045202 **Use WesDyne Procedure PDI-ISI-254-SE To be done with B05.130.008A
B05.010.004B	1RPV-W14-SE Circumferential Class A Dissimilar	NC	CNM 1201.01-64 CN-1NC-023	NDE-35	PT	SS-CS	27.500 2.200		RV Inlet Nozzle G to Safe End 293 Deg. Loop D Nozzle to Safe End
B05.010.005	1RPV-W15-SE Circumferential Class A Dissimilar	NC	CNM 1201.01-65 CN-1NC-024	**	UT	SS-CS	29.000 2.300	*	RV Outlet Nozzle A to Safe End 22 Deg. Loop A UT from Nozzle Side Ref. Request For Relief Serial Number 93-02 Ref. Request for Relief Serial Number 94-05 *NavShips Test Block S/N 045202 **Use WesDyne Procedure PDI-ISI-254-SE To be done with B05.130.009

To be done with B05.130.016

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

Plan Report
Page 14
08/04/2005

CATEGORY B-F, Pressure Retaining Dissimilar**Metal Welds****Reactor Vessel**

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
B05.010.005A	1RPV-W15-SE		CNM 1201.01-65	**	UT	SS-CS	29.000		*	RV Outlet Nozzle A to Safe End 22 Deg. Loop A
	Circumferential	NC	CN-1NC-024				2.300			UT from Pipe Side
Class A	Dissimilar				Nozzle to Safe End					Ref. Request For Relief Serial Number 93-02 Ref. Request for Relief Serial Number 94-05 *NavShips Test Block S/N 045202 **Use WesDyne Procedure PDI-ISI-254-SE To be done with B05.130.009A
B05.010.006	1RPV-W16-SE		CNM 1201.01-65	**	UT	SS-CS	29.000		*	RV Outlet Nozzle D to Safe End 158 Deg. Loop B
	Circumferential	NC	CN-1NC-022				2.300			UT from Nozzle Side
Class A	Dissimilar				Nozzle to Safe End					Ref. Request For Relief Serial Number 93-02 Ref. Request for Relief Serial Number 94-05 *NavShips Test Block S/N 045202 **Use WesDyne Procedure PDI-ISI-254-SE To be done with B05.130.001
B05.010.006A	1RPV-W16-SE		CNM 1201.01-65	**	UT	SS-CS	29.000		*	RV Outlet Nozzle D to Safe End 158 Deg. Loop B
	Circumferential	NC	CN-1NC-022				2.300			UT from Pipe Side
Class A	Dissimilar				Nozzle to Safe End					Ref. Request For Relief Serial Number 93-02 Ref. Request for Relief Serial Number 94-05 *NavShips Test Block S/N 045202 **Use WesDyne Procedure PDI-ISI-254-SE To be done with B05.130.001A
B05.010.007	1RPV-W17-SE		CNM 1201.01-65	**	UT	SS-CS	29.000		*	RV Outlet Nozzle E to Safe End 202 Deg. Loop C
	Circumferential	NC	CN-1NC-025				2.300			UT from Nozzle Side
Class A	Dissimilar				Nozzle to Safe End					Ref. Request For Relief Serial Number 93-02 Ref. Request for Relief Serial Number 94-05 *NavShips Test Block S/N 045202 **Use WesDyne Procedure PDI-ISI-254-SE To be done with B05.130.013
B05.010.007A	1RPV-W17-SE		CNM 1201.01-65	**	UT	SS-CS	29.000		*	RV Outlet Nozzle E to Safe End 202 Deg. Loop C
	Circumferential	NC	CN-1NC-025				2.300			UT from Pipe Side
Class A	Dissimilar				Nozzle to Safe End					Ref. Request For Relief Serial Number 93-02 Ref. Request for Relief Serial Number 94-05 *NavShips Test Block S/N 045202 **Use WesDyne Procedure PDI-ISI-254-SE To be done with B05.130.013A

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

CATEGORY B-F, Pressure Retaining Dissimilar

Metal Welds

Reactor Vessel

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
B05.010.008	1RPV-W18-SE		CNM 1201.01-65	**	UT	SS-CS	29.000		*	RV Outlet Nozzle H to Safe End 338 Deg. Loop D
	Circumferential	NC	CN-1NC-023				2.300			UT from Nozzle Side
Class A	Dissimilar				Nozzle to Safe End					Ref. Request For Relief Serial Number 93-02 Ref. Request for Relief Serial Number 94-05 *NavShips Test Block S/N 045202 **Use WesDyne Procedure PDI-ISI-254-SE To be done with B05.130.005
B05.010.008A	1RPV-W18-SE		CNM 1201.01-65	**	UT	SS-CS	29.000		*	RV Outlet Nozzle H to Safe End 338 Deg. Loop D
	Circumferential	NC	CN-1NC-023				2.300			UT from Pipe Side
Class A	Dissimilar				Nozzle to Safe End					Ref. Request For Relief Serial Number 93-02 Ref. Request for Relief Serial Number 94-05 *NavShips Test Block S/N 045202 **Use WesDyne Procedure PDI-ISI-254-SE To be done with B05.130.005A

Total B05.010 Items: 20

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

Plan Report
Page 16
08/04/2005

**CATEGORY B-F, Pressure Retaining Dissimilar
Metal Welds**

Steam Generator

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL BLOCKS	COMMENTS
**** NPS 4 or Larger; Nozzle-to-Safe End Butt Welds ****									
B05.070.005	1SGC-INLET-W5SE		CNM 1201.01-609	PDI-UT-10	UT	SS-CS	31.000	5158172	Steam Generator 1C Inlet
	Circumferential	NC	CNM 1201.01-617				2.750	5149697	Nozzle to Safe End
Class A	Term end Dissimilar				Nozzle to Safe End				
B05.070.005A	1SGC-INLET-W5SE		CNM 1201.01-609	NDE-35	PT	SS-CS	31.000		Steam Generator 1C Inlet
	Circumferential	NC	CNM 1201.01-617				2.750		Nozzle to Safe End
Class A	Term end Dissimilar				Nozzle to Safe End				
B05.070.006	1SGC-OUT-W6SE		CNM 1201.01-609	PDI-UT-10	UT	SS-CS	31.000	5158172	Steam Generator 1C Outlet
	Circumferential	NC	CNM 1201.01-617				2.750	5149697	Nozzle to Safe End
Class A	Term end Dissimilar				Nozzle to Safe End				
B05.070.006A	1SGC-OUT-W6SE		CNM 1201.01-609	NDE-35	PT	SS-CS	31.000		Steam Generator 1C Outlet
	Circumferential	NC	CNM 1201.01-617				2.750		Nozzle to Safe End
Class A	Term end Dissimilar				Nozzle to Safe End				
Total B05.070 Items: 4									

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

Plan Report
Page 17
08/04/2005

**CATEGORY B-F, Pressure Retaining Dissimilar
Metal Welds**

Piping

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
**** NPS 4 or Larger; Dissimilar Metal Butt Welds ****									
B05.130.001	1NC22-01		CN-1NC-022	**	UT	SS-CS	29.000	*	Outlet Nozzle D 158 Degrees Loop B
	Circumferential	NC	CN-1553-1.0				2.300		UT From Nozzle Side
Class A	Term end								To Be Done With B05.010.006
	Dissimilar								Ref. Request For Relief Serial Number 93-02
									Ref. Request for Relief Serial Number 94-05
									*NavShips Test Block S/N 045202
									**Use WesDyne Procedure PDI-ISI-254-SE
B05.130.001A	1NC22-01		CN-1NC-022	**	UT	SS-CS	29.000	*	Outlet Nozzle D 158 Degrees Loop B
	Circumferential	NC	CN-1553-1.0				2.300		UT From Pipe Side
Class A	Term end								To Be Done With B05.010.006A
	Dissimilar								Ref. Request For Relief Serial Number 93-02
									Ref. Request for Relief Serial Number 94-05
									*NavShips Test Block S/N 045202
									**Use WesDyne Procedure PDI-ISI-254-SE
B05.130.004	1NC22-08		CN-1NC-022	**	UT	SS-CS	27.500	*	Inlet Nozzle C 113 Degrees Loop B
	Circumferential	NC	CN-1553-1.0				2.200		UT From Nozzle Side
Class A	Term end								To Be Done With B05.010.002
	Dissimilar								*NavShips Test Block S/N 045202
									**Use WesDyne Procedure PDI-ISI-254-SE
B05.130.004A	1NC22-08		CN-1NC-022	**	UT	SS-CS	27.500	*	Inlet Nozzle C 113 Degrees Loop B
	Circumferential	NC	CN-1553-1.0				2.200		UT From Pipe Side
Class A	Term end								To Be Done With B05.010.002A
	Dissimilar								*NavShips Test Block S/N 045202
									**Use WesDyne Procedure PDI-ISI-254-SE
B05.130.004B	1NC22-08		CN-1NC-022	NDE-35	PT	SS-CS	27.500		Inlet Nozzle C 113 Degrees Loop B
	Circumferential	NC	CN-1553-1.0				2.200		To Be Done With B05.010.002B
Class A	Term end								
	Dissimilar								
B05.130.005	1NC23-01		CN-1NC-023	**	UT	SS-CS	29.000	*	Outlet Nozzle H 338 Degrees Loop D
	Circumferential	NC	CN-1553-1.0				2.300		UT From Nozzle Side
Class A	Term end								To Be Done With B05.010.008
	Dissimilar								Ref. Request for Relief Serial Number 93-02
									Ref. Request For Relief Serial Number 94-05
									*NavShips Test Block S/N 045202
									**Use WesDyne Procedure PDI-ISI-254-SE

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

Plan Report
Page 18
08/04/2005

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

CATEGORY B-F, Pressure Retaining Dissimilar

Metal Welds

Piping

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL	BLOCKS	COMMENTS
B05.130.005A	1NC23-01		CN-1NC-023	**	UT	SS-CS	29.000		*	Outlet Nozzle H 338 Degrees Loop D
	Circumferential	NC	CN-1553-1.0				2.300			UT From Pipe Side
Class A	Term end									To Be Done With B05.010.008A
	Dissimilar									Ref. Request For Relief Serial Number 93-02
										Ref. Request for Relief Serial Number 94-05
										*NavShips Test Block S/N 045202
										**Use WesDyne Procedure PDI-ISI-254-SE
B05.130.008	1NC23-08		CN-1NC-023	**	UT	SS-CS	27.500		*	Inlet Nozzle G 293 Degrees Loop D
	Circumferential	NC	CN-1553-1.0				2.200			UT From Nozzle Side
Class A	Term end									To Be Done With B05.010.004
	Dissimilar									*NavShips Test Block S/N 045202
										**Use WesDyne Procedure PDI-ISI-254-SE
B05.130.008A	1NC23-08		CN-1NC-023	**	UT	SS-CS	27.500		*	Inlet Nozzle G 293 Degrees Loop D
	Circumferential	NC	CN-1553-1.0				2.200			UT From Pipe Side
Class A	Term end									To Be Done With B05.010.004A
	Dissimilar									*NavShips Test Block S/N 045202
										**Use WesDyne Procedure PDI-ISI-254-SE
B05.130.008B	1NC23-08		CN-1NC-023	NDE-35	PT	SS-CS	27.500			Inlet Nozzle G 293 Degrees Loop D
	Circumferential	NC	CN-1553-1.0				2.200			To Be Done With B05.010.004B
Class A	Term end									
	Dissimilar									
B05.130.009	1NC24-01		CN-1NC-024	**	UT	SS-CS	29.000		*	Outlet Nozzle A 22 Degrees Loop A
	Circumferential	NC	CN-1553-1.0				2.300			UT From Nozzle Side
Class A	Term end									To Be Done With B05.010.005
	Dissimilar									Ref. Request For Relief Serial Number 93-02
										Ref. Request for Relief Serial Number 94-05
										*NavShips Test Block S/N 045202
										**Use WesDyne Procedure PDI-ISI-254-SE
B05.130.009A	1NC24-01		CN-1NC-024	**	UT	SS-CS	29.000		*	Outlet Nozzle A 22 Degrees Loop A
	Circumferential	NC	CN-1553-1.0				2.300			UT From Pipe Side
Class A	Term end									To Be Done With B05.010.005A
	Dissimilar									Ref. Request For Relief Serial Number 93-02
										Ref. Request for Relief Serial Number 94-05
										*NavShips Test Block S/N 045202
										**Use WesDyne Procedure PDI-ISI-254-SE

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

Plan Report
Page 19
08/04/2005

CATEGORY B-F, Pressure Retaining Dissimilar**Metal Welds****Piping**

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL	BLOCKS	COMMENTS
B05.130.012	1NC24-08		CN-1NC-024	**	UT	SS-CS	27.500		*	Inlet Nozzle B 67 Degrees Loop A
	Circumferential	NC	CN-1553-1.0				2.200			UT From Nozzle Side
Class A	Term end									To Be Done With B05.010.001
	Dissimilar									*NavShips Test Block S/N 045202
										**Use WesDyne Procedure PDI-ISI-254-SE
B05.130.012A	1NC24-08		CN-1NC-024	**	UT	SS-CS	27.500		*	Inlet Nozzle B 67 Degrees Loop A
	Circumferential	NC	CN-1553-1.0				2.200			UT From Pipe Side
Class A	Term end									To Be Done With B05.010.001A
	Dissimilar									*NavShips Test Block S/N 045202
										**Use WesDyne Procedure PDI-ISI-254-SE
B05.130.012B	1NC24-08		CN-1NC-024	NDE-35	PT	SS-CS	27.500			Inlet Nozzle B 67 Degrees Loop A
	Circumferential	NC	CN-1553-1.0				2.200			To Be Done With B05.010.001B
Class A	Term end									
	Dissimilar									
B05.130.013	1NC25-01		CN-1NC-025	**	UT	SS-CS	29.000		*	Outlet Nozzle E 202 Degrees Loop C
	Circumferential	NC	CN-1553-1.0				2.300			UT From Nozzle Side
Class A	Term end									To Be Done With B05.010.007
	Dissimilar									Ref. Request For Relief Serial Number 93-02
										Ref. Request for Relief Serial Number 94-05
										*NavShips Test Block S/N 045202
										**Use WesDyne Procedure PDI-ISI-254-SE
B05.130.013A	1NC25-01		CN-1NC-025	**	UT	SS-CS	29.000		*	Outlet Nozzle E 202 Degrees Loop C
	Circumferential	NC	CN-1553-1.0				2.300			UT From Pipe Side
Class A	Term end									To Be Done With B05.010.007A
	Dissimilar									Ref. Request For Relief Serial Number 93-02
										Ref. Request for Relief Serial Number 94-05
										*NavShips Test Block S/N 045202
										**Use WesDyne Procedure PDI-ISI-254-SE
B05.130.016	1NC25-08		CN-1NC-025	**	UT	SS-CS	27.500		*	Inlet Nozzle F 247 Degrees Loop C
	Circumferential	NC	CN-1553-1.0				2.200			UT From Nozzle Side
Class A	Term end									To be Done With B05.010.003
	Dissimilar									*NavShips Test Block S/N 045202
										**Use WesDyne Procedure PDI-ISI-254-SE

**CATEGORY B-G-1, Pressure Retaining Bolting,
Greater than 2" In Diameter**

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

Steam Generators

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
**** Nuts, Bushings, and Washers ****										
B06.110.007	1SGD-MW-Y1-X2		CNM 1201.01-580	QAL-13	VT-1	CS	0.000			SG1D Manway Nuts (20)
		NC					0.000			Primary Manway in Y1-X2 Quadrant (Inlet Side)
Class A										
B06.110.008	1SGD-MW-X2-Y2		CNM 1201.01-580	QAL-13	VT-1	CS	0.000			SG1D Manway Nuts (20)
		NC					0.000			Primary Manway in X2-Y2 Quadrant (Outlet Side)
Class A										
<hr/>										
Total B06.110 Items:		2								
Total B06 Items:		2								

**CATEGORY B-G-2, Pressure Retaining Bolting,
2" And Less In Diameter**

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

Piping

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
**** Bolts, Studs, and Nuts ****										
B07.050.056	1NV614-MJ1		CN-1NV-614	QAL-13	VT-1	CS		1.000		Flange Bolting
		NV	CN-1554-1.5					5.750		4 Studs,8 Nuts
Class A										
B07.050.057	1NV615-MJ1		CN-1NV-615	QAL-13	VT-1	CS		1.000		Flange Bolting
		NV	CN-1554-1.5					7.250		8 Studs,16 Nuts
Class A										
<hr/>										
Total B07.050 Items:		2								

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

Plan Report
 Page 23
 08/04/2005

**CATEGORY B-G-2, Pressure Retaining Bolting,
 2" And Less In Diameter**

Valves

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL BLOCKS	COMMENTS
-------------	-----------	-----	-----------------	------	----------	---------	--------	------------	----------

**** Bolts, Studs, and Nuts ****

B07.070.023	1NI-125		CN-1NI-240	QAL-13	VT-1	SS	1.250		8" Valve
		NI	CNM 1205.00-059				0.000		16 Studs, 16 Nuts

Class A

B07.070.024	1NI-126		CN-1NI-241	QAL-13	VT-1	SS	1.250		6" Valve
		NI	CNM 1205.00-063				0.000		16 Studs, 16 Nuts

Class A

Total B07.070 Items: 2

Total B07 Items: 4

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

Plan Report
Page 24
08/04/2005

CATEGORY B-J, Pressure Retaining Welds In Piping

NPS 4 or Larger

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
**** Circumferential Welds ****										
B09.011.020	1NC30-2		CN-1NC-30	NDE-600	UT	SS	6.000	*		* Reference General Requirments Section 8.1.10
	Circumferential	NC	CN-1553-1.0			160	0.719	50211		Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
	Class A				Pipe to Elbow					
B09.011.020A	1NC30-2		CN-1NC-30	NDE-35	PT	SS	6.000			
	Circumferential	NC	CN-1553-1.0			160	0.719			
	Class A				Pipe to Elbow					
B09.011.021	1NC30-3		CN-1NC-30	NDE-600	UT	SS	6.000	*		* Reference General Requirments Section 8.1.10
	Circumferential	NC	CN-1553-1.0			160	0.719	50211		Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
	Class A				Elbow to Pipe					
B09.011.021A	1NC30-3		CN-1NC-30	NDE-35	PT	SS	6.000			
	Circumferential	NC	CN-1553-1.0			160	0.719			
	Class A				Elbow to Pipe					
B09.011.024	1NC32-2		CN-1NC-32	NDE-600	UT	SS	10.000	*		* Reference General Requirments Section 8.1.10
	Circumferential	NC	CN-1553-1.0			140	1.000	50209		Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
	Class A				Pipe to Elbow					
B09.011.024A	1NC32-2		CN-1NC-32	NDE-35	PT	SS	10.000			
	Circumferential	NC	CN-1553-1.0			140	1.000			
	Class A				Pipe to Elbow					
B09.011.025	1NC32-3		CN-1NC-32	NDE-600	UT	SS	10.000	*		* Reference General Requirments Section 8.1.10
	Circumferential	NC	CN-1553-1.0			140	1.000	50209		Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
	Class A				Elbow to Pipe					

CATEGORY B-J, Pressure Retaining Welds In Piping

NPS 4 or Larger

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

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

Plan Report
Page 25
08/04/2005

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
B09.011.025A	1NC32-3 Circumferential Class A	NC	CN-1NC-32 CN-1553-1.0	NDE-35	PT	SS 140	10.000 1.000		Elbow to Pipe
B09.011.026	1NC32-4 Circumferential Class A	NC	CN-1NC-32 CN-1553-1.0	NDE-600	UT	SS 140	10.000 1.000	* 50209	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
B09.011.026A	1NC32-4 Circumferential Class A	NC	CN-1NC-32 CN-1553-1.0	NDE-35	PT	SS 140	10.000 1.000		Pipe to Elbow
B09.011.027	1NC32-6 Circumferential Class A	NC	CN-1NC-32 CN-1553-1.0	NDE-600	UT	SS 140	10.000 1.000	* 50209	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
B09.011.027A	1NC32-6 Circumferential Class A	NC	CN-1NC-32 CN-1553-1.0	NDE-35	PT	SS 140	10.000 1.000		Elbow to Pipe
B09.011.048	1NC286-1 Circumferential Class A	NC	CN-1NC-286 CN-1553-1.0	NDE-600	UT	SS XXS	6.000 0.864	* 50281	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
B09.011.048A	1NC286-1 Circumferential Class A	NC	CN-1NC-286 CN-1553-1.0	NDE-35	PT	SS XXS	6.000 0.864		UHI Adapter to Pipe Cap
B09.011.156	1NI32-3 Circumferential Class A	NI	CN-1NI-32 CN-1562-1.2	NDE-600	UT	SS 160	8.000 0.906	* 50311	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.

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

Plan Report
Page 26
08/04/2005

CATEGORY B-J, Pressure Retaining Welds In Piping

NPS 4 or Larger

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
B09.011.156A	1NI32-3		CN-1NI-32	NDE-35	PT	SS	8.000			
	Circumferential	NI	CN-1562-1.2			160	0.906			
	Class A				Elbow to Pipe					
B09.011.157	1NI32-4		CN-1NI-32	NDE-600	UT	SS	8.000	*		* Reference General Requirments Section 8.1.10
	Circumferential	NI	CN-1562-1.2			160	0.906	50311		Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
	Class A				Pipe to Elbow					
B09.011.157A	1NI32-4		CN-1NI-32	NDE-35	PT	SS	8.000			
	Circumferential	NI	CN-1562-1.2			160	0.906			
	Class A				Pipe to Elbow					
B09.011.158	1NI32-5		CN-1NI-32	NDE-600	UT	SS	8.000	*		* Reference General Requirments Section 8.1.10
	Circumferential	NI	CN-1562-1.2			160	0.906	50311		Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
	Class A				Elbow to Pipe					
B09.011.158A	1NI32-5		CN-1NI-32	NDE-35	PT	SS	8.000			
	Circumferential	NI	CN-1562-1.2			160	0.906			
	Class A				Elbow to Pipe					
B09.011.192	1NI240-8		CN-1NI-240	NDE-600	UT	SS	8.000	*		* Reference General Requirments Section 8.1.10
	Circumferential	NI	CN-1562-1.2			160	0.906	50311		Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
	Class A				Pipe to Elbow					
B09.011.192A	1NI240-8		CN-1NI-240	NDE-35	PT	SS	8.000			
	Circumferential	NI	CN-1562-1.2			160	0.906			
	Class A				Pipe to Elbow					
B09.011.193	1NI240-10		CN-1NI-240	NDE-600	UT	SS	8.000	*		* Reference General Requirments Section 8.1.10
	Circumferential	NI	CN-1562-1.2			160	0.906	50311		Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
	Class A				Pipe to Elbow					

CATEGORY B-J, Pressure Retaining Welds In Piping

NPS 4 or Larger

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

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

Plan Report
Page 27
08/04/2005

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
B09.011.193A	1NI240-10 Circumferential	NI	CN-1NI-240 CN-1562-1.2	NDE-35	PT	SS 160	8.000 0.906			
	Class A				Pipe to Elbow					
B09.011.194	1NI240-11 Circumferential	NI	CN-1NI-240 CN-1562-1.2	NDE-600	UT	SS 160	8.000 0.906	*	50311	* Reference General Requirments Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
	Class A				Elbow to Pipe					
B09.011.194A	1NI240-11 Circumferential	NI	CN-1NI-240 CN-1562-1.2	NDE-35	PT	SS 160	8.000 0.906			
	Class A				Elbow to Pipe					

Total B09.011 Items: 26

CATEGORY B-J, Pressure Retaining Welds In Piping

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

Branch Pipe Connection Welds

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
-------------	-----------	-----	-----------------	------	----------	---------	--------	-----	--------	----------

**** NPS 4 or Larger ****

B09.031.002	1NC22-WN8		CN-1NC-22	NDE-830	UT	SS	29.500	50214		Reference RFR 04-CN-001
	Branch	NC	CN-1553-1.0			140	2.200			
	Class A				Branch to Pipe					

B09.031.002A	1NC22-WN8		CN-1NC-22	NDE-35	PT	SS	29.500			
	Branch	NC	CN-1553-1.0			140	2.200			
	Class A				Branch to Pipe					

Total B09.031 Items: 2

**** Less Than NPS 4 ****

B09.032.051	1NI10-2		CN-1NI-10	NDE-35	PT	SS	2.000			
	Branch	NI	CN-1562-1.3			160	0.344			
	Class A				Pipe to Special Weld Branch					

B09.032.052	1NI147-3		CN-1NI-147	NDE-35	PT	SS	2.000			
	Branch	NI	CN-1562-1.3			160	0.344			
	Class A				Pipe to Special Weld Branch					

Total B09.032 Items: 2

CATEGORY B-J, Pressure Retaining Welds In Piping

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

Plan Report
Page 31
08/04/2005

Socket Welds

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
**** Socket ****										
B09.040.001	1NC24-12		CN-1NC-24	NDE-35	PT	SS		2.000		
	Socket	NC	CN-1553-1.0			160		0.344		
	Class A									Welding Boss (Nozzle) to Inst. 1NCRD5440
B09.040.002	1NC41-36		CN-1NC-41	NDE-35	PT	SS		2.000		
	Socket	NC	CN-1553-1.0			160		0.344		
	Class A									Tee to Coupling Rest.
B09.040.003	1NC41-37		CN-1NC-41	NDE-35	PT	SS		2.000		
	Socket	NC	CN-1553-1.0			160		0.344		
	Class A									Tee to Pipe
B09.040.004	1NC41-35		CN-1NC-41	NDE-35	PT	SS		2.000		
	Socket	NC	CN-1553-1.0			160		0.344		
	Class A									Tee to Pipe
B09.040.005	1NC42-5		CN-1NC-42	NDE-35	PT	SS		1.500		
	Socket	NC	CN-1553-1.0			160		0.281		
	Class A									Elbow to Pipe
B09.040.006	1NC43-8		CN-1NC-43	NDE-35	PT	SS		1.500		
	Socket	NC	CN-1553-1.0			160		0.281		
	Class A									Pipe to Reducing Insert
B09.040.007	1NC50-6		CN-1NC-50	NDE-35	PT	SS		2.000		
	Socket	NC	CN-1553-1.0			160		0.344		
	Class A									Pipe to Tee
B09.040.008	1NC50-29		CN-1NC-50	NDE-35	PT	SS		2.000		
	Socket	NC	CN-1553-1.0			160		0.344		
	Class A									Pipe to Elbow

CATEGORY B-J, Pressure Retaining Welds In Piping

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

Plan Report
Page 32
08/04/2005

Socket Welds

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL BLOCKS	COMMENTS
B09.040.009	1NC50-30 Socket Class A	NC	CN-1NC-50 CN-1553-1.0	NDE-35	PT	SS 160	2.000 0.344		Elbow to Pipe
B09.040.010	1NC51-2 Socket Class A	NC	CN-1NC-51 CN-1553-1.0	NDE-35	PT	SS 160	1.500 0.281		Pipe to Elbow
B09.040.011	1NC81-21 Socket Class A	NC	CN-1NC-81 CN-1553-1.0	NDE-35	PT	SS 160	2.000 0.344		Pipe to Tee
B09.040.012	1NC82-5 Socket Class A	NC	CN-1NC-82 CN-1553-1.0	NDE-35	PT	SS 160	1.500 0.281		Elbow to Pipe
B09.040.022	1NC245-9 Circumferential Class A	NC	CN-1NC-245 CN-1553-1.1	NDE-35	PT	SS 160	2.000 0.344		Reducing Insert to Reducer Coupling (This weld was added to Outage #7 (EOC15) to adjust the NC System Summary for Inservice Inspection Category B-J, as a result of the re-classification of this weld).
B09.040.067	1NI240-4 Socket Class A	NI	CN-1NI-240 CN-1562-1.2	NDE-35	PT	SS 160	2.000 0.344		Branch to Pipe
B09.040.068	1NI240-6 Socket Class A	NI	CN-1NI-240 CN-1562-1.2	NDE-35	PT	SS 160	2.000 0.344		Elbow to Pipe
B09.040.069	1NI243-1 Socket Class A	NI	CN-1NI-243 CN-1562-1.0	NDE-35	PT	SS 160	2.000 0.344		Reducer to Valve 1NI15
B09.040.070	1NI245-3 Socket Class A	NI	CN-1NI-245 CN-1562-1.0	NDE-35	PT	SS 160	1.500 0.281		Reducer to Pipe

CATEGORY B-J, Pressure Retaining Welds In Piping

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

Socket Welds

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
B09.040.071	1NI247-7		CN-1NI-247	NDE-35	PT	SS	1.500			
	Socket	NI	CN-1562-1.0			160	0.281			Reducer to Pipe
	Class A									
B09.040.108	1NV483-3		CN-1NV-483	NDE-35	PT	SS	2.000			
	Socket	NV	CN-1554-1.5			160	0.344			Flange MJ-1 to Pipe
	Class A									
B09.040.109	1NV483-7		CN-1NV-483	NDE-35	PT	SS	2.000			
	Socket	NV	CN-1554-1.5			160	0.344			Elbow to Pipe
	Class A									
B09.040.110	1NV483-8		CN-1NV-483	NDE-35	PT	SS	2.000			
	Socket	NV	CN-1554-1.5			160	0.344			Pipe to Elbow
	Class A									
B09.040.111	1NV483-9		CN-1NV-483	NDE-35	PT	SS	2.000			
	Socket	NV	CN-1554-1.5			160	0.344			Elbow to Pipe
	Class A									
B09.040.112	1NV483-14		CN-1NV-483	NDE-35	PT	SS	2.000			
	Socket	NV	CN-1554-1.5			160	0.344			Pipe to Elbow
	Class A									

Total B09.040 Items: 23

Total B09 Items: 64

CATEGORY B-M-1, Pressure Retaining Welds in Valve Bodies

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

Valves

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
**** NPS 4 or Larger; Valve Body Welds ****										
B12.040.002D	1ND-37A		CN-1ND-037	NDE-630	UT	SS	20.000		50354	Factory Weld- Valve Body to Bonnett. Inspect one of the following(1ND-1B,2A, 36B,or 37A)
	Circumferential	ND	CNM 1205.00-262				2.043			
	Class A									
<hr/>										
Total B12.040 Items: 1										

CATEGORY B-M-2, Valve Bodies

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

Valves

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS	
**** Valve Body, Exceeding NPS 4 ****										
B12.050.002B	1NC-29		CN-1NC-044	QAL-14	VT-3	SS	6.000		Inspect one of the following(1NC27,or 29) if disassembled	
		NC	CNM 1205.06-41				0.719			
Class A										
B12.050.007E	INI-175		CN-1NI-147	QAL-14	VT-3	SS	6.000		Inspect one of the following(1NI-126,134,157,160,175,176,180 or 181) if disassembled	
		NI	CNM 1205.00-63				0.719			
Class A										
Total B12.050 Items:										2
Total B12 Items:										3

CATEGORY B-N-1, Interior of Reactor Vessel

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

Plan Report
 Page 36
 08/04/2005

Reactor Vessel

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
**** Vessel Interior ****										
B13.010.001	1RPV-INTERIOR		CNM 1201.01-32	*	VT-3	SS	0.000			Area Above and Below Core Made Accessible During Normal Refueling Outages
	Class A		NC				0.000			*Use WesDyne Procedure WDI-STD-088
<hr/>										
Total B13.010 Items: 1										

CATEGORY B-N-2, Integral Welded Core Support Structures And Interior Attach of RV
INSERVICE INSPECTION PLAN MANAGEMENT
Inservice Inspection Database Management System

Plan Report
 Page 37
 08/04/2005

Reactor Vessel (PWR)

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
**** Interior Attachments Beyond Beltline Region ****										
B13.060.001	1RPV-CLEVIS		CNM 1201.01-52/4	*	VT-3	SS	0.000	0.000		6 Clevis Located at 60 Degree Intervals in Lower Shell *Use WesDyne Procedure WDI-STD-088
Class A										
B13.060.002	1RPV-INCORE		CNM 1201.01-52/2	*	VT-3	SS	0.000	0.000		58 Incore Instrumentation Nozzles Located in Lower Head *Use WesDyne Procedure WDI-STD-088
Class A										
Total B13.060 Items: 2										

CATEGORY B-N-3, Removable Core Support Structures

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

Reactor Vessel (PWR)

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
**** Core Support Structure ****									
B13.070.001	1RPV-CORE-SUP		CNM 1201.01-32	*	VT-3	SS		0.000 0.000	Examine When Structure Is Removed From Reactor Vessel *Use WesDyne Procedure WDI-STD-088
Class A									

Total B13.070 Items: 1

Total B13 Items: 4

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

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

Plan Report
Page 39
08/04/2005

Reactor Vessel

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
**** Welds in CRD Housing ****										
B14.010.001	1RPV-CRDM64		CNM 1201.01-52/7	NDE-35	PT	SS-Inconel	4.000	0.642		CRD Housing Weld (Peripheral) First Interval Item Number B14.010.010
Class A										
B14.010.002	1RPV-CRDM72		CNM 1201.01-52/7	NDE-35	PT	SS-Inconel	4.000	0.642		CRD Housing Weld (Peripheral) First Interval Item Number B14.010.018
Class A										
B14.010.003	1RPV-CRDM77		CNM 1201.01-52/7	NDE-35	PT	SS-Inconel	4.000	0.642		CRD Housing Weld (Peripheral) First Interval Item Number B14.010.023
Class A										
Total B14.010 Items:										3
Total B14 Items:										3

**CATEGORY C-A, Pressure Retaining Welds In
Pressure Vessels**

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

Plan Report
Page 40
08/04/2005

Head Circumferential Welds

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DI/THK	CAL BLOCKS	COMMENTS
**** Circumferential ****									
C01.020.013	1SGD-W144		CNM-1201.01-610	NDE-640	UT	CS	0.000	5139385	Steam Generator 1D Steam Drum Shell to Steam Drum Head
	Circumferential	NC	CNM-1201.01-617	NDE-820			4.125		
	Class B				Shell to Head				

Total C01.020 Items: 1

Total C01 Items: 1

**CATEGORY C-B, Pressure Retaining Nozzle
Welds In Vessels**

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

Plan Report
Page 41
08/04/2005

**Nozzles Without Reinforcing Plate In Vessels >
1/2 In. Nom. Thickness**

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
**** Nozzle-to-Shell (or Head) Weld ****										
C02.021.004	1ANSHX-3-N1		CN-1563-1.0	NDE-630	UT	SS	12.000	50380		Containment Spray Heat Exchanger 1A Inlet Nozzle to Channel Pc.3 to Pc.N1 The NDE for this Item Number will not be performed during Outage #7 (EOC15), per NSM# CN-11432/01 (1A NS Heat Exchanger Replacement).
Class B	Circumferential	NS	CNM 1201.06-90 CNM 2201.06-2		Inlet Nozzle to Channel		0.500			
C02.021.004A	1ANSHX-3-N1		CN-1563-1.0	NDE-35	PT	SS	12.000	50380		Containment Spray Heat Exchanger 1A Inlet Nozzle to Channel Pc.3 to Pc.N1 The NDE for this Item Number will not be performed during Outage #7 (EOC15), per NSM# CN-11432/01 (1A NS Heat Exchanger Replacement).
Class B	Circumferential	NS	CNM 1201.06-90 CNM 2201.06-2		Inlet Nozzle to Channel		0.500			
C02.021.005	1ANSHX-3-N2		CN-1563-1.0	NDE-630	UT	SS	12.000	50380		Containment Spray Heat Exchanger 1A Outlet Nozzle to Channel Pc.3 to Pc.N2 The NDE for this Item Number will not be performed during Outage #7 (EOC15), per NSM# CN-11432/01 (1A NS Heat Exchanger Replacement).
Class B	Circumferential	NS	CNM 1201.06-90 CNM 2201.06-2		Outlet Nozzle to Channel		0.500			
C02.021.005A	1ANSHX-3-N2		CN-1563-1.0	NDE-35	PT	SS	12.000	50380		Containment Spray Heat Exchanger 1A Outlet Nozzle to Channel Pc.3 to Pc.N2 The NDE for this Item Number will not be performed during Outage #7 (EOC15), per NSM# CN-11432/01 (1A NS Heat Exchanger Replacement).
Class B	Circumferential	NS	CNM 1201.06-90 CNM 2201.06-2		Outlet Nozzle to Channel		0.500			
Total C02.021 Items: 4										
Total C02 Items: 4										

**CATEGORY C-C, Integral Attachments For
Vessels, Piping, Pumps, And Valves**

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

Plan Report
Page 43
08/04/2005

Piping

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
C03.020.096	1-R-SM-1028		CN-1491-SM001	NDE-25	MT	CS	34.000		Welded Attachment
	Rigid Support	SM	CN-ISIN-1593-1.0	NDE-35			0.750		6 Lugs - Pc. 4 and Pc. 5 (1.50 inches thick), Pc. 8 and Pc. 9 (2 inches thick), and Pc. 10 and Pc. 11 (1 inch thick). PT may be used in conjunction with MT.
Class B									
C03.020.097	1-R-SM-1038		CN-1491-SM004	NDE-25	MT	CS	34.000		Welded Attachment
	Rigid Support	SM	CN-ISIN-1593-1.0	NDE-35			0.750		6 Lugs - Pc. 4 and Pc. 5 (1.50 inches thick), Pc. 8 and Pc. 9 (2 inches thick), and Pc. 10 and Pc. 11 (1 inch thick). PT may be used in conjunction with MT.
Class B									
Total C03.020 Items: 10									

**CATEGORY C-C, Integral Attachments For
Vessels, Piping, Pumps, And Valves**

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

Plan Report
Page 44
08/04/2005

Valves

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL BLOCKS	COMMENTS
**** Integrally Welded Attachments ****									
C03.040.001	1-R-SV-1519		CN-1491-SV005	NDE-25	MT	CS	0.000		Lug to Valve
	Rigid Support	SV	CN-ISIN-1593-1.0				1.000		
	Class B				Lug to Valve				
C03.040.002	1-R-SV-1612		CN-1491-SV005	NDE-25	MT	CS	0.000		Support 1-R-SV-1612 to Forged Bracket on Valve Body
	Rigid Support	SV	CN-ISIN-1593-1.0				1.000		
	Class B				Support to Forged Bracket				
C03.040.003	1-R-SV-1512		CN-1491-SV006	NDE-25	MT	CS	0.000		Lug to Valve
	Rigid Support	SV	CN-ISIN-1593-1.0				1.000		
	Class B				Lug to Valve				
C03.040.004	1-R-SV-1616		CN-1491-SV006	NDE-25	MT	CS	0.000		Support 1-R-SV-1616 to Forged Bracket on Valve Body
	Rigid Support	SV	CN-ISIN-1593-1.0				1.000		
	Class B				Support to Forged Bracket				
C03.040.005	1-R-SV-1505		CN-1491-SV007	NDE-25	MT	CS	0.000		Lug to Valve
	Rigid Support	SV	CN-ISIN-1593-1.0				1.000		
	Class B				Lug to Valve				
C03.040.006	1-R-SV-1610		CN-1491-SV007	NDE-25	MT	CS	0.000		Support 1-R-SV-1610 to Forged Bracket on Valve Body
	Rigid Support	SV	CN-ISIN-1593-1.0				1.000		
	Class B				Support to Forged Bracket				
C03.040.007	1-R-SV-1526		CN-1491-SV008	NDE-25	MT	CS	0.000		Lug to Valve
	Rigid Support	SV	CN-ISIN-1593-1.0				1.000		
	Class B				Lug to Valve				
C03.040.008	1-R-SV-1608		CN-1491-SV008	NDE-25	MT	CS	0.000		Support 1-R-SV-1608 to Forged Bracket on Valve Body
	Rigid Support	SV	CN-ISIN-1593-1.0				1.000		
	Class B				Support to Forged Bracket				
Total C03.040 Items: 8									
Total C03 Items: 18									

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

Plan Report
Page 45
08/04/2005

**CATEGORY C-F-1, Pressure Retaining Welds In
Austenitic SS or High Alloy Piping**

**Piping Welds \geq 3/8 in. Nominal Wall Thickness
for Piping $>$ NPS 4**

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL BLOCKS	COMMENTS
**** Circumferential Weld ****									
C05.011.039	1ND13-1		CN-1ND-13	NDE-600	UT	SS	14.000	*	Residual Heat Removal Pump 1B * Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
Class B	Circumferential Term end	ND	CN-1561-1.1			40	0.438	50314	
C05.011.039A	1ND13-1		CN-1ND-13	NDE-35	PT	SS	14.000		Residual Heat Removal Pump 1B
Class B	Circumferential Term end	ND	CN-1561-1.1			40	0.438		
C05.011.040	1ND13-5		CN-1ND-13	NDE-600	UT	SS	14.000	*	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
Class B	Circumferential	ND	CN-1561-1.1			40	0.438	50314	
C05.011.040A	1ND13-5		CN-1ND-13	NDE-35	PT	SS	14.000		Residual Heat Removal Pump 1B
Class B	Circumferential	ND	CN-1561-1.1			40	0.438		
C05.011.041	1ND13-11		CN-1ND-13	NDE-600	UT	SS	14.000	*	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
Class B	Circumferential	ND	CN-1561-1.1			40	0.438	50314	
C05.011.041A	1ND13-11		CN-1ND-13	NDE-35	PT	SS	14.000		Residual Heat Removal Pump 1B
Class B	Circumferential	ND	CN-1561-1.1			40	0.438		
C05.011.042	1ND14-1		CN-1ND-14	NDE-600	UT	SS	14.000	*	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
Class B	Circumferential	ND	CN-1561-1.1			40	0.438	50314	

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

Plan Report
Page 46
08/04/2005

**CATEGORY C-F-1, Pressure Retaining Welds In
Austenitic SS or High Alloy Piping**

**Piping Welds \geq 3/8 In. Nominal Wall Thickness
for Piping $>$ NPS 4**

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIAM/THK	CAL	BLOCKS	COMMENTS
C05.011.042A	1ND14-1 Circumferential Class B	ND	CN-1ND-14 CN-1561-1.1	NDE-35	PT	SS 40	14.000 0.438			Pipe to Elbow
C05.011.043	1ND14-7 Circumferential Class B	ND	CN-1ND-14 CN-1561-1.1	NDE-600	UT	SS 40	14.000 0.438	*	50314	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
C05.011.043A	1ND14-7 Circumferential Class B	ND	CN-1ND-14 CN-1561-1.1	NDE-35	PT	SS 40	14.000 0.438			Elbow to Pipe
C05.011.044	1ND14-8 Circumferential Class B	ND	CN-1ND-14 CN-1561-1.1	NDE-600	UT	SS 40	14.000 0.438	*	50314	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
C05.011.044A	1ND14-8 Circumferential Class B	ND	CN-1ND-14 CN-1561-1.1	NDE-35	PT	SS 40	14.000 0.438			Pipe to Elbow
C05.011.049	1ND39-12 Circumferential Class B	ND	CN-1ND-39 CN-1561-1.0	NDE-600	UT	SS 140	12.000 1.125	*	50219	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
C05.011.049A	1ND39-12 Circumferential Class B	ND	CN-1ND-39 CN-1561-1.0	NDE-35	PT	SS 140	12.000 1.125			Valve 1ND2A to Pipe
C05.011.067	1ND13-10 Circumferential Class B	ND	CN-1ND-13 CN-1561-1.1	NDE-600	UT	SS 40	14.000 0.438	*		*Reference General Requirements Section 8.1.10. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used. (This weld was added to adjust the ND System Summary for Inservice

**CATEGORY C-F-1, Pressure Retaining Welds In
Austenitic SS or High Alloy Piping**

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

Plan Report
Page 47
08/04/2005

**Piping Welds \geq 3/8 in. Nominal Wall Thickness
for Piping $>$ NPS 4**

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
C05.011.067A	1ND13-10		CN-1ND-13	NDE-35	PT	SS	14.000		(This weld was added to adjust the ND System Summary for Inservice Inspection Category C-F-1, as a result of Weld Iso revision).
Class B	Circumferential	ND	CN-1561-1.1		Pipe to Elbow	40	0.438		
C05.011.114	1NI6-6		CN-1NI-6	NDE-600	UT	SS	6.000	*	* Reference General Requirments Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
Class B	Circumferential	NI	CN-1562-1.3		Pipe to Elbow	160	0.719	50211	
C05.011.114A	1NI6-6		CN-1NI-6	NDE-35	PT	SS	6.000		
Class B	Circumferential	NI	CN-1562-1.3		Pipe to Elbow	160	0.719		
C05.011.115	1NI6-7		CN-1NI-6	NDE-600	UT	SS	6.000	*	* Reference General Requirments Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
Class B	Circumferential	NI	CN-1562-1.3		Elbow to Pipe	160	0.719	50211	
C05.011.115A	1NI6-7		CN-1NI-6	NDE-35	PT	SS	6.000		
Class B	Circumferential	NI	CN-1562-1.3		Elbow to Pipe	160	0.719		
C05.011.118	1NI6-13		CN-1NI-6	NDE-600	UT	SS	6.000	*	* Reference General Requirments Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
Class B	Circumferential	NI	CN-1562-1.3		Elbow to Pipe	160	0.719	50211	
C05.011.118A	1NI6-13		CN-1NI-6	NDE-35	PT	SS	6.000		
Class B	Circumferential	NI	CN-1562-1.3		Elbow to Pipe	160	0.719		

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

INSERVICE INSPECTION PLAN MANAGEMENT
Inservice Inspection Database Management System

Plan Report
Page 48
08/04/2005

**Piping Welds \geq 3/8 in. Nominal Wall Thickness
for Piping $>$ NPS 4**

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
C05.011.119	1N16-22		CN-1NI-6	NDE-600	UT	SS	6.000	*		* Reference General Requirments Section 8.1.10
	Circumferential	NI	CN-1562-1.3			160	0.719	50211		Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
	Class B				Pipe to Elbow					
C05.011.119A	1N16-22		CN-1NI-6	NDE-35	PT	SS	6.000			
	Circumferential	NI	CN-1562-1.3			160	0.719			
	Class B				Pipe to Elbow					

Total C05.011 Items: 24

**CATEGORY C-F-1, Pressure Retaining Welds In
Austenitic SS or High Alloy Piping**

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

Plan Report
Page 49
08/04/2005

**Piping Welds > 1/5 In. Nom Wall For Piping >=
NPS 2 And <= NPS 4**

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
**** Circumferential Weld ****									
C05.021.107	1NV97-7		CN-1NV-97	NDE-600	UT	SS	4.000	*	* Reference General Requirements Section 8.1.10
Class B	Circumferential	NV	CN-1554-1.7		Pipe to Elbow	160	0.531	50275	Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
C05.021.107A	1NV97-7		CN-1NV-97	NDE-35	PT	SS	4.000		
Class B	Circumferential	NV	CN-1554-1.7		Pipe to Elbow	160	0.531		
C05.021.108	1NV97-8		CN-1NV-97	NDE-600	UT	SS	4.000	*	* Reference General Requirements Section 8.1.10
Class B	Circumferential	NV	CN-1554-1.7		Elbow to Pipe	160	0.531	50275	Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
C05.021.108A	1NV97-8		CN-1NV-97	NDE-35	PT	SS	4.000		
Class B	Circumferential	NV	CN-1554-1.7		Elbow to Pipe	160	0.531		
C05.021.109	1NV97-12		CN-1NV-97	NDE-600	UT	SS	4.000	*	* Reference General Requirements Section 8.1.10.
Class B	Circumferential	NV	CN-1554-1.7		Elbow to Pipe	160	0.531	50275	Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
C05.021.109A	1NV97-12		CN-1NV-97	NDE-35	PT	SS	4.000		
Class B	Circumferential	NV	CN-1554-1.7		Elbow to Pipe	160	0.531		
C05.021.110	1NV97-10		CN-1NV-97	NDE-600	UT	SS	4.000	*	* Reference General Requirements Section 8.1.10
Class B	Circumferential	NV	CN-1554-1.7		Elbow to Pipe	160	0.531	50275	Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.

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

Plan Report
Page 50
08/04/2005

**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

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
C05.021.110A	1NV97-10		CN-1NV-97	NDE-35	PT	SS	4.000		
	Circumferential	NV	CN-1554-1.7			160	0.531		
Class B					Elbow to Pipe				
C05.021.140	1NV627-1		CN-1NV-627	NDE-600	UT	SS	4.000	*	* Reference General Requirments Section 8.1.10
	Circumferential	NV	CN-1554-1.7			160	0.531	50275	Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
Class B					Elbow to Elbow				
C05.021.140A	1NV627-1		CN-1NV-627	NDE-35	PT	SS	4.000		
	Circumferential	NV	CN-1554-1.7			160	0.531		
Class B					Elbow to Elbow				
C05.021.141	1NV627-2		CN-1NV-627	NDE-600	UT	SS	4.000	*	* Reference General Requirments Section 8.1.10
	Circumferential	NV	CN-1554-1.7			160	0.531	50275	Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
Class B					Elbow to Pipe				
C05.021.141A	1NV627-2		CN-1NV-627	NDE-35	PT	SS	4.000		
	Circumferential	NV	CN-1554-1.7			160	0.531		
Class B					Elbow to Pipe				
C05.021.142	1NV627-5		CN-1NV-627	NDE-600	UT	SS	4.000	*	* Reference General Requirments Section 8.1.10
	Circumferential	NV	CN-1554-1.7			160	0.531	50275	Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
Class B					Pipe to Elbow				
C05.021.142A	1NV627-5		CN-1NV-627	NDE-35	PT	SS	4.000		
	Circumferential	NV	CN-1554-1.7			160	0.531		
Class B					Pipe to Elbow				
C05.021.143	1NV627-6		CN-1NV-627	NDE-600	UT	SS	4.000	*	* Reference General Requirments Section 8.1.10
	Circumferential	NV	CN-1554-1.7			160	0.531	50275	Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
Class B					Elbow to Pipe				

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

Plan Report
Page 51
08/04/2005

**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

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
C05.021.143A	1NV627-6		CN-1NV-627	NDE-35	PT	SS	4.000		
	Circumferential	NV	CN-1554-1.7			160	0.531		
	Class B				Elbow to Pipe				
C05.021.144	1NV627-11		CN-1NV-627	NDE-600	UT	SS	4.000	*	* Reference General Requirments Section 8.1.10
	Circumferential	NV	CN-1554-1.7			160	0.531	50275	Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
	Class B				Pipe to Elbow				
C05.021.144A	1NV627-11		CN-1NV-627	NDE-35	PT	SS	4.000		
	Circumferential	NV	CN-1554-1.7			160	0.531		
	Class B				Pipe to Elbow				
C05.021.145	1NV627-12		CN-1NV-627	NDE-600	UT	SS	4.000	*	* Reference General Requirments Section 8.1.10
	Circumferential	NV	CN-1554-1.7			160	0.531	50275	Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2-C may be used.
	Class B				Elbow to Pipe				
C05.021.145A	1NV627-12		CN-1NV-627	NDE-35	PT	SS	4.000		
	Circumferential	NV	CN-1554-1.7			160	0.531		
	Class B				Elbow to Pipe				

Total C05.021 Items: 20

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

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

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

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
**** Circumferential Weld ****									
C05.051.055	1CF39-1		CN-1491-CF039	NDE-600	UT	CS	16.000	*	Steam Generator 1B Feedwater Nozzle Transition Ring to Elbow * Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-1 may be used in lieu of NDE-600. If PDI-UT-1 is used, Calibration Block Number PDI-UT-1-C may be used.
Class B	Circumferential	CF	CN-1591-1.1			80	0.844	50329	
					Elbow to Nozzle SG1B Transition Ring				
C05.051.055A	1CF39-1		CN-1491-CF039	NDE-25	MT	CS	16.000		Steam Generator 1B Feedwater Nozzle Transition Ring to Elbow
Class B	Circumferential	CF	CN-1591-1.1			80	0.844		
					Elbow to Nozzle SG1B Transition Ring				
C05.051.058	1CF39-2		CN-1491-CF039	NDE-600	UT	CS	16.000	*	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-1 may be used in lieu of NDE-600. If PDI-UT-1 is used, Calibration Block PDI-UT-1-C may be used.
Class B	Circumferential	CF	CN-1591-1.1			80	0.844	50329	
					Pipe to Elbow				
C05.051.058A	1CF39-2		CN-1491-CF039	NDE-25	MT	CS	16.000		
Class B	Circumferential	CF	CN-1591-1.1			80	0.844		
					Pipe to Elbow				
C05.051.059	1CF39-10		CN-1491-CF039	NDE-600	UT	CS	16.000	*	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-1 may be used in lieu of NDE-600. If PDI-UT-1 is used, Calibration Block PDI-UT-1-C may be used.
Class B	Circumferential	CF	CN-1591-1.1			80	0.844	50329	
					Elbow to Pipe				
C05.051.059A	1CF39-10		CN-1491-CF039	NDE-25	MT	CS	16.000		
Class B	Circumferential	CF	CN-1591-1.1			80	0.844		
					Elbow to Pipe				
C05.051.060	1CF39-11		CN-1491-CF039	NDE-600	UT	CS	16.000	*	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-1 may be used in lieu of NDE-600. If PDI-UT-1 is used, Calibration Block PDI-UT-1-C may be used.
Class B	Circumferential	CF	CN-1591-1.1			80	0.844	50329	
					Pipe to Elbow				

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

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

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

Catawba 1
Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
C05.051.060A	1CF39-11		CN-1491-CF039	NDE-25	MT	CS	16.000		
	Circumferential	CF	CN-1591-1.1			80	0.844		
	Class B				Pipe to Elbow				

Total C05.051 Items: 8
Total C05 Items: 52

CATEGORY C-G, Pressure Retaining Welds In Pumps And Valves

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

Valves

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
**** Valve Body Welds ****									
C06.020.016	1SA-1		CN-1593-1.1	NDE-25	MT	CS	6.000		Valve Body Weld - Valve Numbers in Valve Group
	Circumferential	SA	CNM-1205.00-0117				1.164		1SA-1, 1SA-4
	Class B								Valve Body to Bonnet
C06.020.019	1SV-16		CN-1SV-019	NDE-35	PT	SS-CS	9.000		Valve Body Weld - Valve Numbers in Valve Group
	Circumferential	SV	CNM-1205.09-002				1.500		1SV-14, 1SV-15, 1SV-16, 1SV-17, 1SV-18
	Class B								Weld 1AD Valve Inlet Neck to Base
C06.020.020	1SV-23		CN-1SV-025	NDE-35	PT	SS-CS	9.000		Valve Body Weld - Valve Numbers in Valve Group
	Circumferential	SV	CNM-1205.09-002				1.500		1SV-20, 1SV-21, 1SV-22, 1SV-23, 1SV-24
	Class B								Weld 1AD Valve Inlet Neck to Base

Total C06.020 Items: 3

Total C06 Items: 3

**CATEGORY D-B, Systems In Support Of ECC,
CHR, Atmos. Cleanup, And RHR**

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

Plan Report
Page 55
08/04/2005

Integral Attachment

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
**** Component Supports and Restraints ****									
D02.020.009	1-R-CA-0185		CN-1492-CA025	QAL-14	VT-3	NA	4.000		Welded Attachment
	Rigid Support	CA	CN-1592-1.1				0.750		To be done with F01.031.008
	Class C								
D02.020.010	1-R-CA-0274		CN-1492-CA025	QAL-14	VT-3	NA	4.000		Welded Attachment
	Rigid Support	CA	CN-1592-1.1				1.000		To be done with F01.031.009
	Class C								
D02.020.011	1-R-CA-0246		CN-1492-CA034	QAL-14	VT-3	NA	2.000		Welded Attachment
	Rigid Support	CA	CN-1592-1.0				0.375		To be done with F01.031.010
	Class C								
D02.020.036	1-R-LD-0053		CN-1493-LD047	QAL-14	VT-3	NA	6.000		Welded Attachment
	Rigid Support	LD	CN-1609-2.2				0.500		To be done with F01.030.125
	Class C								
D02.020.061	1-R-RN-0611		CN-1493-RN003	QAL-14	VT-3	NA	10.000		Welded Attachment
	Rigid Support	RN	CN-1574-2.1				0.750		To be done with F01.030.177
	Class C								
D02.020.062	1-R-RN-0629		CN-1493-RN044	QAL-14	VT-3	NA	10.000		Welded Attachment
	Rigid Support	RN	CN-1574-2.5				0.750		To be done with F01.030.178
	Class C								
D02.020.063	1-R-RN-0807		CN-1492-RN00-344	QAL-14	VT-3	SS	8.000		Welded Attachment
	Rigid Support	RN	CN-ISIN-1574-2.1				0.322		To be done with F01.031.156
	Class C								
D02.020.064	1-R-RN-0825		CN-1492-RN0-362	QAL-14	VT-3	SS	8.000		Welded Attachment
	Rigid Support	RN	CN-ISIN-1574-2.1				0.750		To be done with F01.031.157
	Class C								

Total D02.020 Items: 8

**CATEGORY D-B, Systems In Support Of ECC,
CHR, Atmos. Cleanup, And RHR**

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

Integral Attachment

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
-------------	-----------	-----	-----------------	------	----------	---------	---------	------------	----------

****** Spring Type Supports ******

D02.040.027	1-R-KD-0090		CN-1493-KD052	QAL-14	VT-3	NA	8.000		Welded Attachment
	Spring Hgr	KD	CN-1609-1.0				0.625		To be done with F01.032.103
Class C									

D02.040.028	1-R-KD-0057		CN-1493-KD057	QAL-14	VT-3	NA	8.000		Welded Attachment
	Spring Hgr	KD	CN-1609-1.0				0.750		To be done with F01.032.104
Class C									

Total D02.040 Items: 2

Total D02 Items: 10

CATEGORY F-A, Supports

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

Plan Report
Page 58
08/04/2005

Class 1 Piping Supports

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.011.095	1-R-NV-1501		CN-1491-NV004	QAL-14	VT-3	NA	1.500		
	Rigid Support	NV	CN-1554-1.5				0.000		
Class A									
F01.011.096	1-R-NV-1505		CN-1491-NV004	QAL-14	VT-3	NA	2.000		
	Rigid Support	NV	CN-1554-1.5				0.000		
Class A									
Total F01.011 Items:		6							
**** Thermal Movement ****									
F01.012.015	1-R-NC-1535		CN-1491-NC109	QAL-14	VT-3	NA	1.500		
	Spring Hgr	NC	CN-1553-1.0				0.000		
Class A									
F01.012.016	1-R-NC-1536		CN-1491-NC109	QAL-14	VT-3	NA	1.500		
	Mech Snubber	NC	CN-1553-1.0				0.000		
Class A									
Total F01.012 Items:		2							

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

Plan Report
Page 63
08/04/2005

Class 2 Piping Supports

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.020.164	1-R-NV-0298		CN-1492-NV024	QAL-14	VT-3	NA	3.000		
	Rigid Support	NV	CN-1554-1.2				0.000		
Class B									
F01.020.165	1-R-NV-0300		CN-1492-NV024	QAL-14	VT-3	NA	3.000		
	Rigid Support	NV	CN-1554-1.2				0.000		
Class B									
F01.020.166	1-R-NV-0301		CN-1492-NV024	QAL-14	VT-3	NA	3.000		
	Rigid Support	NV	CN-1554-1.2				0.000		
Class B									
F01.020.193	1-R-SA-0003		CN-1492-SA001	QAL-14	VT-3	NA	6.000		
	Rigid Support	SA	CN-ISIN-1593-1.1				0.000		
Class B									
F01.020.223	1-R-SV-1522		CN-1491-SV008	QAL-14	VT-3	NA	6.000		
	Rigid Support	SV	CN-1593-1.0				0.000		
Class B									
F01.020.224	1-R-SV-1524		CN-1491-SV008	QAL-14	VT-3	NA	6.000		
	Rigid Support	SV	CN-1593-1.0				0.000		
Class B									
Total F01.020 Items:		41							
**** Multidirectional ****									
F01.021.001	1-R-CA-1654		CN-1491-CA021	QAL-14	VT-3	NA	6.000		
	Rigid Support	CA	CN-1592-1.1				0.000		
Class B									
F01.021.011	1-R-CF-1518		CN-1491-CF027	QAL-14	VT-3	NA	18.000		
	Rigid Support	CF	CN-1591-1.1				0.000		
Class B									

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

Plan Report
Page 65
08/04/2005

Class 2 Piping Supports

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.021.168	1-A-NV-3202		CN-1492-NV034	QAL-14	VT-3	NA	2.000		Dwg. CN-AA-1076
	Rigid Support	NV	CN-1554-1.6				0.000		
Class B									
F01.021.169	1-A-NV-3205		CN-1492-NV034	QAL-14	VT-3	NA	2.000		
	Rigid Support	NV	CN-1554-1.6				0.000		
Class B									
F01.021.170	1-R-NV-0175		CN-1492-NV040	QAL-14	VT-3	NA	2.000		
	Rigid Support	NV	CN-1554-1.7				0.000		
Class B									
Total F01.021 Items:		14							
**** Thermal Movement ****									
F01.022.021	1-R-FW-0056		CN-1492-FW021	QAL-14	VT-3	NA	12.000		
	Mech Snubber	FW	CN-1571-1.0				0.000		
Class B									
F01.022.037	1-R-ND-0129		CN-1492-ND030	QAL-14	VT-3	NA	8.000		
	Spring Hgr	ND	CN-1561-1.1				0.000		
Class B									
F01.022.038	1-R-ND-0131		CN-1492-ND030	QAL-14	VT-3	NA	8.000		
	Spring Hgr	ND	CN-1561-1.1				0.000		
Class B									
F01.022.039	1-R-ND-0626		CN-1492-ND030	QAL-14	VT-3	NA	8.000		
	Spring Hgr	ND	CN-1561-1.1				0.000		
Class B									
F01.022.040	1-R-ND-0168		CN-1492-ND050	QAL-14	VT-3	NA	12.000		
	Spring Hgr	ND	CN-1561-1.1				0.000		
Class B									

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

Class 2 Piping Supports

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.022.063	1-R-NI-2264		CN-1491-NI060	QAL-14	VT-3	NA	6.000		
	Mech Snubber	NI	CN-1562-1.2				0.000		
Class B									
F01.022.092	1-R-NS-0031		CN-1492-NS008	QAL-14	VT-3	NA	10.000		
	Mech Snubber	NS	CN-1563-1.0				0.000		
Class B									
F01.022.145	1-R-NV-0315		CN-1492-NV008	QAL-14	VT-3	NA	3.000		
	Spring Hgr	NV	CN-1554-1.2				0.000		
Class B									
F01.022.147	1-R-NV-0319		CN-1492-NV008	QAL-14	VT-3	NA	3.000		
	Spring Hgr	NV	CN-1554-1.2				0.000		
Class B									
F01.022.148	1-R-NV-0015		CN-1492-NV017	QAL-14	VT-3	NA	8.000		
	Mech Snubber	NV	CN-1554-1.7				0.000		
Class B									
F01.022.149	1-R-NV-0136		CN-1492-NV017	QAL-14	VT-3	NA	8.000		
	Spring Hgr	NV	CN-1554-1.7				0.000		
Class B									
F01.022.150	1-R-NV-0508		CN-1492-NV017	QAL-14	VT-3	NA	6.000		
	Mech Snubber	NV	CN-1554-1.7				0.000		
Class B									
F01.022.221	1-R-SV-1514		CN-1491-SV005	QAL-14	VT-3	NA	6.000		
	Mech Snubber	SV	CN-1593-1.0				0.000		
Class B									

Total F01.022 Items: 13

CATEGORY F-A, Supports

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

Plan Report
Page 68
08/04/2005

Class 3 Piping Supports

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
F01.030.179	1-R-RN-0810		CN-1492-RN-347	QAL-14	VT-3	NA	8.000		
	Rigid Support	RN	CN-ISI-1574-2.1				0.000		
	Class C								
F01.030.180	1-R-RN-0593		CN-1492-RN.00-356	QAL-14	VT-3	NA	8.000		
	Rigid Support	RN	CN-1574-2.5				0.000		
	Class C								
F01.030.181	1-R-RN-0594		CN-1492-RN.00-356	QAL-14	VT-3	NA	8.000		
	Rigid Support	RN	CN-1574-2.5				0.000		
	Class C								
F01.030.191	1-R-SA-0015		CN-1492-SA002	QAL-14	VT-3	NA	6.000		
	Rigid Support	SA	CN-1593-1.1				0.000		
	Class C		CN-1595-1.1						
F01.030.201	1-R-TE-0024		CN-1492-TE001	QAL-14	VT-3	NA	12.000		
	Rigid Support	TE	CN-1593-1.2				0.000		
	Class C								
F01.030.202	1-R-TE-0032		CN-1492-TE001	QAL-14	VT-3	NA	12.000		
	Rigid Support	TE	CN-1593-1.2				0.000		
	Class C								
F01.030.225	1-R-VN-0019		CN-1493-VN009	QAL-14	VT-3	NA	30.000		
	Rigid Support	VN	CN-1609-5.0				0.000		
	Class C								
F01.030.254	1-R-YC-0046		CN-1525-YC007	QAL-14	VT-3	NA	6.000		
	Rigid Support	YC	CN-1578-2.0				0.000		
	Class C								

Total F01.030 Items: 16

****** Multidirectional ******

CATEGORY F-A, Supports

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

Plan Report
Page 70
08/04/2005

Class 3 Piping Supports

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL BLOCKS	COMMENTS
F01.031.157	1-R-RN-0825		CN-1492-RN0-362	QAL-14	VT-3	NA	8.000		To Be Done with D02.020.064
	Rigid Support	RN	CN-ISIN-1574-2.1				0.000		
Class C									
F01.031.158	1-R-RN-0826		CN-1492-RN0-353	QAL-14	VT-3	NA	8.000		
	Rigid Support	RN	CN-ISIN-1574-2.5				0.000		
Class C									
Total F01.031 Items:		11							
**** Thermal Movement ****									
F01.032.004	1-R-CA-0220		CN-1492-CA024	QAL-14	VT-3	NA	8.000		
	Spring Hgr	CA	CN-1592-1.1				0.000		
Class C									
F01.032.056	1-R-KC-0075		CN-1492-KC111	QAL-14	VT-3	NA	14.000		
	Spring Hgr	KC	CN-1573-1.2				0.000		
Class C									
F01.032.057	1-R-KC-0076		CN-1492-KC111	QAL-14	VT-3	NA	12.000		
	Spring Hgr	KC	CN-1573-1.2				0.000		
Class C									
F01.032.103	1-R-KD-0090		CN-1493-KD052	QAL-14	VT-3	NA	8.000		To be done with D02.040.027
	Spring Hgr	KD	CN-1609-1.0				0.000		
Class C									
F01.032.104	1-R-KD-0057		CN-1493-KD057	QAL-14	VT-3	NA	8.000		To be done with D02.040.028
	Spring Hgr	KD	CN-1609-1.0				0.000		
Class C									
F01.032.191	1-R-SA-0016		CN-1492-SA002	QAL-14	VT-3	NA	6.000		
	Mech Snubber	SA	CN-1593-1.1				0.000		
			CN-1595-1.1						
Class C									

CATEGORY F-A, Supports

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

Plan Report
Page 71
08/04/2005

Class 3 Piping Supports

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
F01.032.222	1-R-VN-0055		CN-1493-VN006	QAL-14	VT-3	NA		26.000		
	Mech Snubber	VN	CN-1609-5.0					0.000		

Class C

Total F01.032 Items: 7

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

Plan Report
Page 72
08/04/2005

Class 1,2,3 Supports

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
**** Supports Other Than Piping Supports ****									
F01.040.004	1RCPB-COLUMNS Rigid Support	NC	CN-1070-9 CN-1553-1.0	QAL-14	VT-3	NA	0.000 0.000		Reactor Coolant Pump 1B Support Columns 3 Assemblies
Class A									
F01.040.005	1RCPC-SUPPORT Rigid Support	NC	CN-1070-8 CN-1553-1.0	QAL-14	VT-3	NA	0.000 0.000		Reactor Coolant Pump 1C Lateral Support
Class A									
F01.040.006	1SGA-COLUMNS Rigid Support	NC	CN-1070-9 CN-1553-1.0	QAL-14	VT-3	NA	0.000 0.000		Steam Generator 1A Support Columns 4 Assemblies
Class A									
F01.040.011	1SGD-LATERALS Rigid Restraint	NC	CN-1070-11 CN-1553-1.0	QAL-14	VT-3	NA	0.000 0.000		Steam Generator 1D Lower Laterals Reference Drawing Numbers CN-1070-12 and CN-1070-12.01.
Class A									
F01.040.107	1SGD-SUPPORT Rigid Support	NC	CN-1070-30.01 CN-1553-1.0	QAL-14	VT-3	NA	0.000 0.000		Steam Generator 1D Upper Lateral Support and Snubbers Reference Drawing Numbers CN-1070-40 and CN-1070-41.
Class B									
F01.040.205	1NSHXA-SUPPORT Rigid Support	NS	CNM-1201.06-52 CN-1563-1.0	QAL-14	VT-3	NA	0.000 0.000		Containment Spray Heat Exchanger 1A Support
Class C									
F01.040.206	1RNPA-SUPPORT Rigid Support	RN	CNM-1201.05-122 CN-1574-1.0	QAL-14	VT-3	NA	0.000 0.000		Nuclear Service Water Pump 1A Support
Class C									
F01.040.207	1RNSB-SUPPORT Rigid Support	RN	CNM-1218.02-10 CN-1574-1.2	QAL-14	VT-3	NA	0.000 0.000		Nuclear Service Water Strainer 1B Support
Class C									
Total F01.040 Items:		8							
Total F01 Items:		122							

CATEGORY , Augmented

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

Plan Report
Page 73
08/04/2005

Pipe Rupture Protection

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
**** Main Steam System ****									
G02.001.028	1SM33-01		CN-1SM-033	NDE-600	UT	CS	34.000	*	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-1 may be used in lieu of NDE-600. If PDI-UT-1 is used, Calibration Block PDI-UT-1-C may be used.
	Circumferential	SM	CN-1593-1.0		Pipe to Pipe		1.750		
G02.001.028A	1SM33-01		CN-1SM-033	NDE-25	MT	CS	34.000		* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-1 may be used in lieu of NDE-600. If PDI-UT-1 is used, Calibration Block PDI-UT-1-C may be used.
	Circumferential	SM	CN-1593-1.0		Pipe to Pipe		1.750		
G02.001.029	1SM-4A-A		CN-1SM-033	NDE-600	UT	CS	34.000	*	Grinnell Piece Mark CT-SM-4A Weld A * Reference General Requirments Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-1 may be used in lieu of NDE-600. If PDI-UT-1 is used, Calibration Block PDI-UT-1-C may be used.
	Circumferential	SM	CN-1593-1.0		Pipe to Elbow		1.750		
G02.001.029A	1SM-4A-A		CN-1SM-033	NDE-25	MT	CS	34.000		Grinnell Piece Mark CT-SM-4A Weld A
	Circumferential	SM	CN-1593-1.0		Pipe to Elbow		1.750		
G02.001.030	1SM33-02		CN-1SM-033	NDE-600	UT	CS	34.000	*	* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-1 may be used in lieu of NDE-600. If PDI-UT-1 is used, Calibration Block PDI-UT-1-C may be used.
	Circumferential	SM	CN-1593-1.0		Pipe to Elbow		1.750		
G02.001.030A	1SM33-02		CN-1SM-033	NDE-25	MT	CS	34.000		* Reference General Requirements Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-1 may be used in lieu of NDE-600. If PDI-UT-1 is used, Calibration Block PDI-UT-1-C may be used.
	Circumferential	SM	CN-1593-1.0		Pipe to Elbow		1.750		
G02.001.031	1SM-5A-A		CN-1SM-033	NDE-600	UT	CS	34.000	*	Grinnell Piece Mark CT-SM-5A Weld A * Reference General Requirments Section 8.1.10 Depending on the examiner's qualifications, Procedure PDI-UT-1 may be used in lieu of NDE-600. If PDI-UT-1 is used, Calibration Block PDI-UT-1-C may be used.
	Circumferential	SM	CN-1593-1.0		Pipe to Elbow		1.750		

CATEGORY

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

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

Plan Report
Page 75
08/04/2005

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL BLOCKS	COMMENTS
H01.001.001	1NI148-9 Circumferential Class A	NI	CN-1NI-148 CN-1562-1.1	NDE-600	UT	SS 160	6.000 0.719	* 50211	* Reference General Requirements Section 8.1.10. This weld examined under Item Number B09.011.162 in Outage 1 (EOC9), and meets the intent of this Elective Examination. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
					Pipe to Tee				
H01.001.002	1NI148-9L Longitudinal Class A	NI	CN-1NI-148 CN-1562-1.1	NDE-600	UT	SS 160	6.000 0.719	* 50211	* Reference General Requirements Section 8.1.10. The examination includes at least a pipe diameter length but no more than 12 inches of longitudinal weld intersecting the circumferential weld in reducing T, located near circumferential weld #9. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
					Pipe to Tee				
H01.001.003	1NI148-10 Circumferential Class A	NI	CN-1NI-148 CN-1562-1.1	NDE-600	UT	SS 140	10.000 1.000	* 50209	* Reference General Requirements Section 8.1.10. This weld examined under Item Number B09.011.163 in Outage 1 (EOC9), and meets the intent of this Elective Examination. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
					Tee to Valve 1NI81				
H01.001.004	1NI148-10L Longitudinal Class A	NI	CN-1NI-148 CN-1562-1.1	NDE-600	UT	SS-Inconel 140	10.000 1.000	* 50209	* Reference General Requirements Section 8.1.10. The examination includes at least a pipe diameter length but no more than 12 inches of longitudinal weld intersecting the circumferential weld in reducing T, located near circumferential weld #10. This Elective Examination was added to the ISI
					Tee to Valve 1NI81				

CATEGORY

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

Plan Report
Page 76
08/04/2005

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL BLOCKS	COMMENTS
H01.001.005	1NI148-11 Circumferential	NI	CN-1NI-148 CN-1562-1.1	NDE-600	UT	SS	10.000	* 50209	<p>Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.</p> <p>* Reference General Requirements Section 8.1.10. This weld examined under Item Number B09.011.164 in Outage 1 (EOC9), and meets the intent of this Elective Examination. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01.</p> <p>Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.</p>
Class A					Tee to Valve 1NI82	140	1.000		
H01.001.006	1NI148-11L Longitudinal	NI	CN-1NI-148 CN-1562-1.1	NDE-600	UT	SS	10.000	* 1.000	<p>* Reference General Requirements Section 8.1.10. The examination includes at least a pipe diameter length but no more than 12 inches of longitudinal weld intersecting the circumferential weld in reducing T, located near circumferential weld #11. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.</p>
Class A					Tee to Valve 1NI82	140	1.000		
H01.001.007	1NI152-9 Circumferential	NI	CN-1NI-152 CN-1562-1.1	NDE-600	UT	SS	6.000	* 50211	<p>* Reference General Requirements Section 8.1.10. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.</p>
Class A					Pipe to Tee	160	0.719		

CATEGORY

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

Plan Report
Page 77
08/04/2005

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIATHK	CAL	BLOCKS	COMMENTS
H01.001.008	1NI152-9L Longitudinal	NI	CN-1NI-152 CN-1562-1.1	NDE-600	UT	SS 160	6.000 0.719	*	50211	* Reference General Requirements Section 8.1.10. The examination includes at least a pipe diameter length but no more than 12 inches of longitudinal weld intersecting the circumferential weld in reducing T, located near circumferential weld #9. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
Class A					Pipe to Tee					
H01.001.009	1NI152-10 Circumferential	NI	CN-1NI-152 CN-1562-1.1	NDE-600	UT	SS 140	10.000 1.000	*	50209	* Reference General Requirements Section 8.1.10. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
Class A					Tee to Valve 1NI94					
H01.001.010	1NI152-10L Longitudinal	NI	CN-1NI-152 CN-1562-1.1	NDE-600	UT	SS 140	10.000 1.000	*	50209	* Reference General Requirements Section 8.1.10. The examination includes at least a pipe diameter length but no more than 12 inches of longitudinal weld intersecting the circumferential weld in reducing T, located near circumferential weld #10. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
Class A					Tee to Valve 1NI94					
H01.001.011	1NI152-11 Circumferential	NI	CN-1NI-152 CN-1562-1.1	NDE-600	UT	SS 140	10.000 1.000	*	50209	* Reference General Requirements Section 8.1.10. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block
Class A					Tee to Valve 1NI93					

CATEGORY

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

Plan Report
Page 78
08/04/2005

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
H01.001.012	1NI152-11L Longitudinal Class A	NI	CN-1NI-152 CN-1562-1.1	NDE-600	UT	SS	10.000 140	* 50209	* Reference General Requirements Section 8.1.10. The examination includes at least a pipe diameter length but no more than 12 inches of longitudinal weld intersecting the circumferential weld in reducing T, located near circumferential weld #11. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
					Tee to Valve 1NI93				
H01.001.013	1NI162-13 Circumferential Class A	NI	CN-1NI-162 CN-1562-1.1	NDE-600	UT	SS	6.000 160	* 50211	* Reference General Requirements Section 8.1.10. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
					Pipe to Tee				
H01.001.014	1NI162-13L Longitudinal Class A	NI	CN-1NI-162 CN-1562-1.1	NDE-600	UT	SS	6.000 160	* 50211	* Reference General Requirements Section 8.1.10. The examination includes at least a pipe diameter length but no more than 12 inches of longitudinal weld intersecting the circumferential weld in reducing T, located near circumferential weld #13. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
					Pipe to Tee				

CATEGORY

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

Plan Report
Page 79
08/04/2005

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL	BLOCKS	COMMENTS
H01.001.015	1NI162-14 Circumferential	NI	CN-1NI-162 CN-1562-1.1	NDE-600	UT	SS 140	10.000 1.000	*	50209	* Reference General Requirements Section 8.1.10. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
Class A					Tee to Pipe					
H01.001.016	1NI162-14L Longitudinal	NI	CN-1NI-162 CN-1562-1.1	NDE-600	UT	SS 140	10.000 1.000	*	50209	* Reference General Requirements Section 8.1.10. The examination includes at least a pipe diameter length but no more than 12 inches of longitudinal weld intersecting the circumferential weld in reducing T, located near circumferential weld #14. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
Class A					Tee to Pipe					
H01.001.017	1NI163-15 Circumferential	NI	CN-1NI-163 CN-1562-1.1	NDE-600	UT	SS 140	10.000 1.000	*	50209	* Reference General Requirements Section 8.1.10. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
Class A					Valve 1NI59 to Tee					
H01.001.018	1NI163-15L Longitudinal	NI	CN-1NI-163 CN-1562-1.1	NDE-600	UT	SS 140	10.000 1.000	*	50209	* Reference General Requirements Section 8.1.10. The examination includes at least a pipe diameter length but no more than 12 inches of longitudinal weld intersecting the circumferential weld in reducing T, located near circumferential weld #15. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block
Class A					Valve 1NI59 to Tee					

CATEGORY

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

Catawba 1

Inservice Inspection Plan for Interval 2 Outage 7

Plan Report

Page 80

08/04/2005

ITEM NUMBER	ID NUMBER	SYS	ISO/DWG NUMBERS	PROC	INSP REQ	MAT/SCH	DIA/THK	CAL BLOCKS	COMMENTS
H01.001.019	1NI164-8 Circumferential	NI	CN-1NI-164 CN-1562-1.1	NDE-600	UT	SS 140	10.000 1.000	* 50209	* Reference General Requirements Section 8.1.10. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
Class A					Valve 1NI70 to Tee				
H01.001.020	1NI164-8L Longitudinal	NI	CN-1NI-164 CN-1562-1.1	NDE-600	UT	SS 140	10.000 1.000	* 50209	* Reference General Requirements Section 8.1.10. The examination includes at least a pipe diameter length but no more than 12 inches of longitudinal weld intersecting the circumferential weld in reducing T, located near circumferential weld #8. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
Class A					Valve 1NI70 to Tee				
H01.001.021	1NI165-8 Circumferential	NI	CN-1NI-165 CN-1562-1.1	NDE-600	UT	SS 140	10.000 1.000	* 50209	* Reference General Requirements Section 8.1.10. This Elective Examination was added to the ISI Database per Engineering Examination Request # ER-CNS-99-01. Depending on the examiner's qualifications, Procedure PDI-UT-2 may be used in lieu of NDE-600. If PDI-UT-2 is used, Calibration Block PDI-UT-2 -C may be used.
Class A					Valve 1NI71 to Tee				
H01.001.022	1NI165-8L Longitudinal	NI	CN-1NI-165 CN-1562-1.1	NDE-600	UT	SS 140	10.000 1.000	* 50209	* Reference General Requirements Section 8.1.10. The examination includes at least a pipe diameter length but no more than 12 inches of longitudinal weld intersecting the circumferential weld in reducing T, located near circumferential weld #8. This Elective Examination was added to the ISI Database per Engineering Examination Request #
Class A					Valve 1NI71 to Tee				

4.0 Results of Inspections Performed

The results of each examination shown in the final Inservice Inspection Plan (Section 3.0 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
SYSTEM	=	Component System Identification
INSP DATE	=	Date of Examination
INSP STATUS	=	CLR Clear REC Recordable REP Reportable
INSP LIMITED	=	Indicates inspection was limited. Coverage obtained is listed.
GEO REF (Geometric Reflector applies only to UT)	=	<u>Y</u> Yes <u>N</u> No
RFR (Relief Request)	=	<u>Y</u> Yes <u>N</u> No
COMMENTS	=	General and / or Detail Description

4.1 Reportable Indications

A reportable condition was detected during EOC15 on KC System Support ID Number 1-R-KC-0875 (Item Number F01.030.090). The inspection sample was increased in EOC15 in accordance with ASME Section XI, Paragraph IWF-2430(a) and PIP #C-05-01591. No other reportable conditions were detected. A copy of the inspection data sheets is included in this section of the report.

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 #C-05-01591 was written during EOC15 to document a reportable condition found by a VT-3 visual examination on a KC System Rigid Support, ID. Number 1-R-KC-0875 (Item Number F01.030.090). A copy of PIP #C-05-01591 is included in this section of the report.

PIP # C-05-2956 was written during EOC15 to document an indication found by ultrasonic examination on the Reactor Vessel 338 Degree Outlet Nozzle to Safe End and Safe End to Pipe Buttering Weld, ID Number 1-RPV-W18-SE (Item Number B05.010.008 and B05.010.008A) and Weld ID Number 1NC23-01 (Item Numbers B05.130.005 and B05.130.005A). Plant Engineering performed an evaluation of the weld indication (Calculation #CNC-1201.01-00-0025). The conclusion of the evaluation determined that the integrity of the nozzle-to-pipe weld region will not be affected by the exposure of the layer of heat treated Type 309S weld material to the PWR primary water as the result of the axial indications in the Alloy 182 deposit on the ID surface. The weld indication was considered a recordable indication. A copy of Inspection Data Sheets B05.010.008, B05.010.008A, B05.130.005 and B05.130.005A are included in this section of the report. A copy of Calculation #CNC-1201.01-00-0025 is on file at Catawba Nuclear Station.

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

Limitations (i.e. 90% or less of the required examination coverage obtained) identified for examinations associated with this report period are shown below. A relief request will be submitted to seek NRC acceptance of the limited coverage. Reference Subsection 1.3 for additional information.

Item Numbers

Relief Request Serial Number

B01.011.001

To be filed later

B01.021.001

To be filed later

B03.110.001A

To be filed later

Item Numbers

Relief Request Serial Number

B03.110.004A
B03.110.005
B03.110.006A
B05.010.008
B05.010.008A
B05.130.005
B05.130.005A
B09.011.048
B12.040.002D
C05.011.049

To be filed later
To be filed later
To be filed later
To be filed later
To be filed later
To be filed later
To be filed later
To be filed later
To be filed later
To be filed later

DUKE ENERGY CORPORATION
 QUALITY ASSURANCE ANALYTICAL SERVICES
 In-Service Inspection Database Management System
 Catawba 1 Inservice Inspection Listing
 Interval 2 Outage 7

Run D
 Page 1
 08/16/2005

EOC 15
 Plant: Catawba 1

ITEM NUMBER	ID NUMBER	SYSTEM	INSP DATE	INSP STATUS	INSP LIMITED	GEO REF	RFR	COMMENTS
B01.011.001	1RPV-W03	NC	05/18/2005	CLR	72.76%	N	Y	Request for Relief will be filed for the limitation.
B01.011.002	1RPV-W04	NC	05/18/2005	CLR	90.91%	N	N	
B01.011.003	1RPV-W05	NC	05/18/2005	REC	---	N	N	
B01.011.004	1RPV-W06	NC	05/21/2005	REC	---	N	N	
B01.021.001	1RPV-W01	NC	05/19/2005	REC	87.19%	N	Y	Request for Relief will be filed for the limitation.
B01.022.001	1RPV-W02-01	NC	05/19/2005	CLR	---	N	N	
B01.022.002	1RPV-W02-02	NC	05/19/2005	CLR	---	N	N	
B01.022.003	1RPV-W02-03	NC	05/19/2005	REC	---	N	N	
B01.022.004	1RPV-W02-04	NC	05/19/2005	REC	---	N	N	
B01.022.005	1RPV-W02-05	NC	05/19/2005	CLR	---	N	N	
B01.022.006	1RPV-W02-06	NC	05/19/2005	CLR	---	N	N	
B01.030.001	1RPV-W07	NC	05/21/2005	REC	99.21%	N	N	
B03.090.001	1RPV-W11	NC	05/21/2005	REC	95.19%	N	N	
B03.090.001A	1RPV-W11	NC	05/19/2005	CLR	95.19%	N	N	
B03.090.002	1RPV-W12	NC	05/21/2005	REC	95.19%	N	N	
B03.090.002A	1RPV-W12	NC	05/19/2005	CLR	95.19%	N	N	
B03.090.003	1RPV-W13	NC	05/21/2005	REC	95.19%	N	N	
B03.090.003A	1RPV-W13	NC	05/19/2005	CLR	95.19%	N	N	
B03.090.004	1RPV-W14	NC	05/21/2005	CLR	95.19%	N	N	
B03.090.004A	1RPV-W14	NC	05/19/2005	CLR	95.19%	N	N	
B03.090.005	1RPV-W15	NC	05/21/2005	CLR	94.30%	N	N	
B03.090.005A	1RPV-W15	NC	05/19/2005	REC	94.30%	N	N	
B03.090.006	1RPV-W16	NC	05/21/2005	CLR	94.30%	N	N	
B03.090.006A	1RPV-W16	NC	05/19/2005	CLR	94.30%	N	N	
B03.090.007	1RPV-W17	NC	05/21/2005	CLR	94.30%	N	N	
B03.090.007A	1RPV-W17	NC	05/19/2005	REC	94.30%	N	N	
B03.090.008	1RPV-W18	NC	05/21/2005	CLR	94.30%	N	N	
B03.090.008A	1RPV-W18	NC	05/19/2005	CLR	94.30%	N	N	
B03.100.001	1RPV-W11	NC	05/16/2005	CLR	---	N	N	
B03.100.002	1RPV-W12	NC	05/16/2005	CLR	---	N	N	
B03.100.003	1RPV-W13	NC	05/16/2005	CLR	---	N	N	
B03.100.004	1RPV-W14	NC	05/16/2005	CLR	---	N	N	
B03.100.005	1RPV-W15	NC	05/16/2005	CLR	---	N	N	
B03.100.006	1RPV-W16	NC	05/16/2005	CLR	---	N	N	
B03.100.007	1RPV-W17	NC	05/16/2005	CLR	---	N	N	
B03.100.008	1RPV-W18	NC	05/16/2005	CLR	---	N	N	

DUKE ENERGY CORPORATION
 QUALITY ASSURANCE TECHNICAL SERVICES
 In-Service Inspection Database Management System
 Catawba 1 Inservice Inspection Listing
 Interval 2 Outage 7

Run D
 Page 2
 08/16/2005

EOC 15
 Plant: Catawba 1

ITEM NUMBER	ID NUMBER	SYSTEM	INSP DATE	INSP STATUS	INSP LIMITED	GEO REF	RFR	COMMENTS
B03.110.001A	1PZR-W1	NC	05/17/2005	CLR	77.20%	N	Y	Request for Relief will be filed for the limitation.
B03.110.004A	1PZR-W4A	NC	05/26/2005	CLR	79.20%	N	Y	Request for Relief will be filed for the limitation.
B03.110.005	1PZR-W4B	NC	05/26/2005	CLR	79.20%	N	Y	Request for Relief will be filed for the limitation.
B03.110.006A	1PZR-W4C	NC	05/26/2005	CLR	79.20%	N	Y	Request for Relief will be filed for the limitation.
B03.120.001A	1PZR-W1	NC	05/17/2005	CLR	---	N	N	
B03.120.004A	1PZR-W4A	NC	05/26/2005	CLR	---	N	N	
B03.120.005	1PZR-W4B	NC	05/26/2005	CLR	---	N	N	
B03.120.006A	1PZR-W4C	NC	05/26/2005	CLR	---	N	N	
B03.140.005	1SGC-INLET	NC	05/13/2005	CLR	---	N	N	
B03.140.006	1SGC-OUTLET	NC	05/13/2005	CLR	---	N	N	
B05.010.001	1RPV-W11-SE	NC	05/18/2005	CLR	97.35%	N	N	
B05.010.001A	1RPV-W11-SE	NC	05/18/2005	CLR	97.35%	N	N	
B05.010.001B	1RPV-W11-SE	NC	05/24/2005	CLR	---	N	N	
B05.010.002	1RPV-W12-SE	NC	05/18/2005	CLR	98.56%	N	N	
B05.010.002A	1RPV-W12-SE	NC	05/18/2005	CLR	98.56%	N	N	
B05.010.002B	1RPV-W12-SE	NC	05/24/2005	CLR	---	N	N	
B05.010.003	1RPV-W13-SE	NC	05/18/2005	CLR	---	N	N	
B05.010.003A	1RPV-W13-SE	NC	05/18/2005	CLR	---	N	N	
B05.010.003B	1RPV-W13-SE	NC	05/24/2005	CLR	---	N	N	
B05.010.004	1RPV-W14-SE	NC	05/18/2005	CLR	92.31%	N	N	
B05.010.004A	1RPV-W14-SE	NC	05/18/2005	CLR	92.31%	N	N	
B05.010.004B	1RPV-W14-SE	NC	05/24/2005	CLR	---	N	N	
B05.010.005	1RPV-W15-SE	NC	05/18/2005	CLR	93.20%	N	N	
B05.010.005A	1RPV-W15-SE	NC	05/18/2005	CLR	93.20%	N	N	
B05.010.006	1RPV-W16-SE	NC	05/18/2005	CLR	95.73%	N	N	
B05.010.006A	1RPV-W16-SE	NC	05/18/2005	CLR	95.73%	N	N	
B05.010.007	1RPV-W17-SE	NC	05/17/2005	CLR	90.82%	N	N	
B05.010.007A	1RPV-W17-SE	NC	05/17/2005	CLR	90.82%	N	N	
B05.010.008	1RPV-W18-SE	NC	05/18/2005	REC	82.45%	N	Y	Request for Relief will be filed for the limitation.
								Reference Catawba Plant Engineering Calculation #CNC-1201.01-00-0025 for indication detected during EOC15.
B05.010.008A	1RPV-W18-SE	NC	05/18/2005	REC	82.45%	N	Y	Request for Relief will be filed for the limitation.
								Reference Catawba Plant Engineering Calculation #CNC-1201.01-00-0025 for indication detected during EOC15.
B05.070.005	1SGC-INLET-W5SE	NC	05/13/2005	CLR	92.60%	N	N	

DUKE ENERGY CORPORATION
 QUALITY ASSURANCE TECHNICAL SERVICES
 In-Service Inspection Database Management System
 Catawba 1 Inservice Inspection Listing
 Interval 2 Outage 7

Run D
 Page 3
 08/16/2005

EOC 15
 Plant: Catawba 1

ITEM NUMBER	ID NUMBER	SYSTEM	INSP DATE	INSP STATUS	INSP LIMITED	GEO REF	RFR	COMMENTS
B05.070.005A	1SGC-INLET-W5SE	NC	05/13/2005	CLR	---	N	N	
B05.070.006	1SGC-OUT-W6SE	NC	05/13/2005	CLR	92.60%	N	N	
B05.070.006A	1SGC-OUT-W6SE	NC	05/13/2005	CLR	---	N	N	
B05.130.001	1NC22-01	NC	05/18/2005	CLR	95.73%	N	N	
B05.130.001A	1NC22-01	NC	05/18/2005	CLR	95.73%	N	N	
B05.130.004	1NC22-08	NC	05/18/2005	CLR	98.56%	N	N	
B05.130.004A	1NC22-08	NC	05/18/2005	CLR	98.56%	N	N	
B05.130.004B	1NC22-08	NC	05/24/2005	CLR	---	N	N	
B05.130.005	1NC23-01	NC	05/18/2005	REC	82.45%	N	Y	Request for Relief will be filed for the limitation.
								Reference Catawba Plant Engineering Calculation #CNC-1201.01-00-0025 for Indication detected during EOC15.
B05.130.005A	1NC23-01	NC	05/18/2005	REC	82.45%	N	Y	Request for Relief will be filed for the limitation.
								Reference Catawba Plant Engineering Calculation #CNC-1201.01-00-0025 for indication detected during EOC15.
B05.130.008	1NC23-08	NC	05/18/2005	CLR	92.31%	N	N	
B05.130.008A	1NC23-08	NC	05/18/2005	CLR	92.31%	N	N	
B05.130.008B	1NC23-08	NC	05/24/2005	CLR	---	N	N	
B05.130.009	1NC24-01	NC	05/18/2005	CLR	93.20%	N	N	
B05.130.009A	1NC24-01	NC	05/18/2005	CLR	93.20%	N	N	
B05.130.012	1NC24-08	NC	05/18/2005	CLR	97.35%	N	N	
B05.130.012A	1NC24-08	NC	05/18/2005	CLR	97.35%	N	N	
B05.130.012B	1NC24-08	NC	05/24/2005	CLR	---	N	N	
B05.130.013	1NC25-01	NC	05/17/2005	CLR	90.82%	N	N	
B05.130.013A	1NC25-01	NC	05/17/2005	CLR	90.82%	N	N	
B05.130.016	1NC25-08	NC	05/18/2005	CLR	---	N	N	
B05.130.016A	1NC25-08	NC	05/18/2005	CLR	---	N	N	
B05.130.016B	1NC25-08	NC	05/24/2005	CLR	---	N	N	
B06.110.007	1SGD-MW-Y1-X2	NC	05/17/2005	CLR	---	N	N	
B06.110.008	1SGD-MW-X2-Y2	NC	05/17/2005	CLR	---	N	N	
B07.050.056	1NV614-MJ1	NV	05/10/2005	CLR	---	N	N	
B07.050.057	1NV615-MJ1	NV	05/10/2005	CLR	---	N	N	
B07.070.023	1NI-125	NI	05/16/2005	CLR	---	N	N	
B07.070.024	1NI-126	NI	05/24/2005	CLR	---	N	N	
B09.011.020	1NC30-2	NC	05/21/2005	CLR	---	N	N	
B09.011.020A	1NC30-2	NC	05/21/2005	CLR	---	N	N	

DUKE ENERGY CORPORATION
 QUALITY ASSURANCE TECHNICAL SERVICES
 In-Service Inspection Database Management System
 Catawba 1 Inservice Inspection Listing
 Interval 2 Outage 7

Run D
 Page 4
 08/16/2005

EOC 15
 Plant: Catawba 1

ITEM NUMBER	ID NUMBER	SYSTEM	INSP DATE	INSP STATUS	INSP LIMITED	GEO REF	RFR	COMMENTS
B09.011.021	1NC30-3	NC	05/21/2005	CLR	96.40%	N	N	
B09.011.021A	1NC30-3	NC	05/21/2005	CLR	---	N	N	
B09.011.024	1NC32-2	NC	05/18/2005	CLR	---	N	N	
B09.011.024A	1NC32-2	NC	05/17/2005	CLR	---	N	N	
B09.011.025	1NC32-3	NC	05/18/2005	CLR	---	N	N	
B09.011.025A	1NC32-3	NC	05/17/2005	CLR	---	N	N	
B09.011.026	1NC32-4	NC	05/18/2005	CLR	---	N	N	
B09.011.026A	1NC32-4	NC	05/17/2005	CLR	---	N	N	
B09.011.027	1NC32-6	NC	05/18/2005	CLR	---	N	N	
B09.011.027A	1NC32-6	NC	05/17/2005	CLR	---	N	N	
B09.011.048	1NC286-1	NC	05/19/2005	CLR	37.50%	N	Y	Request for Relief will be filed for the limitation.
B09.011.048A	1NC286-1	NC	05/19/2005	CLR	---	N	N	
B09.011.156	1NI32-3	NI	05/18/2005	CLR	---	N	N	
B09.011.156A	1NI32-3	NI	05/18/2005	CLR	---	N	N	
B09.011.157	1NI32-4	NI	05/18/2005	CLR	---	N	N	
B09.011.157A	1NI32-4	NI	05/18/2005	CLR	---	N	N	
B09.011.158	1NI32-5	NI	05/18/2005	CLR	93.60%	N	N	
B09.011.158A	1NI32-5	NI	05/18/2005	CLR	---	N	N	
B09.011.192	1NI240-8	NI	05/18/2005	CLR	---	N	N	
B09.011.192A	1NI240-8	NI	05/18/2005	CLR	---	N	N	
B09.011.193	1NI240-10	NI	05/18/2005	CLR	---	N	N	
B09.011.193A	1NI240-10	NI	05/18/2005	CLR	---	N	N	
B09.011.194	1NI240-11	NI	05/18/2005	CLR	---	N	N	
B09.011.194A	1NI240-11	NI	05/18/2005	CLR	---	N	N	
B09.021.001	1NC22-12	NC	05/22/2005	CLR	---	N	N	
B09.021.002	1NC22-16	NC	05/22/2005	CLR	---	N	N	
B09.021.009	1NC41-15	NC	05/14/2005	CLR	---	N	N	
B09.021.010	1NC42-1	NC	05/17/2005	CLR	---	N	N	
B09.021.011	1NC43-11	NC	05/14/2005	CLR	---	N	N	
B09.021.012	1NC50-25	NC	05/15/2005	CLR	---	N	N	
B09.021.013	1NC50-26	NC	05/15/2005	CLR	---	N	N	
B09.021.014	1NC51-1	NC	05/15/2005	CLR	---	N	N	
B09.021.015	1NC56-1	NC	05/15/2005	CLR	---	N	N	
B09.021.103	1NV310-1	NV	05/17/2005	CLR	---	N	N	
B09.021.104	1NV310-2	NV	05/17/2005	CLR	---	N	N	
B09.031.002	1NC22-WN8	NC	05/27/2005	CLR	---	N	N	

DUKE ENERGY CORPORATION
 QUALITY ASSURANCE TECHNICAL SERVICES
 In-Service Inspection Database Management System
 Catawba 1 Inservice Inspection Listing
 Interval 2 Outage 7

Run D
 Page 5
 08/16/2005

EOC 15
 Plant: Catawba 1

ITEM NUMBER	ID NUMBER	SYSTEM	INSP DATE	INSP STATUS	INSP LIMITED	GEO REF	RFR	COMMENTS
B09.031.002A	1NC22-WN8	NC	05/22/2005	CLR	---	N	N	
B09.032.051	1NI10-2	NI	05/11/2005	CLR	---	N	N	
B09.032.052	1NI147-3	NI	05/11/2005	CLR	96.90%	N	N	
B09.040.001	1NC24-12	NC	05/22/2005	CLR	---	N	N	
B09.040.002	1NC41-36	NC	05/14/2005	CLR	---	N	N	
B09.040.003	1NC41-37	NC	05/14/2005	CLR	---	N	N	
B09.040.004	1NC41-35	NC	05/14/2005	CLR	---	N	N	
B09.040.005	1NC42-5	NC	05/14/2005	CLR	---	N	N	
B09.040.006	1NC43-8	NC	05/14/2005	CLR	---	N	N	
B09.040.007	1NC50-6	NC	05/15/2005	CLR	---	N	N	
B09.040.008	1NC50-29	NC	05/15/2005	CLR	---	N	N	
B09.040.009	1NC50-30	NC	05/15/2005	CLR	---	N	N	
B09.040.010	1NC51-2	NC	05/15/2005	CLR	---	N	N	
B09.040.011	1NC81-21	NC	05/10/2005	CLR	---	N	N	
B09.040.012	1NC82-5	NC	05/10/2005	CLR	---	N	N	
B09.040.022	1NC245-9	NC	05/27/2005	CLR	---	N	N	
B09.040.067	1NI240-4	NI	05/18/2005	CLR	---	N	N	
B09.040.068	1NI240-6	NI	05/18/2005	CLR	---	N	N	
B09.040.069	1NI243-1	NI	05/15/2005	CLR	---	N	N	
B09.040.070	1NI245-3	NI	05/20/2005	CLR	---	N	N	
B09.040.071	1NI247-7	NI	05/10/2005	CLR	---	N	N	
B09.040.108	1NV483-3	NV	05/12/2005	CLR	---	N	N	
B09.040.109	1NV483-7	NV	05/12/2005	CLR	---	N	N	
B09.040.110	1NV483-8	NV	05/12/2005	CLR	---	N	N	
B09.040.111	1NV483-9	NV	05/12/2005	CLR	---	N	N	
B09.040.112	1NV483-14	NV	05/12/2005	CLR	---	N	N	
B12.040.002D	1ND-37A	ND	05/25/2005	CLR	69.30%	N	Y	Request for Relief will be filed for the limitation.
B12.050.002B	1NC-29	NC	05/14/2005	CLR	---	N	N	
B12.050.007E	INI-175	NI	05/14/2005	CLR	---	N	N	
B13.010.001	1RPV-INTERIOR	NC	05/16/2005	CLR	---	N	N	
B13.060.001	1RPV-CLEVIS		05/16/2005	CLR	---	N	N	
B13.060.002	1RPV-INCORE		05/16/2005	CLR	---	N	N	
B13.070.001	1RPV-CORE-SUP		05/20/2005	CLR	---	N	N	
B14.010.001	1RPV-CRDM64		05/19/2005	CLR	---	N	N	
B14.010.002	1RPV-CRDM72		05/19/2005	CLR	---	N	N	
B14.010.003	1RPV-CRDM77		05/19/2005	CLR	---	N	N	

DUKE ENERGY CORPORATION
 QUALITY ASSURANCE TECHNICAL SERVICES
 In-Service Inspection Database Management System
 Catawba 1 Inservice Inspection Listing
 Interval 2 Outage 7

Run D
 Page 6
 08/16/2005

EOC 15
 Plant: Catawba 1

ITEM NUMBER	ID NUMBER	SYSTEM	INSP DATE	INSP STATUS	INSP LIMITED	GEO REF	RFR	COMMENTS
C01.020.013	1SGD-W144	NC	05/23/2005	CLR	---	N	N	
C02.021.004	1ANSHX-3-N1	NS	//		---	N	N	The NDE for this Item Number was not performed during Outage #7 (EOC15), per NSM# CN-11432/01 (1A NS Heat Exchanger Replacement).
C02.021.004A	1ANSHX-3-N1	NS	//		---	N	N	The NDE for this Item Number was not performed during Outage #7 (EOC15), per NSM# CN-11432/01 (1A NS Heat Exchanger Replacement).
C02.021.005	1ANSHX-3-N2	NS	//		---	N	N	The NDE for this Item Number was not performed during Outage #7 (EOC15), per NSM# CN-11432/01 (1A NS Heat Exchanger Replacement).
C02.021.005A	1ANSHX-3-N2	NS	//		---	N	N	The NDE for this Item Number was not performed during Outage #7 (EOC15), per NSM# CN-11432/01 (1A NS Heat Exchanger Replacement).
C03.020.010	1-R-FW-0002	FW	05/03/2005	CLR	---	N	N	
C03.020.015	1-R-ND-0165	ND	04/27/2005	CLR	---	N	N	
C03.020.025	1-R-NI-0285	NI	04/27/2005	CLR	---	N	N	
C03.020.026	1-R-NI-0286	NI	05/06/2005	CLR	---	N	N	
C03.020.027	1-R-NI-1195	NI	05/21/2005	CLR	---	N	N	
C03.020.052	1-R-NV-0433	NV	05/03/2005	CLR	---	N	N	
C03.020.094	1-R-SM-1008	SM	05/29/2005	CLR	98.00%	N	N	
C03.020.095	1-R-SM-1018	SM	05/29/2005	CLR	---	N	N	
C03.020.096	1-R-SM-1028	SM	05/29/2005	CLR	---	N	N	
C03.020.097	1-R-SM-1038	SM	05/29/2005	CLR	---	N	N	
C03.040.001	1-R-SV-1519	SV	05/26/2005	CLR	---	N	N	
C03.040.002	1-R-SV-1612	SV	05/26/2005	CLR	---	N	N	
C03.040.003	1-R-SV-1512	SV	05/26/2005	CLR	---	N	N	
C03.040.004	1-R-SV-1616	SV	05/26/2005	CLR	---	N	N	
C03.040.005	1-R-SV-1505	SV	05/26/2005	CLR	---	N	N	
C03.040.006	1-R-SV-1610	SV	05/26/2005	CLR	---	N	N	
C03.040.007	1-R-SV-1526	SV	05/26/2005	CLR	---	N	N	
C03.040.008	1-R-SV-1608	SV	05/26/2005	CLR	---	N	N	
C05.011.039	1ND13-1	ND	05/01/2005	CLR	---	N	N	
C05.011.039A	1ND13-1	ND	04/30/2005	CLR	---	N	N	
C05.011.040	1ND13-5	ND	05/01/2005	CLR	---	N	N	
C05.011.040A	1ND13-5	ND	04/30/2005	CLR	---	N	N	
C05.011.041	1ND13-11	ND	05/01/2005	CLR	---	N	N	
C05.011.041A	1ND13-11	ND	04/30/2005	CLR	---	N	N	

DUKE ENERGY CORPORATION
 QUALITY ASSURANCE ANALYTICAL SERVICES
 In-Service Inspection Database Management System
 Catawba 1 Inservice Inspection Listing
 Interval 2 Outage 7

Run D
 Page 7
 08/16/2005

EOC 15
 Plant: Catawba 1

ITEM NUMBER	ID NUMBER	SYSTEM	INSP DATE	INSP STATUS	INSP LIMITED	GEO REF	RFR	COMMENTS
C05.011.042	1ND14-1	ND	05/01/2005	CLR	---	N	N	
C05.011.042A	1ND14-1	ND	04/30/2005	CLR	---	N	N	
C05.011.043	1ND14-7	ND	05/01/2005	CLR	---	N	N	
C05.011.043A	1ND14-7	ND	04/30/2005	CLR	---	N	N	
C05.011.044	1ND14-8	ND	05/01/2005	CLR	---	N	N	
C05.011.044A	1ND14-8	ND	04/30/2005	CLR	---	N	N	
C05.011.049	1ND39-12	ND	05/20/2005	CLR	76.10%	N	Y	Request for Relief will be filed for the limitation.
C05.011.049A	1ND39-12	ND	05/20/2005	CLR	---	N	N	
C05.011.067	1ND13-10	ND	05/01/2005	CLR	---	N	N	
C05.011.067A	1ND13-10	ND	04/30/2005	CLR	---	N	N	
C05.011.114	1NI6-6	NI	05/12/2005	CLR	---	N	N	
C05.011.114A	1NI6-6	NI	05/12/2005	CLR	---	N	N	
C05.011.115	1NI6-7	NI	05/12/2005	CLR	---	N	N	
C05.011.115A	1NI6-7	NI	05/12/2005	CLR	---	N	N	
C05.011.118	1NI6-13	NI	05/12/2005	CLR	---	N	N	
C05.011.118A	1NI6-13	NI	05/12/2005	CLR	---	N	N	
C05.011.119	1NI6-22	NI	05/12/2005	CLR	---	N	N	
C05.011.119A	1NI6-22	NI	05/12/2005	CLR	---	N	N	
C05.021.107	1NV97-7	NV	05/04/2005	CLR	---	N	N	
C05.021.107A	1NV97-7	NV	05/04/2005	CLR	---	N	N	
C05.021.108	1NV97-8	NV	05/04/2005	CLR	---	N	N	
C05.021.108A	1NV97-8	NV	05/04/2005	CLR	---	N	N	
C05.021.109	1NV97-12	NV	05/04/2005	CLR	---	N	N	
C05.021.109A	1NV97-12	NV	05/04/2005	CLR	---	N	N	
C05.021.110	1NV97-10	NV	05/04/2005	CLR	---	N	N	
C05.021.110A	1NV97-10	NV	05/04/2005	CLR	---	N	N	
C05.021.140	1NV627-1	NV	05/05/2005	CLR	---	N	N	
C05.021.140A	1NV627-1	NV	05/04/2005	CLR	---	N	N	
C05.021.141	1NV627-2	NV	05/05/2005	CLR	---	N	N	
C05.021.141A	1NV627-2	NV	05/04/2005	CLR	---	N	N	
C05.021.142	1NV627-5	NV	05/05/2005	CLR	---	N	N	
C05.021.142A	1NV627-5	NV	05/04/2005	CLR	---	N	N	
C05.021.143	1NV627-6	NV	05/05/2005	CLR	---	N	N	
C05.021.143A	1NV627-6	NV	05/04/2005	CLR	---	N	N	
C05.021.144	1NV627-11	NV	05/05/2005	CLR	---	N	N	
C05.021.144A	1NV627-11	NV	05/04/2005	CLR	---	N	N	

DUKE ENERGY CORPORATION
 QUALITY ASSURANCE ANALYTICAL SERVICES
 In-Service Inspection Database Management System
 Catawba 1 Inservice Inspection Listing
 Interval 2 Outage 7

Run D
 Page 8
 08/16/2005

EOC 15
 Plant: Catawba 1

ITEM NUMBER	ID NUMBER	SYSTEM	INSP DATE	INSP STATUS	INSP LIMITED	GEO REF	RFR	COMMENTS
C05.021.145	1NV627-12	NV	05/05/2005	CLR	---	N	N	
C05.021.145A	1NV627-12	NV	05/04/2005	CLR	---	N	N	
C05.051.055	1CF39-1	CF	05/22/2005	REC	---	Y	N	
C05.051.055A	1CF39-1	CF	05/21/2005	CLR	---	N	N	
C05.051.058	1CF39-2	CF	05/22/2005	CLR	---	N	N	
C05.051.058A	1CF39-2	CF	05/21/2005	CLR	---	N	N	
C05.051.059	1CF39-10	CF	05/22/2005	CLR	---	N	N	
C05.051.059A	1CF39-10	CF	05/21/2005	CLR	---	N	N	
C05.051.060	1CF39-11	CF	05/22/2005	CLR	---	N	N	
C05.051.060A	1CF39-11	CF	05/21/2005	CLR	---	N	N	
C06.020.016	1SA-1	SA	05/23/2005	CLR	---	N	N	
C06.020.019	1SV-16	SV	05/23/2005	CLR	---	N	N	
C06.020.020	1SV-23	SV	05/23/2005	CLR	---	N	N	
D02.020.009	1-R-CA-0185	CA	04/05/2005	CLR	---	N	N	
D02.020.010	1-R-CA-0274	CA	04/05/2005	CLR	---	N	N	
D02.020.011	1-R-CA-0246	CA	04/05/2005	CLR	---	N	N	
D02.020.036	1-R-LD-0053	LD	04/21/2005	CLR	---	N	N	
D02.020.061	1-R-RN-0611	RN	05/15/2005	CLR	---	N	N	
D02.020.062	1-R-RN-0629	RN	05/15/2005	CLR	---	N	N	
D02.020.063	1-R-RN-0807	RN	05/15/2005	CLR	---	N	N	
D02.020.064	1-R-RN-0825	RN	05/15/1905	CLR	---	N	N	
D02.040.027	1-R-KD-0090	KD	06/02/2005	CLR	---	N	N	
D02.040.028	1-R-KD-0057	KD	05/15/2005	CLR	---	N	N	
F01.010.091	1-R-NV-1470	NV	05/10/2005	CLR	---	N	N	
F01.010.092	1-R-NV-1471	NV	05/10/2005	CLR	---	N	N	
F01.010.096	1-R-NV-1503	NV	05/10/2005	CLR	---	N	N	
F01.010.097	1-R-NV-1508	NV	05/10/2005	CLR	---	N	N	
F01.011.053	1-R-NI-1390	NI	05/10/2005	CLR	---	N	N	
F01.011.054	1-R-NI-1465	NI	05/10/2005	CLR	---	N	N	
F01.011.091	1-R-NV-1502	NV	05/10/2005	CLR	---	N	N	
F01.011.092	1-R-NV-1504	NV	05/10/2005	CLR	---	N	N	
F01.011.095	1-R-NV-1501	NV	05/10/2005	CLR	---	N	N	
F01.011.096	1-R-NV-1505	NV	05/10/2005	CLR	---	N	N	
F01.012.015	1-R-NC-1535	NC	05/10/2005	REC	---	N	N	
F01.012.016	1-R-NC-1536	NC	05/10/2005	REC	---	N	N	
F01.020.011	1-R-CF-1500	CF	05/08/2005	CLR	---	N	N	

DUKE ENERGY CORPORATION
 QUALITY ASSURANCE TECHNICAL SERVICES
 In-Service Inspection Database Management System
 Catawba 1 Inservice Inspection Listing
 Interval 2 Outage 7

Run D
 Page 9
 08/16/2005

EOC 15
 Plant: Catawba 1

ITEM NUMBER	ID NUMBER	SYSTEM	INSP DATE	INSP STATUS	INSP LIMITED	GEO REF	RFR	COMMENTS
F01.020.023	1-R-FW-0002	FW	05/03/2005	REC	---	N	N	
F01.020.044	1-R-ND-0188	ND	04/20/2005	CLR	---	N	N	
F01.020.045	1-R-ND-0523	ND	04/19/2005	CLR	---	N	N	
F01.020.046	1-R-ND-0186	ND	04/20/2005	CLR	---	N	N	
F01.020.047	1-R-ND-0187	ND	04/20/2005	CLR	---	N	N	
F01.020.048	1-R-ND-0170	ND	04/19/2005	CLR	---	N	N	
F01.020.049	1-R-ND-0171	ND	05/15/2005	CLR	---	N	N	
F01.020.050	1-R-ND-0172	ND	04/19/2005	CLR	---	N	N	
F01.020.067	1-R-NI-2273	NI	05/10/2005	CLR	---	N	N	
F01.020.068	1-R-NI-2274	NI	05/10/2005	CLR	---	N	N	
F01.020.069	1-R-NI-2275	NI	05/10/2005	CLR	---	N	N	
F01.020.104	1-R-NS-0058	NS	04/04/2005	CLR	---	N	N	
F01.020.105	1-R-NS-0076	NS	04/04/2005	CLR	---	N	N	
F01.020.108	1-R-NS-0001	NS	04/19/2005	CLR	---	N	N	
F01.020.109	1-R-NS-0002	NS	04/19/2005	CLR	---	N	N	
F01.020.110	1-R-NS-0003	NS	04/19/2005	CLR	---	N	N	
F01.020.111	1-R-NS-0037	NS	04/18/2005	CLR	---	N	N	
F01.020.112	1-R-NS-0038	NS	04/18/2005	CLR	---	N	N	
F01.020.113	1-R-NS-0039	NS	04/18/2005	REC	---	N	N	
F01.020.114	1-R-NS-0042	NS	04/18/2005	CLR	---	N	N	
F01.020.115	1-R-NS-0043	NS	04/18/2005	CLR	---	N	N	
F01.020.116	1-R-NS-0044	NS	04/18/2005	CLR	---	N	N	
F01.020.117	1-R-NS-0047	NS	04/18/2005	CLR	---	N	N	
F01.020.118	1-R-NS-0048	NS	04/18/2005	REC	---	N	N	
F01.020.119	1-R-NS-0049	NS	04/05/2005	CLR	---	N	N	
F01.020.155	1-R-NV-0316	NV	04/05/2005	CLR	---	N	N	
F01.020.156	1-R-NV-0318	NV	04/05/2005	CLR	---	N	N	
F01.020.157	1-R-NV-0131	NV	04/04/2005	CLR	---	N	N	
F01.020.158	1-R-NV-0135	NV	04/04/2005	CLR	---	N	N	
F01.020.159	1-R-NV-0137	NV	04/04/2005	REC	---	N	N	
F01.020.160	1-R-NV-0143	NV	04/04/2005	CLR	---	N	N	
F01.020.161	1-R-NV-0293	NV	04/19/2005	CLR	---	N	N	
F01.020.162	1-R-NV-0294	NV	04/19/2005	CLR	---	N	N	
F01.020.163	1-R-NV-0296	NV	04/05/2005	CLR	---	N	N	
F01.020.164	1-R-NV-0298	NV	04/04/2005	CLR	---	N	N	
F01.020.165	1-R-NV-0300	NV	04/04/2005	CLR	---	N	N	

DUKE ENERGY CORPORATION
 QUALITY ASSURANCE TECHNICAL SERVICES
 In-Service Inspection Database Management System
 Catawba 1 Inservice Inspection Listing

Run D
 Page 10
 08/16/2005

EOC 15
 Plant: Catawba 1

Interval 2 Outage 7

ITEM NUMBER	ID NUMBER	SYSTEM	INSP DATE	INSP STATUS	INSP LIMITED	GEO REF	RFR	COMMENTS
F01.020.166	1-R-NV-0301	NV	04/04/2005	CLR	---	N	N	
F01.020.193	1-R-SA-0003	SA	04/20/2005	CLR	---	N	N	
F01.020.223	1-R-SV-1522	SV	05/08/2005	CLR	---	N	N	
F01.020.224	1-R-SV-1524	SV	05/08/2005	CLR	---	N	N	
F01.021.001	1-R-CA-1654	CA	04/25/2005	CLR	---	N	N	
F01.021.011	1-R-CF-1518	CF	05/15/2005	CLR	---	N	N	
F01.021.035	1-R-ND-0610	ND	04/19/2005	CLR	---	N	N	
F01.021.036	1-R-ND-0611	ND	04/20/2005	CLR	---	N	N	
F01.021.071	1-R-NI-2271	NI	05/10/2005	CLR	---	N	N	
F01.021.072	1-R-NI-2272	NI	05/10/2005	CLR	---	N	N	
F01.021.073	1-R-NI-2278	NI	05/10/2005	CLR	---	N	N	
F01.021.098	1-R-NS-0033	NS	04/19/2005	CLR	---	N	N	
F01.021.165	1-R-NV-0509	NV	04/04/2005	CLR	---	N	N	
F01.021.166	1-R-NV-0537	NV	04/04/2005	CLR	---	N	N	
F01.021.167	1-R-NV-0538	NV	04/04/2005	CLR	---	N	N	
F01.021.168	1-A-NV-3202	NV	04/12/2005	CLR	---	N	N	
F01.021.169	1-A-NV-3205	NV	04/12/2005	CLR	---	N	N	
F01.021.170	1-R-NV-0175	NV	04/12/2005	CLR	---	N	N	
F01.022.021	1-R-FW-0056	FW	04/19/2005	CLR	---	N	N	
F01.022.037	1-R-ND-0129	ND	04/19/2005	CLR	---	N	N	
F01.022.038	1-R-ND-0131	ND	04/20/2005	CLR	---	N	N	
F01.022.039	1-R-ND-0626	ND	04/20/2005	CLR	---	N	N	
F01.022.040	1-R-ND-0168	ND	04/19/2005	CLR	---	N	N	
F01.022.063	1-R-NI-2264	NI	05/10/2005	CLR	---	N	N	
F01.022.092	1-R-NS-0031	NS	04/20/2005	CLR	---	N	N	
F01.022.145	1-R-NV-0315	NV	04/05/2005	CLR	---	N	N	
F01.022.147	1-R-NV-0319	NV	04/05/2005	CLR	---	N	N	
F01.022.148	1-R-NV-0015	NV	04/05/2005	CLR	---	N	N	
F01.022.149	1-R-NV-0136	NV	04/05/2005	CLR	---	N	N	
F01.022.150	1-R-NV-0508	NV	04/05/2005	CLR	---	N	N	
F01.022.221	1-R-SV-1514	SV	04/25/2005	CLR	---	N	N	
F01.030.090	1-R-KC-0875	KC	04/06/2005	REP	---	N	N	Reference PIP# C-05-1591 in Section 1.0.
F01.030.092	1-R-KC-0184	KC	04/06/2005	CLR	---	N	N	
F01.030.093	1-R-KC-0028	KC	04/25/2005	CLR	---	N	N	Added to Outage #7 (EOC15) per ASME Section XI, Paragraph IWF-2430(a) and PIP #C-05-01591.
F01.030.094	1-R-KC-0031	KC	04/25/2005	CLR	---	N	N	Added to Outage #7 (EOC15) per ASME Section XI, Paragraph IWF-2430(a) and PIP #C-05-01591.

DUKE ENERGY CORPORATION
 QUALITY ASSURANCE TECHNICAL SERVICES
 In-Service Inspection Database Management System
 Catawba 1 Inservice Inspection Listing
 Interval 2 Outage 7

Run D
 Page 12
 08/16/2005

EOC 15
 Plant: Catawba 1

ITEM NUMBER	ID NUMBER	SYSTEM	INSP DATE	INSP STATUS	INSP LIMITED	GEO REF	RFR	COMMENTS
F01.040.206	1RNPA-SUPPORT	RN	04/12/2005	REC	---	N	N	
F01.040.207	1RNSB-SUPPORT	RN	05/04/2005	CLR	---	N	N	
G02.001.028	1SM33-01	SM	05/29/2005	CLR	---	N	N	
G02.001.028A	1SM33-01	SM	05/28/2005	CLR	---	N	N	
G02.001.029	1SM-4A-A	SM	05/29/2005	CLR	---	N	N	
G02.001.029A	1SM-4A-A	SM	05/28/2005	CLR	---	N	N	
G02.001.030	1SM33-02	SM	05/29/2005	CLR	---	N	N	
G02.001.030A	1SM33-02	SM	05/28/2005	CLR	---	N	N	
G02.001.031	1SM-5A-A	SM	05/29/2005	CLR	---	N	N	
G02.001.031A	1SM-5A-A	SM	05/28/2005	CLR	---	N	N	
G02.001.032	1SM33-03	SM	05/29/2005	CLR	---	N	N	
G02.001.032A	1SM33-03	SM	05/28/2005	CLR	---	N	N	
H01.001.001	1NI148-9	NI	05/20/2005	CLR	---	N	N	
H01.001.002	1NI148-9L	NI	05/20/2005	CLR	---	N	N	
H01.001.003	1NI148-10	NI	05/20/2005	CLR	---	N	N	
H01.001.004	1NI148-10L	NI	05/20/2005	CLR	---	N	N	
H01.001.005	1NI148-11	NI	05/20/2005	CLR	---	N	N	
H01.001.006	1NI148-11L	NI	05/20/2005	CLR	---	N	N	
H01.001.007	1NI152-9	NI	05/20/2005	CLR	---	N	N	
H01.001.008	1NI152-9L	NI	05/20/2005	CLR	---	N	N	
H01.001.009	1NI152-10	NI	05/20/2005	CLR	---	N	N	
H01.001.010	1NI152-10L	NI	05/20/2005	CLR	---	N	N	
H01.001.011	1NI152-11	NI	05/20/2005	CLR	---	N	N	
H01.001.012	1NI152-11L	NI	05/20/2005	CLR	---	N	N	
H01.001.013	1NI162-13	NI	05/20/2005	CLR	---	N	N	
H01.001.014	1NI162-13L	NI	05/20/2005	CLR	---	N	N	
H01.001.015	1NI162-14	NI	05/20/2005	CLR	---	N	N	
H01.001.016	1NI162-14L	NI	05/20/2005	CLR	---	N	N	
H01.001.017	1NI163-15	NI	05/20/2005	CLR	---	N	N	
H01.001.018	1NI163-15L	NI	05/20/2005	CLR	---	N	N	
H01.001.019	1NI164-8	NI	05/20/2005	CLR	---	N	N	
H01.001.020	1NI164-8L	NI	05/20/2005	CLR	---	N	N	
H01.001.021	1NI165-8	NI	05/20/2005	CLR	---	N	N	
H01.001.022	1NI165-8L	NI	05/20/2005	CLR	---	N	N	
H01.001.023	1NI165-9	NI	05/20/2005	CLR	---	N	N	
H01.001.024	1NI165-9L	NI	05/20/2005	CLR	---	N	N	

Catawba 1 EOC15 ISI Visual Examination Data Sheets

ITEM NUMBER F01.030.090

PAGE 1 OF 1
PROJECT Catawba
UNIT 1

DUKE POWER COMPANY
ISI VISUAL EXAMINATION VT-3 HANGERS

PSI ISI

W.O. #/NSM 98716291-01 PROCEDURE QAL-14 REV. 25

INSPECTOR <u>John Fair</u>	LEVEL <u>II</u>	DATE <u>4-6-05</u>	VISUAL METHOD: <input checked="" type="checkbox"/> DIRECT <input type="checkbox"/> REMOTE
			VISUAL AIDS <u>None</u>
			M&TE SERIAL NUMBER <u>None</u>
SYSTEM STATUS: <input type="checkbox"/> HOT <input checked="" type="checkbox"/> COLD <input type="checkbox"/> OTHER (EXPLAIN IN COMMENTS)			

S/R NUMBER 1-R-KC-0875 REV. 0 I.D. NUMBER Rigid Support 1-R-KC-0875 ACTUAL SYSTEM TEMPERATURE Ambient

RESULTS: ACCEPTABLE UNACCEPTABLE (REQUIRES NDE, EVALUATION OR REPAIR) (See sketch / Dwg Attached)
** (reportable)* SEE ENGINEERING JUSTIFICATION ATTACHED (OPTIONAL)

IND. NO.	INDICATION TYPE	LENGTH	WIDTH	REMARKS
	<u>Base plate pulled away from ceiling</u>			<u>During initial walkdown on 3-18-05, base plate was found pulled away from ceiling. see PIP 1591 + WO 98720840-01 JAF 4-6-05</u>

MECHANICAL SHOCK SUPPRESSOR	A	B	LIMIT STOP	A	B
HOT SETTING	N/A	N/A	ACTUAL TRAVEL (COMP/TENSION)	N/A	N/A
COLD SETTING	N/A	N/A	HYDRAULIC SHOCK SUPPRESSOR	A	B
ACTUAL PISTON SETTING	N/A	N/A	FLUID LEVEL	N/A	N/A
VARIABLE SPRING SUPPORTS	A	B	HOT SETTING	N/A	N/A
HOT LOAD	N/A	N/A	COLD SETTING	N/A	N/A
COLD LOAD	N/A	N/A	ACTUAL PISTON SETTING	N/A	N/A

CONSTANT SUPPORT A B

HOT LOAD	N/A	N/A
COLD LOAD	N/A	N/A
POSITION IND. READING	N/A	N/A
TOTAL NO. OF DIV. SCALE	N/A	N/A

COMMENTS/DISPOSITION
Note: Added to RFO #1 per IWF-2420(b)
Ref. PIP# 1-C93-0875
support is not operable in As-found condition. System operability is not affected per PIP assessment. Corrective actions to be per PIP. Matthew 4-12-05

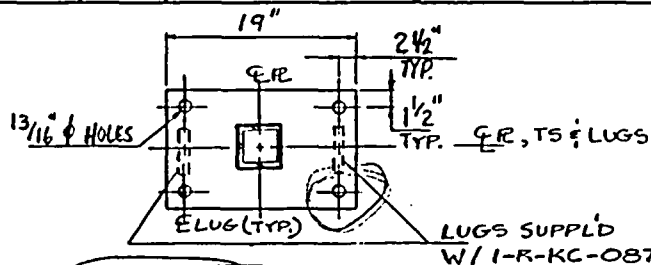
PIP: YES NO SERIAL NO. C-05-1591

FINAL REVIEW T.E. Wade DATE 4/25/05 ANII REVIEW Robert Marshall DATE 5-8-05

ITEM NUMBER F01.030.090

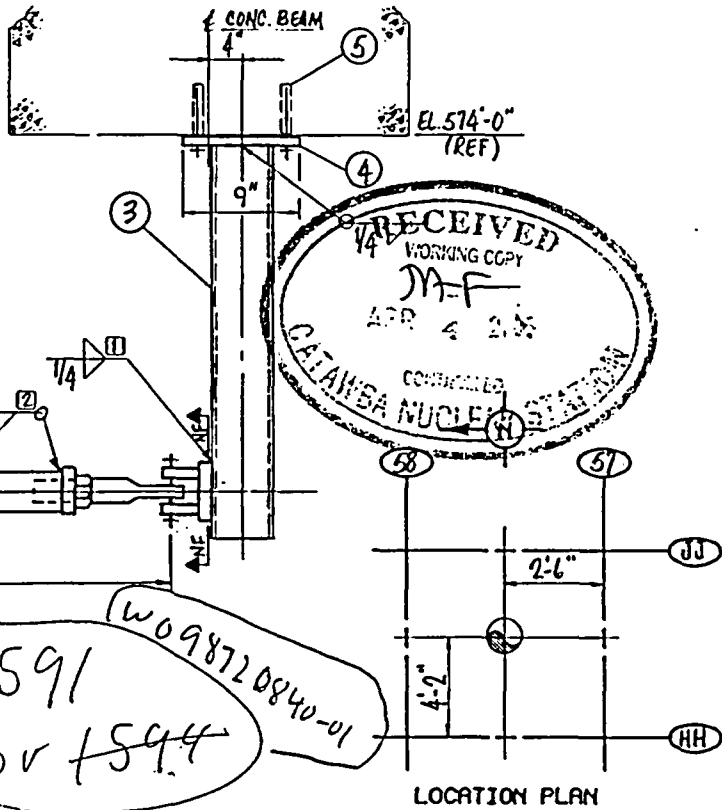
ASH
7/21/05

ITEM NO.	NO. REQ'D	SIZE	DESCRIPTION	ASTM	LOT NUMBER	BY
1	1	# B	FIG. 211N SWAY STRUT ASSEMBLY, OPTION #1		298-4972B	
			W = 0'-11 1/2" LG			
2	1	6.625" O.D.C.S.	PIPE CLAMP FOR # B, FIG. 211N		298-1780B	
3	1	15 1/4 x 4 x .250 x 0'-9 1/4" LG		A500 GR B		
4	1	2 1/4 x 9 x 1'-7 1/2" LG		A36		
5	4	3/4" PHILLIPS CONC. FAST.	CAT # HN-3440			



A4K
Rm 300
EL 560

PLATE DETAIL
Top base plate pulled away from ceiling app. 1 1/2" on west side
3-18-05 Ambient
JAF
#6" KC



Pip 1591
or 1594
W098720840-01

ELEV. LKG. EAST

DIRECTION	MVMT.	HOT LD.	COLD LD.	UPSET	HYDRO	FAULTED	ALLOW LD
VERTICAL	-	-	-	-	-	-	-
N-S	000	417°N	8°S	727°N	318°S	978°N 589°S	-
E-W	-	-	-	-	-	-	-

ANALYSIS PROBLEM NO. KCY	6-21-83	DATA PT. 19	CALC. NO. -	DP. CO. CLASS C
DESIGNER/DATE JAF 8/4/83	INSPECTED/DATE WAIVED	Q.A. CONDITION 1		
DRAWN/DATE H.W. Hilday 8-16-83	INSPECTED/DATE WAIVED			
CHECKED/DATE M. Nash 8/23/83	APPROVED/DATE JAF 8/25/83			

DUKE POWER COMPANY						
PROJECT CATAWBA NUCLEAR STATION UNIT 1						
REV.	BY	CK	DATE	INSP. ELEC.	INSP. CIVIL	DESCRIPTION
0	GWM	JAF	8/23-83	B	B	RELEASED FOR CONST.

PIPE ISO: CN-1492-KC349R	REV. -
CIVIL CN-1226-2/1-3	REV. -
ELECT CN-1892-01	REV. -
HVAC CN-1522-01.45-00	REV. -
MARK NO. 1-R-KC-0875	REV. 0
SHEET 1 OF 1	

Catawba 1 EOC15 PIP #C-05-01591

*Problem Investigation Process
Catawba Nuclear Station*

PIP Serial No: C-05-01591	Action Category: 3	LER No.:	Other Report:
------------------------------	-----------------------	----------	---------------

Problem Identification

Discovered Time/Date: 10:43 03/23/2005 **Occurred Time/Date:**

Unit(s) Affected:

<u>Unit</u>	<u>Mode</u>	<u>%Power</u>	<u>Unit Status</u>	<u>Remarks</u>
1	1	100	At power	

System(s) Affected:

KC Component Cooling

Affected Equipment

(No Equipment Affected)

Location of Problem:

Bldg: AUX Column Line: 57-HH Elev: 560

Location Remarks:

Method Used to Discover Problem:

OSM inspections

Brief Problem Description:

ISI inspector (John Faris) noted damage to several pipe supports on the 6" 1A KC Miniflow line. Additional examination by engineering indicates that the damage is likely due to a system transient, the date of which is unknown.

Detail Problem Description:

OSM Concurrence on operability assessment:

Based on my visual observations of the hangers, supports and piping associated with this PIP and my discussions with ENG (Fred Willis & Dave Ward) about the status of the inspections and work completed (still have one anchor bolt that will need to be addressed at a later time), I concur with the Operability Assessment as it is described below.

Jimmy Burgess
On Duty OSM

Last Updated By: JEB5426: BURGESS, JAMES E Team: CLO5903 Group: OPS Date: 03/23/2005

ISI inspector (John Faris) noted damage to several pipe supports on the 6" 1A KC Miniflow line. Additional examination by engineering (Mark Shutt and Fred Willis) indicates that the damage is likely due to a system transient, the date of which is unknown. The support damage is detailed as follows:

Support 1-R-KC-0873:

The concrete anchors on the north side are pulled out about 3/8". The northwest anchor is loose and can be spun by hand.

Support 1-R-KC-0874:

The lateral strut is misaligned by about 2" (down) at the clamp attachment point. The vertical support rods attach to the base plate for 1-R-KC-0875 which is damaged as noted.

Support 1-R-KC-0875:

All four concrete anchors are pulled out to some extent. The west anchors are out about 1 1/2", the east anchors about 3/8"

Support 1-R-KC-0876:

*Problem Investigation Process
Catawba Nuclear Station*

There is no discernable damage to this support, but there is paint chipped at the anchor washers that indicate the support was subjected to a shock load at some point.

The OSM was notified of the situation and work request 98340909 has been written to initiate repairs. Engineering is reviewing the pipe stress analysis to determine affect on system operability.

Originated By: MDS8363: SHUTT, MARK D Team: DLW2990 Group: MCE Date: 03/23/2005

Additional Information/OE

Supports 1-R-KC-0873, 1-R-KC-0874, 1-R-KC-0875 and 1-R-KC-0876 were found damaged in 1984 due to a water hammer. The damage included concrete anchors partially pulled out. This condition was documented in NCI CN-147.

During a visual ISI examination support 1-R-KC-0875 was found damaged. The inspector noted that the base plate had separated from the ceiling about 1/4". This condition was documented in PIP 1-C93-0875.

Operability Assessment

Component Affected

The component affected is the 1A KC pump mini-flow line between valves 1KCC36 and 1KCC38. Loss of this line would affect the "A" train of KC. This line is Duke Class C, ASME Class 3 and is required to be operable per Catawba Technical Specification 3.7.7 Component Cooling Water (CCW) System.

Degraded Condition

See description above for degraded components.

Evaluation

The 1A KC pump mini-flow line between valves 1KCC36 and 1KCC38 is covered by Unit 1 piping analysis problem KCY, calculation file CNC-1206.02-80-2025. The piping covered by this analysis problem was analyzed using the computer program Superpipe. This analysis model was modified to remove the vertical and lateral support functions of support 1-R-KC-0873, the vertical support function of 1-R-KC-0874 and the lateral support function of support 1-R-KC-0875. Based on inspection and engineering judgment the lateral strut part of 1-R-KC-0874 would still carry its design load. Also the minor damage noted on 1-R-KC-0876 would not have prevented this support from carrying its design load. With the above support functions removed the problem was reanalyzed. The following design requirements were reviewed.

ASME Code Stresses - All pipe stresses were less than the Code allowables.

Valve Accelerations - All valve accelerations were less than the values considered in the valve design.

Pipe Sleeve Clearances - All pipe sleeve clearances were greater than the revised movements.

Functionality Pipe Stresses - All pipe stresses were less than the allowables required to show functionality.

Support Loads - All supports loads were less than the original design loads (Ref. Calculation CNC-1206.12-16-1113).

Conclusion

Based on the above evaluation the piping covered by Unit 1 analysis problem KCY can be considered operable with the degraded hangers as noted above.

The changes to the analysis model and results were generated by Bill Callaway and reviewed by Fred Willis. The support load evaluation was performed by Bill Callaway and reviewed by Mark Shut.

Status of Immediate Corrective Actions

Currently all of the supports have been repaired with the exception of support 1-R-KC-0875. This support still has one anchor bolt that will not torque. This work was performed under W/O 98720840.

Problem Investigation Process
Catawba Nuclear Station

Last Updated By: JFW8363: WILLIS, JAMES F Team: GWH17828 Group: RES Date: 03/23/2005

Extent of Condition Review:

A walk down was performed of all four mini-flow lines (1A, 1B, 2A, 2B) in their entirety, from header to header on elevations 560 ad 577. In addition other portions of the KC system pipe and supports in the area were visually examined, including the essential header in the vicinity of the mini-flow connections. No other discrepancies or unusual indications were noted. This condition is considered to be isolated to the 1A mini-flow loop.

Last Updated By: MDS8363: SHUTT, MARK D Team: DLW2990 Group: MCE Date: 03/23/2005

Other Units/Components/Systems/Areas Affected(Y,N,U): N

Industry Plants Affected(Y,N,U): N

Immediate Corrective Actions:

OSM notified. Work request 98340909 written to initiate repairs.

Originated By: MDS8363: SHUTT, MARK D Team: DLW2990 Group: MCE Date: 03/23/2005

Immediate Corrective Action Documents / Work Orders:

	<u>Indiv</u>	<u>Team</u>	<u>Group</u>	<u>Date</u>
Problem Identified By:	MDS8363	DLW2990	MCE	03/23/2005
Problem Entered By:	MDS8363	DLW2990	MCE	03/23/2005

Screening

Action Category: 3 Root Cause performed? No

OEP No:

Other Report Nos:

Event Codes:

F10 Equipment Damage

Screening Remarks:

Screened by the Centralized Screening Team on March 28, 2005.

Originated By: DSM0811: MILLER (DSM0811), DAVID S Team: PAM7334 Group: SRG Date: 03/28/2005

Assignments:

Responsible Groups(s) for Problem Evaluation:	MCE	Mechanical/Civil Eng
Responsible Group for Present Operability:	N/A	
Responsible Group for Report Support Info:	N/A	
Responsible Group for Reportability:	N/A	
Responsible Group for Overall PIP Approval:	MCE	Mechanical/Civil Eng

<u>Signature Type</u>	<u>Indiv</u>	<u>Team</u>	<u>Group</u>	<u>Date</u>
Screened By:	DSM0811	PAM7334	SRG	03/28/2005

Present Operability

Responsible Group: Status:

Sys/Comp Operable? (Y,N,C,E,T):

Required Mode:

Comments:

No Current Signatures For This Section

Reportability

Responsible Group: Status:

Problem Reportable(Y,N,E):

Reportable Per:

Comments:

No Current Signatures For This Section

Investigation Report:

Responsible Group: Act Date:

Investigator: Group:

Due Date:

Date Due to VP or Sta. Mgr:

Date Regulatory or Agency Rpt Due:

Date Investigation Report Approved:

NRC Cause Codes:

Report Support Info:

Responsible Group: Status:

No Current Signatures For This Section

Problem Evaluation

Event	Cause Code	Cause Description	Primary	Causing Groups
-------	------------	-------------------	---------	----------------

Problem Evaluation From: Resp. Group: MCE Status: Open OEDB Checked: No

TEMPLATE FOR CAT 3 PROBLEM EVALUATIONS

To meet the minimum expectations for a Category 3 PIP Problem Evaluation this section must include the following. Reference NSD 208 (Section 208.10) and NSD 212 (Section 212.6.2).

*Problem Investigation Process
Catawba Nuclear Station*

Porting Information- (This section is not mandatory but may be used to provide additional information to better define the problem.)

Apparent Cause- (Clearly state why the problem occurred and causing group.)

Corrective Actions- (State the actions taken or needed to address the problem. Ensure actions align with the cause.)

Notes:

- Verify event codes are correct. If additional event codes need to be added or existing event codes need to be changed, contact SRG at extension 3972 or 3973.
- Make sure cause code matches the apparent cause. Select down to at least the second level of cause code. (Ex. Choose "F3" or "F3e" instead of "F")
- Make sure the correct culpable group is selected based on the group this is designated as causing the event as stated in the apparent cause.
- Additional guidance and detail for addressing these items is contained in the help (blue text) section above.

Originated By: SITECOOR: SITE COORDINATOR Team: Group: SRG Date: 03/29/2005

OEDB Comments:

Remarks Comments:

Signature Type	Indiv	Team	Group	Date
Due Date:	04/22/2005			
Accepted By:	TIM8390	GTH7317	MCE	03/29/2005
Assigned To:	JFM9986	SMS8381	MCE	03/29/2005

Corrective Actions

CA Seq. No: 1

Resp Group	Status	Orig Group	Event Code	Prop GAO	Cause Code
MCE	Closed	MCE	F10	Q	YYY

Proposed Corrective Action:

Perform and document an extent of condition review for the failure identified in this pip. Work orders initiated as a result of the extent of condition review should initially be coded as "E" and follow the work control process for urgent work with a date specified for the work order to be completed.

Originated By: TIM8390: MC KINNEY, TIMOTHY Team: GTH7317 Group: MCE Date: 03/29/2005

Signature Type	Indiv	Team	Group	Date
Ready For Approval:	TIM8390	GTH7317	MCE	03/29/2005
Approval Assigned To:	GTH7317	GTH7317	MCE	03/29/2005
Approved By:	TIM8390	GTH7317	MCE	03/29/2005

General: Outage: Mode:

Other Tracking Processes

*Problem Investigation Process
Catawba Nuclear Station*

Number Text

Actual Corrective Action:

Priority: I2 Actual CAC: Q Status: Closed Due Date: 06/29/2005

Extent of Condition Review (originally documented in Problem Description 3/23/2005):

A walk down was performed of all four mini-flow lines (1A, 1B, 2A, 2B) in their entirety, from header to header on elevations 560 and 577. In addition other portions of the KC system pipe and supports in the area were visually examined, including the essential header in the vicinity of the mini-flow connections. No other discrepancies or unusual indications were noted. This condition is considered to be isolated to the 1A mini-flow loop.

Originated By: MDS8363: SHUTT, MARK D Team: DLW2990 Group: MCE Date: 03/30/2005

Signature Type	Indiv	Team	Group	Date
Accepted By:	TIM8390	GTH7317	MCE	03/29/2005
Assigned To:	MDS8363	DLW2990	MCE	03/29/2005
Due Date:	06/29/2005			
Ready For Approval:	MDS8363	DLW2990	MCE	03/30/2005
Approval Assigned To:	DLW2990	DLW2990	MCE	03/30/2005
Approved By:	DLW2990	DLW2990	MCE	04/05/2005

Final and Overall PIP Approval

Responsible Group: MCE Status: Screened

Signature Type	Indiv	Team	Group	Date
Assigned To:			MCE	03/28/2005

Any Supplemental Concurrence Signatures Above Do Not Affect PIP Closure.

Closure Document Type Closure Document No

Attachments

Generic Applicability

Responsible Group: Status:
GO PIP No:

Assessment Remarks:
No Current Signatures For This Section

Failure Prevention Investigation

No FPI Records for this PIP.

Remarks

No Remarks for this PIP.

Maintenance Rule

Responsible Group: MCE Status: Open

Problem Investigation Process
Catawba Nuclear Station

Maintenance Rule SSC

SSC	Description	Risk Significant	Primary System
KC	Component Cooling		No

Equipment Group:

Applicable Unit:

Functional Failure: Yes MPFF: No Repetitive MPFF: No

Functional Failure Comments:

MPFF Comments:

Repetitive MPFF Comments:

Reactor Trip: No Safety System Actuation: No Loss of Heat Decay Removal: No
Force Outage Rate or Plant Transient: No Loss Of Spent Fuel: No

Comments:

Signature	Type	Indiv	Team	Group	Date
Assigned To:		JFM9986	SMS8381	MCE	03/29/2005

End of the Document for PIP No: C-5-1591
The status of this PIP is: Screened
The duration of this PIP was: 5 days

Catawba 1 EOC15 PIP #C-05-02956

*Problem Investigation Process
Catawba Nuclear Station*

PIP Serial No:	Action Category:	LER No:	Other Report:
C-05-02956	4		

Problem Identification

Discovered Time/Date: 19:20 05/20/2005 **Occurred Time/Date:**

Unit(s) Affected:

Unit	Mode	%Power	Unit Status	Remarks
1	NOMODE		1EOC15	

System(s) Affected:

NC Reactor Coolant

Affected Equipment

AWMS Equipment Code	Unit Code	System Code	Type Code	Suffix	ECODE	Manufacturer
CNINC RX0001	1	NC	RX	0001	47611	

Location of Problem:

Bldg: RX Column Line: Elev:

Location Remarks:

Method Used to Discover Problem:

Brief Problem Description:

Ultrasonic examinations performed by Westdyne during the 1EOC15, 10 yr RV ISI have identified five recordable indications in the Unit 1 reactor vessel, hot leg 1D nozzle to safe end weld region.

Detail Problem Description:

Ultrasonic examinations performed by Westdyne during the 1EOC15, 10 yr RV ISI have identified five recordable indications in the Unit 1 reactor vessel, hot leg 1D nozzle to safe end weld region. These indications are surface connected on the interior of the piping in the region of the weld between the carbon steel nozzle forging and the stainless steel buttered safe end. Looking out from the RV centerline, (with 0 deg at the top of the piping) all five indications are between 86 and 100 deg. All flaws are axially oriented. Eddy current has confirmed these indications.

The connection between the RV nozzle and the reactor coolant piping was made by buttering the carbon steel (SA508 Class 2) nozzle with a 309S material. A 308L (low carbon) stainless steel safe end was applied via weld buildup over the buttering. Circumferential Inconel bands were then placed on the inside and outside surfaces. These bands served to reduce the susceptibility of the 309S material to stress corrosion cracking related to the sensitization of the 309S, SS material after RV post weld heat treatment. The safe end was then welded to the cast austenitic stainless steel reactor coolant loop piping. All of these flaws are located within the Inconel band on the inside surface of the piping / nozzle.

Based on Westdyne sizing techniques, four of these five flaws have been evaluated and accepted under ASME XI, IWB-3500 acceptance standards. The remaining flaw has been characterized with a length of 0.89" long and a depth of 0.25". A penalty of 0.064" must be applied to the flaw depth based on the current limitations of sizing ability, thus yielding a 0.31" deep flaw. The initial review of this flaw indicates that the flaw exceeds the IWB-3500 acceptance standards. Further review of this indication is necessary to evaluate the flaw characteristics in conjunction with the applied internal SS and Inconel vessel and nozzle cladding and determine if this flaw is reportable (ie exceeds the ASME XI acceptance limits).

This PIP should be screened as Category 4. A corrective action is needed to review the Westdyne characterization of the remaining flaw and determine if ASME XI, IWB-3500 acceptance limits are satisfied. Corrective action should be completed prior to MODE 4.

Originated By: WOC8363: CALLAWAY, WILLIAM O Team: DLW2990 Group: MCE Date: 05/20/2005

Other Units/Components/Systems/Areas Affected(Y,N,U): N

Problem Investigation Process
Catawba Nuclear Station

stry Plants Affected(Y,N,U): U

Immediate Corrective Actions:

Immediate Corrective Action Documents / Work Orders:

	<u>Indiv</u>	<u>Team</u>	<u>Group</u>	<u>Date</u>
Problem Identified By:	WOC8363	DLW2990	MCE	05/20/2005
Problem Entered By:	WOC8363	DLW2990	MCE	05/20/2005

Screening

Action Category: 4 Root Cause performed? No

OEP No:

Other Report Nos:

Event Codes:

F8	Testing
O2a	ASME Section XI

Screening Remarks:

Screened by the centralized screening team on 5/23/05

Updated By: SRGADMIN: SRG Admin Team: Group: SRG Date: 05/23/2005

Originated By: RSP5945: PURSLEY, R STEVE Team: PAM7334 Group: SRG Date: 05/20/2005

Assignments:

Responsible Groups(s) for Problem Evaluation:	Responsible Group for Present Operability:	N/A
Responsible Group for Report Support Info:		N/A
Responsible Group for Reportability:		N/A
Responsible Group for Overall PIP Approval:	MCE	Mechanical/Civil Eng

<u>Signature</u>	<u>Type</u>	<u>Indiv</u>	<u>Team</u>	<u>Group</u>	<u>Date</u>
Screened By:		RSP5945	PAM7334	SRG	05/20/2005

Present Operability

Responsible Group: Status:

Sys/Comp Operable? (Y,N,C,E,T):

Required Mode:

Comments:

No Current Signatures For This Section

Problem Investigation Process
Catawba Nuclear Station

Reportability

Responsible Group: Status:
Problem Reportable(Y,N,E):
Reportable Per:
Comments:

No Current Signatures For This Section

Investigation Report:

Responsible Group: Act Date:
Investigator: Group:
Due Date:
Date Due to VP or Sta. Mgr:
Date Regulatory or Agency Rpt Due:
Date Investigation Report Approved:
NRC Cause Codes:

Report Support Info:

Responsible Group: Status:
No Current Signatures For This Section

Problem Evaluation

Event Code	Cause Code	Cause Description	Primary	Causing Groups
------------	------------	-------------------	---------	----------------

Problem Evaluation From: N/A

Corrective Actions

CA Seq. No: 1

Resp Group	Status	Ong Group	Event Code	Prop CAC	Cause Code
MCE	Closed	SRG	F8	B3	R

Proposed Corrective Action:
Review the Westdyne characterization of the remaining flaw and determine if ASME XI, IWB-3500 acceptance limits are satisfied.
Corrective action should be completed prior to MODE 4.

Originated By: WOC8363: CALLAWAY, WILLIAM O Team: DLW2990 Group: MCE Date: 05/20/2005
Entered By: RSP5945: PURSLEY, R STEVE Team: PAM7334 Group: SRG Date: 05/20/2005

*Problem Investigation Process
Catawba Nuclear Station*

Signature	Type	Indiv	Team	Group	Date
Approval Assigned To:		PAM7334	PAM7334	SRG	05/20/2005
Ready For Approval:		RSP5945	PAM7334	SRG	05/20/2005
Approved By:		RSP5945	PAM7334	SRG	05/20/2005

General: Outage: 1EOC15 Mode: 4

Other Tracking Processes

Type Number Text

Actual Corrective Action:

Priority: O2 Actual CAC: N Status: Closed Due Date: 06/03/2005

A review of the Westdyne RV ISI call sheets was performed in Calculation CNC-1201.01-00-0025. Indication # 2 was evaluated and found acceptable in accordance with ASME XI, IWB-3430. The acceptance standards of IWB-3514 were satisfied as documented in the calculation. No ASME Code required repairs, replacements, additional examinations, successive examinations nor analytical evaluations are required.

An additional corrective action will be assigned to the MM&P group (NGO) to evaluate the potential exposure effects of the primary water environment to the sensitized stainless steel (309S) buttering resulting from the possibility that the indication extends entirely through the Inconel / stainless cladding. Westinghouse has been contracted to support this effort.

Originated By: WOC8363: CALLAWAY, WILLIAM O Team: DLW2990 Group: MCE Date: 06/01/2005

The subsequent corrective action is not a Mode 4 issue. The new CA will be a further action to pursue any work associated with longer term dispositioning that Duke may elect to take associated with the indications found this Outage. As stated above, all indications were of sufficient sized size to be determined as within the acceptance limits of the ASME Code with no followup actions required.

Last Updated By: DLW2990: WARD, DAVID L Team: DLW2990 Group: MCE Date: 06/01/2005

Signature	Type	Indiv	Team	Group	Date
Due Date:		06/03/2005			
Accepted By:		TIM8390	GTH7317	MCE	05/24/2005
Assigned To:		WOC8363	DLW2990	MCE	05/24/2005
Approval Assigned To:		DLW2990	DLW2990	MCE	06/01/2005
Ready For Approval:		DLW2990	DLW2990	MCE	06/01/2005
Approved By:		DLW2990	DLW2990	MCE	06/01/2005

CA Seq. No: 2

Resp Group	Status	Orig Group	Event Code	Prop CAC	Cause Code
MMP	Closed	MCE	O2a	B3	R

Proposed Corrective Action:

MM&P group (NGO) - David Whitaker - to evaluate the potential exposure effects of the primary water environment to the sensitized stainless steel (309S) buttering resulting from the possibility that the indication extends entirely through the Inconel / stainless cladding.

Originated By: WOC8363: CALLAWAY, WILLIAM O Team: DLW2990 Group: MCE Date: 06/01/2005

This Corrective Action is not a restart issue for Catawba Unit 1. Reference response detailed in CA #1.

Problem Investigation Process
Catawba Nuclear Station

Last Updated By: DLW2990: WARD, DAVID L Team: DLW2990 Group: MCE Date: 06/01/2005

Signature Type	Indiv	Team	Group	Date
Approval Assigned To:	DLW2990	DLW2990	MCE	06/01/2005
Ready For Approval:	DLW2990	DLW2990	MCE	06/01/2005
Approved By:	DLW2990	DLW2990	MCE	06/01/2005

General: Outage: Mode:

Other Tracking Processes
Type Number Text

Actual Corrective Action:

Priority: I2d Actual CAC: Status: Open Due Date: 11/16/2005

Signature Type	Indiv	Team	Group	Date
Accepted By:	JMS8460	CTA7235	MMP	06/06/2005
Assigned To:	DEW4981	CTA7235	MMP	06/06/2005
Due Date:	11/16/2005			

Final and Overall PIP Approval

Responsible Group: MCE Status: Screened

Signature Type	Indiv	Team	Group	Date
Assigned To:			MCE	05/20/2005

Any Supplemental Concurrence Signatures Above Do Not Affect PIP Closure.

Closure Document Type Closure Document No

Attachments

Generic Applicability

Responsible Group: Status:
GO PIP No:

Assessment Remarks:

No Current Signatures For This Section

Failure Prevention Investigation

No FPI Records for this PIP.

Remarks

No Remarks for this PIP.

*Problem Investigation Process
Catawba Nuclear Station*

Maintenance Rule

No Maintenance Rule Records for this PIP.

End of the Document for PIP No: C-5-2956
The status of this PIP is: Screened
The duration of this PIP was: 0 days

Catawba 1 EOC15 ISI Examination Data Sheets

ITEM NUMBERS B05.010.008, B05.010.008A, B05.130.005,
B05.130.005A

WesDyne International
Reactor Vessel Weld Results Summary

CATAWBA UNIT 1

WELD NO.	<u>1RPV-W18-SE</u> <u>AND INC23-01</u> <u>(B05.010.008 &</u> <u>B05.010.008A)</u> <u>AND</u> <u>(B05.130.005 &</u> <u>B05.130.005A)</u>	DESCRIPTION	<u>OUTLET NOZZLE</u> <u>DM WELD @ 338°</u>
----------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------	-----------------------------------------------

LIMITATIONS NO YES COVERAGE = 82.45%

RESULTS NI RI

NO. OF INDICATIONS 5
STATUS 4 CODE ALLOWABLE
AND 1 NON-
ALLOWABLE

EXAM DOCUMENTATION

INDICATION DOCUMENTATION

ANALYSIS LOG

ASSESSMENT SHEET

ACQUISITION LOG

PARAGON HARD COPY

SCAN PRINTOUT

OTHER (specify)

INDICATION LOCATION
SKETCH

COVERAGE BREAKDOWN

WESDYNE ANALYST

J. Selbo

WesDyne International
Reactor Vessel Inservice Examination
Scan Parameter Execution

CUSTOMERDUKE POWER
SITECATAWBA UNIT-1
OUTAGE1E0C15
VESSEL TYPEWestinghouse 4-Loop

WELD IDENTIFICATION - 1RPV-W18-SE

Weld and Scan Type = NOZZLE SAFE END PERPENDICULAR SCAN

Scan Data File Name = WN338-SE-PRP-DET-ON

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	AZIMUTH (DEGREES)	DEPTH (IN)
START CW :	179.90	109.98
END CCW :	-179.90	109.98
START CW :	179.90	125.50
END CCW :	-179.90	125.50

Index Size (in) = 0.24
Number of Indexes Specified = 373
Number of Indexes Completed = 373

	Time	Date
Scan Started	08:04:14.851	05/18/05
Scan Completed	08:45:34.936	05/18/05

Robot Operator Signature *Carl J. Riley* DATE 05-18-05

PARAGON Operator Signature *[Signature]* DATE 5-18-05

Comments _____

WesDyne International
Reactor Vessel Inservice Examination
Scan Parameter Execution

CUSTOMERDUKE POWER
SITECATAWBA UNIT-1
OUTAGE1E0C15
VESSEL TYPEWestinghouse 4-Loop

WELD IDENTIFICATION - 1RPV-W18-SE

Weld and Scan Type = NOZZLE SAFE END PARALLEL SCAN
Scan Data File Name = WN338-SE-PAR-DET-ON

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	DEPTH (IN)	AZIMUTH (DEGREES)
START CW :	122.00	179.90
END CCW :	122.00	-179.90
START CW :	127.50	179.90
END CCW :	127.50	-179.90

Index Size (in) = 0.08
Number of Indexes Specified = 70
Number of Indexes Completed = 70

	Time	Date
Scan Started	09:56:54.957	05/18/05
Scan Completed	11:14:21.408	05/18/05

Robot Operator Signature *Carl J. Hill* DATE 05-18-05
PARAGON Operator Signature *[Signature]* DATE 5-18-05

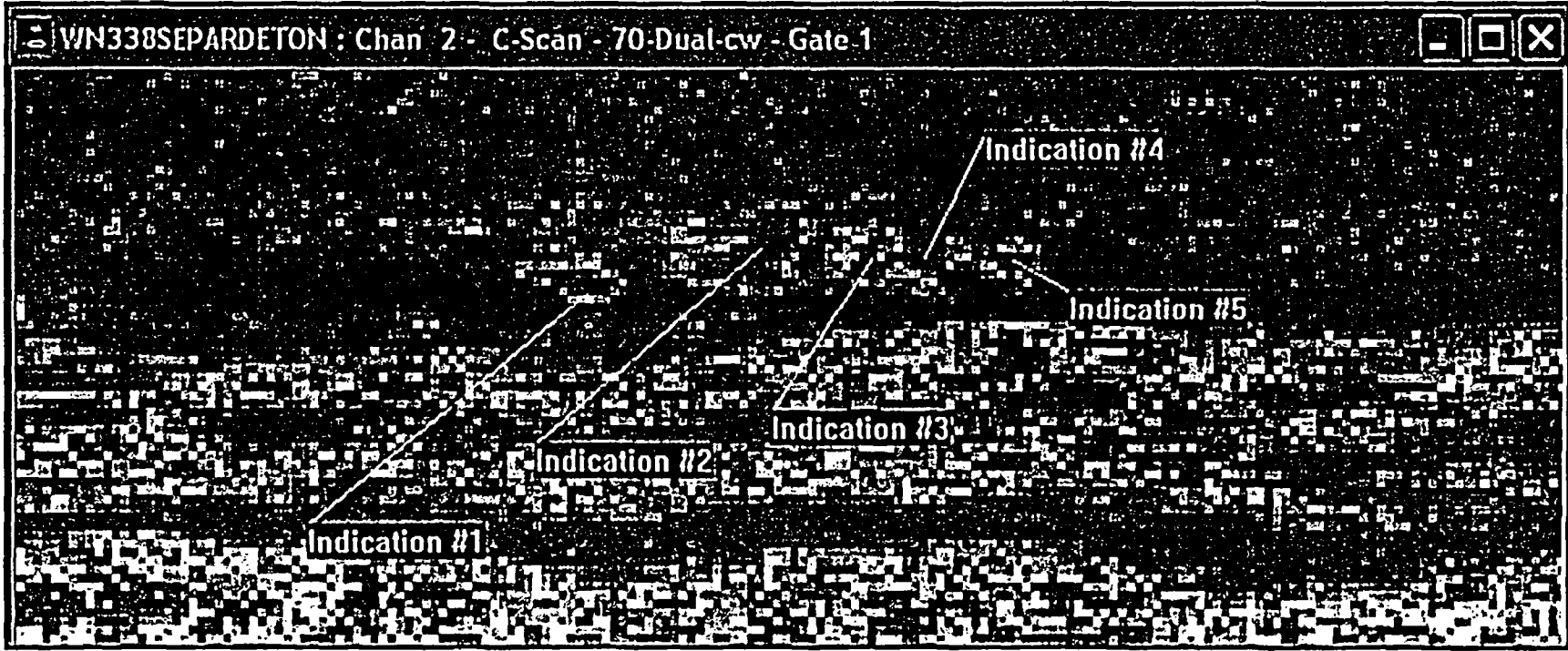
Comments WN338-SE-PAR-DET-GU

INDICATION DATA SHEET # WN338-1

Utility:	DUKE POWER	Plant:	CATAWBA	Unit:	1	Outage:	1EOC15
Procedure No:	PDI-ISI-254-SE			Procedure Rev. No.:	2	PARAGON Anal. Release:	6.1.3
Applicable Analysis Log Sheet No:	WN338-1	Applicable Acquisition Log Sheet No:	WN338-1	Applicable Sensitivity Calibration Data Sheet No:	SE-01		
Weld No:	1RPV-W18-SE & 1NC23-01	Axial Scan Increment (deg):	0.97°	Axial Scan Increment (in.):	0.25"	Circ. Scan Increment (in.):	0.8"

UT Examiner Signature: *JA Sch* Level: III Date: 5/18/05

File Name	Indication No.	Channel No.	Beam Angle (deg.)	Beam Direction (in or out, CW or CCW)	Volumetric (V) or Planar (P)	1 st Sweep #, N _{1st sweep}	Last Sweep #, N _{last sweep}	Total # of Sweeps, N _{total}	1 st Sweep (deg or in.)	Last Sweep (deg or in.)	Center of Indication			Length, L _w (in.)	Through-Wall Depth (TW) (in.)	Ligament (in.)
											R _{center} (in.)	θ _{center} (deg)	Z _{center} (in.)			
WN338-SE-PAR-DET-ON	1	2	70	CW	P	21	27	6	121.1	121.58	121.4	74.28	0.19	0.48	0.19	0
WN338-SE-PAR-DET-ON	2	2	70	CW	P	16	26	11	120.7	121.5	121.18	78.93	0.25	0.88	0.25	0
WN338-SE-PAR-DET-ON	3	2	70	CW	P	18	26	9	120.86	121.5	121.26	83.88	0.21	0.72	0.21	0
WN338-SE-PAR-DET-ON	4	2	70	CW	P	21	27	7	121.1	121.58	121.26	85.76	0.22	0.56	0.22	0
WN338-SE-PAR-DET-ON	5	2	70	CW	P	20	25	6	121.02	121.42	121.26	87.64	0.21	0.48	0.21	0



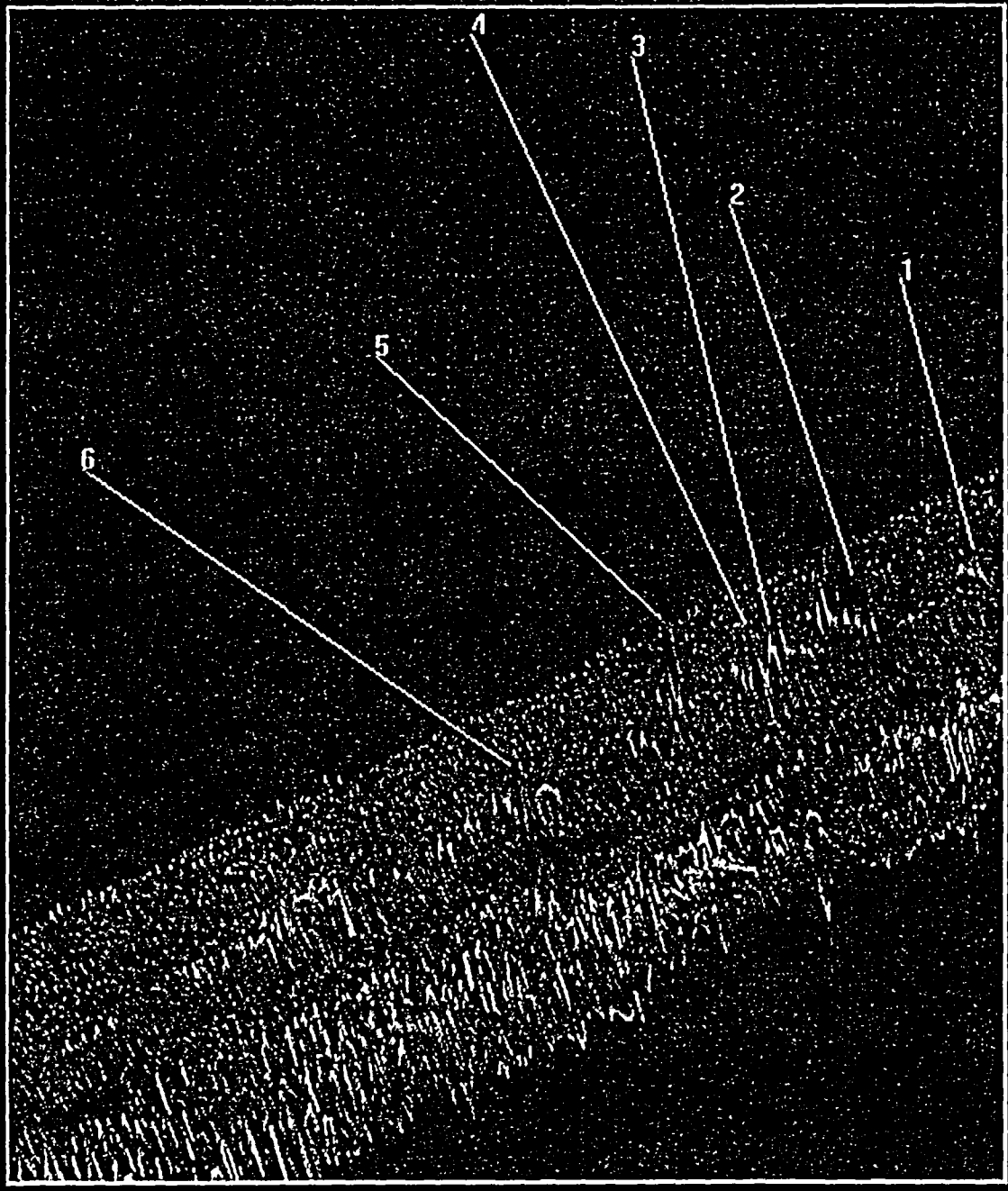
ET INDICATION ASSESSMENT SHEET #

WN338-1

Utility:	DUKE POWER	Plant:	CATAWBA	Unit:	1	Outage:	1EOC15							
Procedure No:	WDI-STD-146					Procedure Rev. No.:	4							
Weld No:	1RPV-W18-SE AND 1NC23-01	Scan Increment (Inch):	0.08:	Scan Increment (deg):	0.08°	Total Number of Sweeps:	70							
ET Examiner Signature:	<i>Wade H. Hunt</i> Level III					Date:	5/18/05							
File Name	Disk No	Indication No.	Probe No.	Scan Direction (in/out)	1 st Sweep, N _{1st sweep}	Last Sweep, N _{last sweep}	Total Number of Sweeps for Indication, N _{total}	Indication Parameters				Center of Indication		Length, L (inch)
								Sweep #	Data Point #	250 kHz Frequency		R _{vcenter} (inch)	θ _{ncenter} (deg)	
										Amp. (%)	Phase (deg)			
WN338-SE-PAR-DET-ON	N/A	1	4	CIRC	28	30	3	30	593	63.0	244°	121.74°	72.3°	0.24°
WN338-SE-PAR-DET-ON	N/A	2	4	CIRC	21	31	11	27	670	133.0	254°	121.58°	78.4°	0.88°
WN338-SE-PAR-DET-ON	N/A	3	4	CIRC	24	30	7	25	716	99	263°	121.58°	82.0°	0.56°
WN338-SE-PAR-DET-ON	N/A	4	4	CIRC	25	30	6	29	743	86.4	267°	121.66°	84.2°	0.48°
WN338-SE-PAR-DET-ON	N/A	5	4	CIRC	23	28	6	25	782	125.0	261°	121.50°	87.3°	0.48°
WN338-SE-PAR-DET-ON	N/A	6	4	CIRC	29	34	6	33	903	90.5	258°	121.98°	96.9°	0.48°

WN338SEPARDETON:1 - EddyCurrent 3

Channel 4 # 250 Khz 4 0



DATA ACQUISITION LOG # WN338-2

Utility:	DUKE POWER	Plant:	CATAWBA	Unit:	1	Outage:	1EOC15			
Procedure No:	PDI-ISI-254-SE						Procedure Rev. No.:	2		
Applicable Sensitivity Calibration Data Sheet No:	SE-CIRC-01									
UT Examiner Signature:	<i>JAS for J Nelson</i>					Level:	II	Date:	5/20/05	
Data File Name	Weld No.	Index Start	Scan Start	Total # of Sweeps	'AVE' Signal Amplitude	Gain Adj. (dB)	Operator Initials	Date (mm/dd/yy)	Time	Comments
WN338-SE-SIZ-PAR-ON	1RPV-W18-SE & 1NC23-01	117"	0"	130	11	0	DN	5/20/05	01:00	
WN338-SE-SIZ-PAR-ONA	1RPV-W18-SE & 1NC23-01	117"	0"	100	11	+10	DN	5/20/05	03:10	

WesDyne International
Reactor Vessel Inservice Examination
Scan Parameter Execution

CUSTOMER:DUKE POWER
SITECATAWBA UNIT-1
OUTAGEiE0C15
VESSEL TYPEWestinghouse 4-Loop

WELD IDENTIFICATION - 1RPV-W18-SE

Weld and Scan Type = NOZZLE SAFE END PARALLEL SCAN

Scan Data File Name = WN338-SE-SIZ-PAR-ON

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	DEPTH (IN)	AZIMUTH (DEGREES)
START CW :	117.00	179.90
END CCW :	117.00	-179.90
START CW :	127.25	179.90
END CCW :	127.25	-179.90

Index Size (in) = 0.08
Number of Indexes Specified = 130
Number of Indexes Completed = 130

	Time	Date
Scan Started	22:22:34.350	05/19/05
Scan Completed	00:47:20.550	05/20/05

Robot Operator Signature Wesley Pope DATE 5-19-05
PARAGON Operator Signature [Signature] DATE 5-19-05

Comments WN338-SE-SIZ-PAR-ON

WesDyne International
Reactor Vessel Inservice Examination
Scan Parameter Execution

CUSTOMERDUKE POWER
SITECATAWBA UNIT-1
OUTAGE1E0C15
VESSEL TYPEWestinghouse 4-Loop

WELD IDENTIFICATION - 1RPV-W18-SE

Weld and Scan Type = NOZZLE SAFE END PARALLEL SCAN

Scan Data File Name = WN338-SE-SIZ-PAR-ON

SCAN AREA PER THE ORIGINAL TECHNIQUES

UDRPS SCAN AREA DEFINITION	DEPTH (IN)	AZIMUTH (DEGREES)
START CW :	117.00	179.90
END CCW :	117.00	-179.90
START CW :	127.25	179.90
END CCW :	127.25	-179.90

Index Size (in) = 0.08
Number of Indexes Specified = 130
Number of Indexes Completed = 101

	Time	Date
Scan Started	01:18:11.858	05/20/05
Scan Completed	03:11:23.882	05/20/05

Robot Operator Signature *[Signature]* DATE 5-20-05
PARAGON Operator Signature *[Signature]* DATE 5-24-05

Comments WN338-SE-SIZ-PAR-ON

ANALYSIS LOG # WN338-2

Utility: DUKE POWER		Plant: CATAWBA			Unit: 1	Outage: 1EOC15		
Procedure No: PDI-ISI-254-SE					Procedure Rev. No.: 2			
Weld No: 1RPV-W18-SE AND 1NC23-01				Weld Type: OUTLET NOZZLE DM WELD @ 338°		Exam. Surface: ID		
Applicable Sensitivity Calibration Data Sheet No: SE-CIRC-01		Acquisition Log No: WN338-2		PARAGON Anal. Release:		6.1.3		
UT Examiner Signature: <i>J. Selby / J. Selby for D. Nelson</i>				Level: III / II		Date: 5/20/05		
Data File Name		UT Channel No.	Beam Angle / Beam Direction <small>(In or out, CW or CCW)</small>	NI	RI	RI Resolution / Comments / Limitations		Examiner ID / Date
WN338-SE-SIZ-PAR-ONA		1	45°L / CW		X			DN / 5/20/05
WN338-SE-SIZ-PAR-ONA		2	45°L / CCW		X			DN / 5/20/05
WN338-SE-SIZ-PAR-ONA		3	60°L / CW		X			DN / 5/20/05
WN338-SE-SIZ-PAR-ONA		4	60°L / CCW		X			DN / 5/20/05
WN338-SE-SIZ-PAR-ONA		5	37°L / CW	X				DN / 5/20/05
WN338-SE-SIZ-PAR-ONA		6	37°L / CCW	X				DN / 5/20/05


INDICATION DATA SHEET # WN338-2

Utility:	DUKE POWER	Plant:	CATAWBA	Unit:	1	Outage:	1EOC15
Procedure No:	PDI-ISI-254-SE			Procedure Rev. No.:	2	PARAGON Anal. Release:	6.1.3
Applicable Analysis Log Sheet No:	WN338-2	Applicable Acquisition Log Sheet No:	WN338-2	Applicable Sensitivity Calibration Data Sheet No:	SE-CIRC-01		
Weld No:	1RPV-W18-SE & 1NC23-01	Axial Scan Increment (deg):	N/A	Axial Scan Increment (in.):	N/A	Circ. Scan Increment (in.):	0.080"


UT Examiner Signature: *J. Sch* Level: III Date: 5/20/05

File Name	Indication No.	Channel No.	Beam Angle (deg.)	Beam Direction (in or out, CW or CCW)	Volumetric (V) or Planar (P)	1 st Sweep #, N _{1st sweep}	Last Sweep #, N _{last sweep}	Total # of Sweeps, N _{total}	1 st Sweep (deg or in.)	Last Sweep (deg or in.)	Center of Indication			Length, L _n (in.)	Through-Wall Depth (TW) (in.)	Ligament (in.)
											R _{center} (in.)	θ _{center} (deg)	Z _{center} (in.)			
WN338-SE-SIZ-PAR-ON	2	2	45	CCW	P	82	89	8	120.98	121.54	121.27	79.6	0.25	0.64	0.25	0
WN338-SE-SIZ-PAR-ON	3	2	45	CCW	P	89	90	2	121.46	121.54	121.54	82.45	0.21	0.16	0.21	0
WN338-SE-SIZ-PAR-ON	5	2	45	CCW	P	80	81	2	120.82	120.9	120.85	87.3	0.21	0.16	0.21	0

INDICATION ASSESSMENT SHEET # WN338-1

Utility:	DUKE POWER	Plant:	CATAWBA	Unit:	1	Outage:	1EOC15									
Procedure No:	PDI-ISI-254-SE						Procedure Rev. No.:	2								
UT Examiner Signature:							Level:	III								
						Date:	5/20/05									
File Name	Weld #	Indication Data Sheet # (Indication #)	Beam Angle (deg.)	Beam Direction (in or out, CW or CCW)	Volumetric (V) or Planar (P)	Applicable 't' (in.)	Flaw Depth (min/max) (in.)	Flaw Length - 'L' (in.)	Surf. or Sub.	'S' Dimension (in.)	'Y' Value (S/a)	'2a' Dim./a' Dim. (in.)	'a/L' Value (0.50 max)	'a/t' (%)	Allowable 'a/t%' per ASME Code, Section XI	Acc./Rej. ('Y' or 'N')
WN338-SE-PAR-DET-ON	1RPV-W18-SE AND 1NC23-01	WN338-1 #1	70	CW	P	2.58	0 0.25*	0.48	SURF	0	0	0.25* 0.13	0.50	9.7	11.1	Y
WN338-SE-SIZ-PAR-ONA	1RPV-W18-SE AND 1NC23-01	WN338-2 #2	45	CCW	P	2.58	0 0.31*	(1) 0.88	SURF	0	0	0.31* 0.16	0.35	12.0	10.6	N
WN338-SE-SIZ-PAR-ONA	1RPV-W18-SE AND 1NC23-01	WN338-2 #3	45	CCW	P	2.58	0 0.28*	(1) 0.56	SURF	0	0	0.28* 0.14	0.50	10.9	11.1	Y
WN338-SE-PAR-DET-ON	1RPV-W18-SE AND 1NC23-01	WN338-1 #4	70	CW	P	2.58	0 0.28*	0.56	SURF	0	0	0.28* 0.14	0.50	10.9	11.1	Y
WN338-SE-SIZ-PAR-ONA	1RPV-W18-SE AND 1NC23-01	WN338-2 #5	45	CCW	P	2.58	0 0.28*	(1) 0.48	SURF	0	0	0.28* 0.14	0.50	10.9	11.1	Y

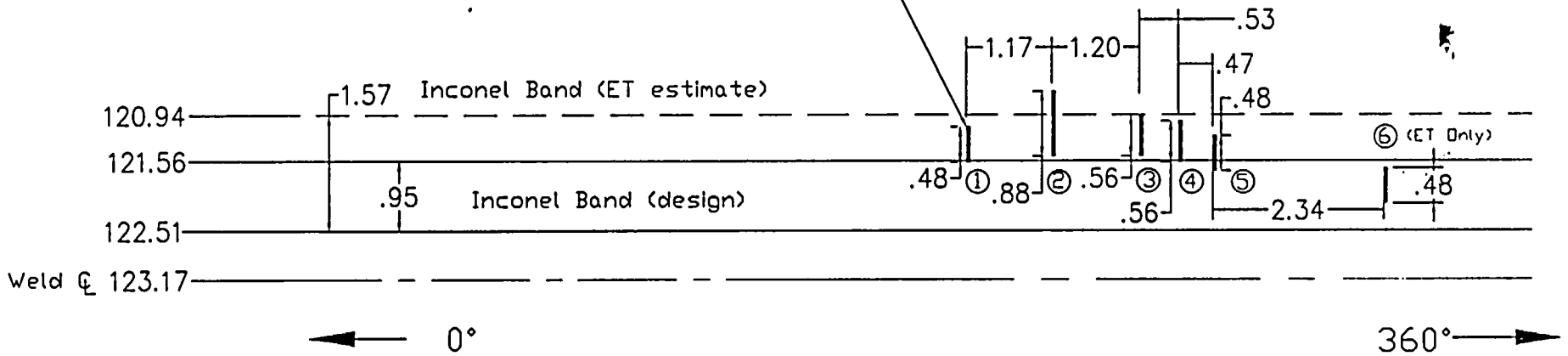
Notes: Y=CODE ALLOWABLE PER ASME 1989; IWB-3514-2.
 N=NON-ALLOWABLE PER ASME 1989; IWB-3514-2.
 *=INCLUDES +0.064" ADDED AS COMPENSATION FOR PDI QUALIFICATION RMS ERROR.
 (1) LENGTH FROM EDDY CURRENT.

 6-9-05

Reviewed by WSH 5-23-05

Toward Vessel

Theta Location
74.28°

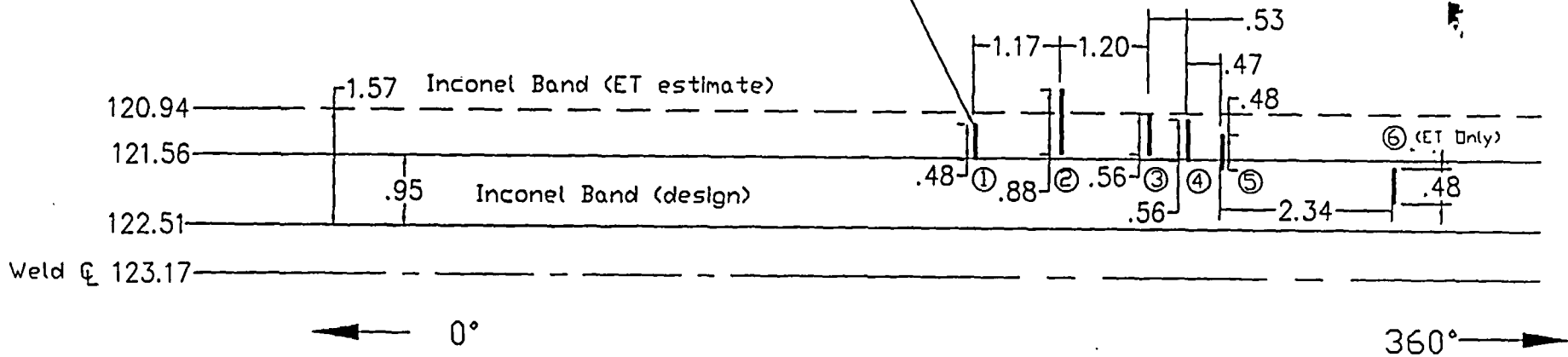


0.2525 inches per degree

CATAWBA 1 DCP	
WesDyne International	
SHEET TITLE	338° OUTLET SAFE END INDICATIONS
Weld # 1RPV-W18-SE & INC23-01	
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED	

Toward Vessel

Theta Location
74.28°



0.2525 inches per degree

CATAWBA 1 DCP	
WesDyne International	
SHEET TITLE	338° OUTLET SAFE END INDICATIONS
Weld # 1RPV-W18-SE & 1NC23-01	
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED	



CATAWBA UNIT 1
RVISI 2005
WELD # 1RPV-W18-SE_1NC23-01
ITEM #'s B05.010.008, 008A, B05.130.005, 005A
INDICATION #1
TWE = 0.19"
L = 0.48"
X POSITION = 121.4"

CODE ALLOWABLE PER IWB-3512-2

Z= 0.188, A= 47%, Y=74.277

: Chan 2 - Tops - 45-Dual-ccw



CATAWBA UNIT#1
RVISI 2005
WELD # 1RPV-W18-SE_1NC23-01
ITEM #'s B05.010.008, 008A_B05.130.005, 005A
INDICATION #2
TYE = 0.25"
L = 0.64"
X POSITION = 121.27"

NON-ALLOWABLE PER IWB-3514-2

Z= 0.250, A= 51%, Y=79.038



CATAWBA UNIT#1
RVISI 2005
WELD # 1RPV-W18-SE 1NC23-01
ITEM #'s B05.010.008, 008A B05.130.005, 005A
INDICATION #3
TWE = 0.21"
L = 0.72"
X POSITION = 121.54"

NON-ALLOWABLE PER IWB-3514-2

Z= 0.211, A= 47%, Y=82.455



CATAWBA UNIT 1
RVISI 2005
WELD # 1RPV-W18-SE_1NC23-01
ITEM #'s B05.010.008, 008A_B05.130.005, 005A
INDICATION #4
TWE = 0.22"
L = 0.56"
X POSITION = 121.26"

CODE ALLOWABLE PER IWB-3512-2

Z= 0.220, A= 43%, Y=85.566

WN338SESIZPARONA : Chan 2 - Tops - 45-Dual-ccw



CATAWBA UNIT #1
RVISI 2005
WELD #1RPV-W18-SE 1NC23-01
ITEM #'s B05.010.008, 8A B05.130.005, 005A
INDICATION #5
L = 0.16"
X POSITION = 120.85"

CODE ALLOWABLE PER IWB-3514-2

Z= 0.211, A= 60%, Y=88.988

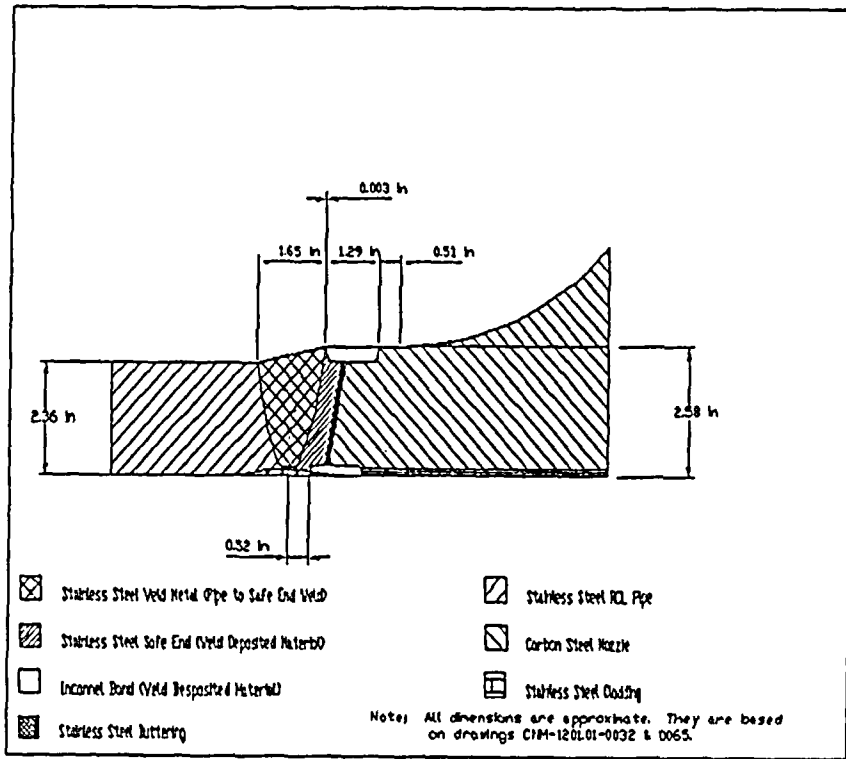
TWE = 0.21"
SAS 5/23/05

UT / ET CORRELATION

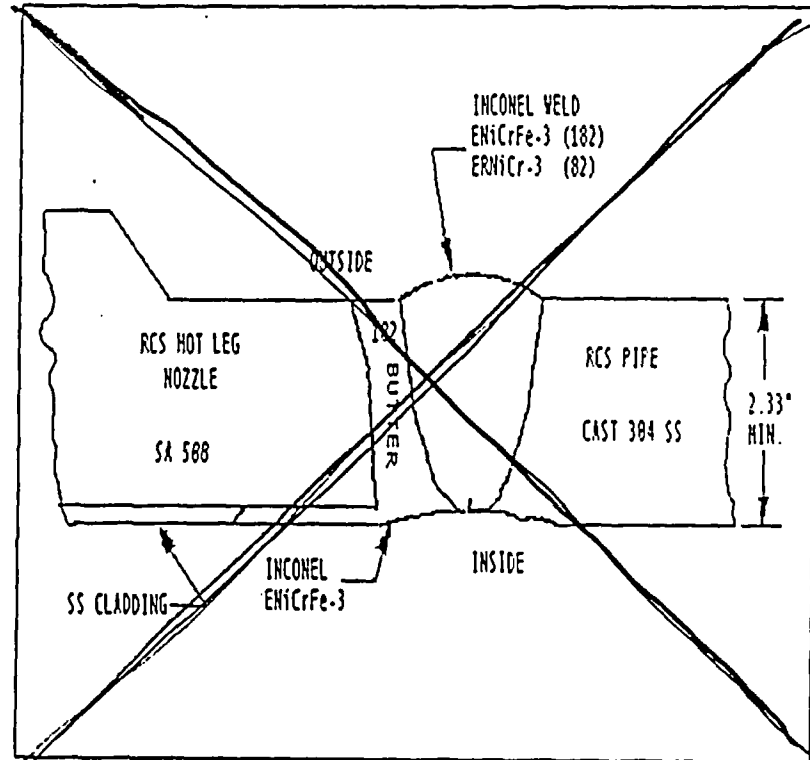
Indication #	Method	Θ Position (center)	Start Y position	End Y position	Length	Comments
			- 110A4 -			
1	UT	74.28°	121.10"	121.58"	0.48"	
	ET	72.30°	121.66"	121.82"	0.24"	
2	UT	78.93°	120.70"	121.50"	0.88"	
	ET	78.40°	121.10"	121.90"	0.88"	
3	UT	83.68°	120.86"	121.50"	0.72"	
	ET	82.00°	121.34"	121.82"	0.56"	
4	UT	85.76°	121.10"	121.58"	0.56"	
	ET	84.20°	121.42"	121.82"	0.48"	
5	UT	87.64°	121.02"	121.42"	0.48"	
	ET	87.30°	121.26"	121.66"	0.48"	
6	UT					NOT SEEN
	ET	96.90°	121.74"	122.14"	0.48"	

Nozzle - Safe End - Piping Construction Details

Catawba Unit #1, MNS #2 Hot Leg Nozzle/Safe End Details



Catawba Unit #2, MNS #1 Hot Leg Nozzle/Safe End Details



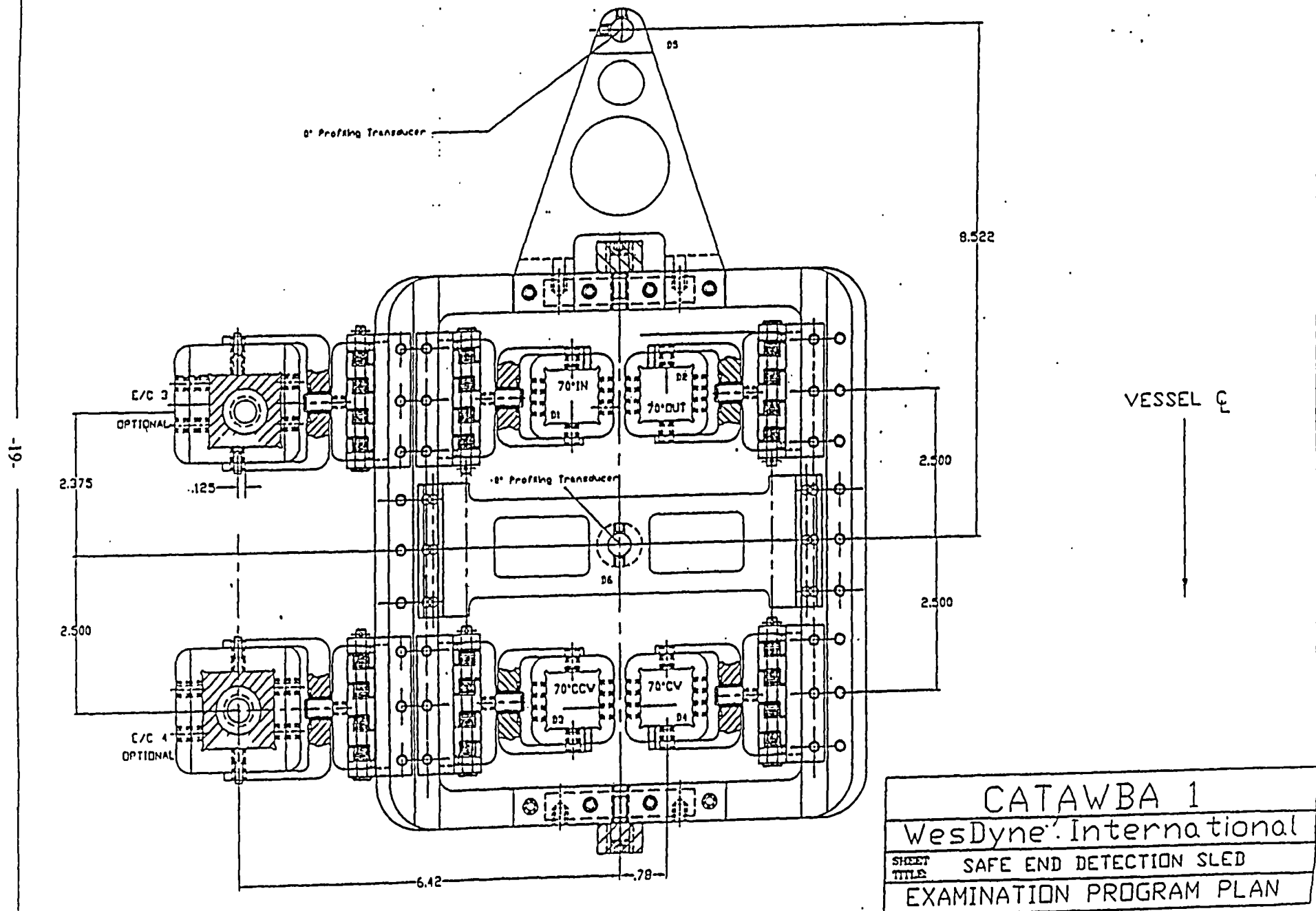
+ .06 in

.18 in
- .125 in
= .06 in

UT / ET CORRELATION

Indication #	Method	Θ Position (center)	Start Y position	End Y position	Length	Comments
1	UT	74.28°	121.10"	121.58"	0.48"	
	ET	72.30°	121.66"	121.82"	0.24"	
2	UT	78.93°	120.70"	121.50"	0.88"	
	ET	78.40°	121.10"	121.90"	0.88"	
3	UT	83.68°	120.86"	121.50"	0.72"	
	ET	82.00°	121.34"	121.82"	0.56"	
4	UT	85.76°	121.10"	121.58"	0.56"	
	ET	84.20°	121.42"	121.82"	0.48"	
5	UT	87.64°	121.02"	121.42"	0.48"	
	ET	87.30°	121.26"	121.66"	0.48"	
6	UT					NOT SEEN
	ET	96.90°	121.74"	122.14"	0.48"	

Westinghouse Proprietary Class 2C



CATAWBA 1

WesDyne International

SHEET TITLE SAFE END DETECTION SLED

EXAMINATION PROGRAM PLAN

5.0 Owner's Report for Repair / 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.

The NIS-2 forms included in this section were completed for work performed during this report period.

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

PIP #C-04-02215 was written on May 6, 2004 to document that a NIS-2 Form for the NV System Valve 1NV338 Disc that was replaced during the EOC14 Refueling Outage. The NIS-2 Form had not been submitted in time to support the 90 day time frame submittal requirement of the Catawba 1 EOC14 ISI Summary Report. A revised EOC14 Section XI Repair/Replacement Activities Log and the NV System Valve 1NV338 Replacement Disc NIS-2 Form is included in this section of this report. Reference Section 1.3 for additional information. A copy of PIP #C-04-02215 is included in this section of the report.

Work Order	Code Class	Sys	MOD No.	Description	Repair, Replacement	Flaw Indication Maint/ ISI (*Yes No)	Owner Final	ANII Final
98440711-21	A	NC	NA	Replace Spare Valve	Replacement	No	12/6/2004	1/13/2005
98636132-05	A	NC	NA	Disc for Valve 1NC-29	Replacement	No	6/13/2005	6/20/2005
98649526-01	A	NV	NA	Load Pin for S/R 1-R-NV-1188	Replacement	No	7/7/2005	7/12/2005
98683543-04	A	NC	NA	Bolting for S/R 1-R-NC-2320	Replacement	No	7/7/2005	7/12/2005
98683598-05	A	NC	NA	Valve 1NC-003	Replacement	No	6/13/2005	6/20/2005
98728678-01	A	NI	NA	Seal Weld Valve 1NI19	Replacement	No	6/13/2005	6/20/2005
98440714-05	B	NI	CE61612	NI Piping	Replacement	No	12/9/2004	1/13/2005
98453424-04	B	ND	NA	Offsite Repair of ND Stuffing Box	Repair	No	5/3/2004	5/6/2004
98588027-01	B	NV	NA	Disc for Valve 1NV338	Replacement	No	5/6/2004	5/6/2004
98640136-01	B	CA	NA	1CA190 valve cover	Replacement	No	8/15/2005	8/17/2005
98644720-37	B	NS	11432/01	Containment Spray HX "1A"	Replacement	No	7/28/2005	8/1/2005
98644720-43	B	NS	11432/01	NS HX "1A" Piping	Replacement	No	7/27/2005	8/2/2005
98647944-01	B	NV	NA	Valve 1NV-235	Replacement	No	3/29/2004	5/6/2004
98647944-06	B	NV	NA	Disc for Valve 1NV-235	Replacement	No	7/6/2004	7/22/2004
98668640-01	B	NV	NA	Valve 1NV-294 Plug Assembly	Replacement	No	6/13/2005	6/20/2005
98668644-01	B	NV	NA	Valve 1NV-232	Replacement	No	7/7/2005	7/12/2005
98668650-01	B	SM	NA	Valve 1SM-19	Replacement	No	7/26/2005	7/26/2005
98668763-01	B	NV	NA	Replace Valve 1NV-235	Replacement	No	7/6/2004	7/22/2004
98668763-05	B	NV	NA	Valve Disc for 1NV-235	Replacement	No	2/14/2005	2/14/2005
98669062-01	B	NV	CE-100184	Valve 1NV-233 Disc	Replacement	No	6/3/2005	6/28/2005
98670596-01	B	NV	NA	Valve 1NV-849 Plug Assembly	Replacement	No	6/13/2005	6/20/2005
98684801-01	B	NV	NA	Valve 1NV-290 Disc	Replacement	No	6/3/2005	6/27/2005
98688771-10	B	NS	CD100115	NS Test Loop A Train Piping	Replacement	No	8/2/2005	8/9/2005
98688781-11	B	NS	CD100115	NS Test Loop B Train Piping	Replacement	No	8/3/2005	8/9/2005
98690544-08	B	SV	NA	Valve 1SV-19 Plug Assembly	Replacement	No	3/8/2005	3/8/2005
98698971-01	B	SM	NA	Bolting for Valve 1SM-3	Replacement	No	6/13/2005	6/21/2005
98698972-01	B	SM	NA	Bolting for Valve 1SM-5	Replacement	No	6/14/2005	6/21/2005
98712333-14	B	CA	CD100262	Valve 1CA-57	Replacement	No	7/29/2005	8/1/2005
98712362-14	B	CA	NA	Valve 1CA-61	Replacement	No	7/25/2005	7/25/2005
98714044-01	B	ND	NA	RHR HX 1A Bolting	Replacement	No	2/23/2005	3/1/2005
98714044-04	B	ND	NA	RHR HX 1A Bolting	Replacement	No	3/31/2005	4/4/2005

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

1a Date 12/06/04

Sheet 1 of 1

Address 526 S. CHURCH STREET. CHARLOTTE N.C. 28201-1006

2. Plant CATAWBA NUCLEAR STATION

2a Unit 1 2 3 Shared (specify Units)

Address 4800 CONCORD RD. YORK, S.C. 29745

3. Work Performed By Duke Power Company

3a Work Order # 98440711-21

Address 526 S. Church St. Charlotte, N.C. 28201-1006

Type Code Symbol Stamp N/A Authorization No. N/A

3b NSM or MN # NA

Expiration Date N/A

4 Identification of System NC REACTOR COOLANT SYSTEM

Class A

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Valve Disc	Dresser	AAC-19	NA	For Spare Valve with S/N BS-02872	NA	Replaced	No
B	Valve Disc	Dresser	AAC-78	NA	For Spare Valve with S/N BS-02872	NA	Replacement	No
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 Offsite Spare Valve Repair_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. Nominal Operating Pressure deg.F. Other Exempt

9. Remarks _ Code Cases _ NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 12/16, 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 Province of NORTH CAROLINA and employed by HSB I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 9-30-04 to 1-13-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Inspector's Signature

Commissions NC 978

Date 1-13, 20-05

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 N.C. 28201-1006

1a Date 12/09/04

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98440714-05

3b NSM or MN # CE61612

4 Identification of System NI SAFETY INJECTION SYSTEM

Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Pipe/Fittings	Duke Power Co.	C-1NI	128	1 1/4" Pipe- SA106, Pipe Cap- SA105, Cplg.- SA105, 90 ell- SA105	NA	Replacement	No
B					Tee- SA105		-	-
C	Pipe Welds	Duke Power Co.	C-1NI	128	Welds #1201.05-0075-1B3 1B4 1B5 1B6 1B7 1B8 1B9	2004	Replacement	No
D							-	-
E							-	-
F							-	-

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 reports 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 Lube Oil Piping

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases __N-416-2 USING SECT. III 1992 NDE_Pressure Test not required due to line is under atmospheric pressure.

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed Paul Smith TECH SPEC Date 12/9, 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 Province of NORTH CAROLINA and employed by HSB I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 8-4-04 to 1-13-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Inspector's Signature Robert McMillan Commissions NC 978

Date 1-13, 2005

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 N.C. 28201-1006

1a Date 5/04/04

Sheet / of /

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98453424-04

3b NSM or MN # NA

4 Identification of System
ND RESIDUAL HEAT REMOVAL SYSTEM

Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Stuffing Box Extension	Ingersoll-Rand	78890	NA	Weld Alignment Pads to Stuffing Box	NA	Repaired	No
B							-	-
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 Offsite Repair to Spare RNR Pump_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. Nominal Operating Pressure deg.F. Other Exempt

9. Remarks _ Code Cases ___NONE_Pump was repaired offsite by Flowserve.

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 5/04, 20 04
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NORTH CAROLINA and employed by HSB I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 10-8-03 to 5-6-04 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
Inspector's Signature

Commissions NC 978

Date 5-6, 20 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 N.C. 28201-1006

1a Date 5/10/04

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98588027-01

3b NSM or MN # NA

4 Identification of System
NV CNEMICAL VOLUME CONTROL SYSTEM

Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Valve Disc	Anchor Darling	NA	NA	For Valve INV338 with SN# E1581-51-1 and NB# 694	NA	Replaced	No
B	Valve Disc	Anchor Darling	See attached Data Report	NA	Valve INV338	NA	Replacement	No
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 Replace Disc for INV338_

8. Test Conducted: Hydrostatic Pressure Pneumatic Test Temp. Nominal Operating Pressure deg.F. Other Exempt

9. Remarks _ Code Cases ___NONE_ _Reference PIP C-04-2215

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 5/10 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 Province of NORTH CAROLINA and employed by HSB LAND I Company of Connecticut have inspected the components described in this Owners Report during the period 11-15-03 to 5-6-04 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Inspector's Signature

Commissions NC 978

Date 5-10 2004

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 N.C. 28201-1006

1a Date 6/13/05

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98636132-05

3b NSM or MN # NA

4 Identification of System NC REACTOR COOLANT SYSTEM Class A

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Vee Ball Assembly	Fisher	NA	NA	Valve tag 1NC-29	NA	Replaced	No
B	Vee Ball Assembly	Fisher	AD9411-1	NA	Valve Tag 1NC-29	NA	Replacement	No
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 I/R Valve INC-29_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases _ NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 6/13, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-14-05 to 6-20-05 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions NC 978
Inspector's Signature

Date 6-20, 2005

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

1a Date 8/16/05

Sheet 1 of 1

Address 526 S. CHURCH STREET. CHARLOTTE N.C. 28201-1006

2. Plant CATAWBA NUCLEAR STATION

2a Unit 1 2 3 Shared (specify Units)

Address 4800 CONCORD RD. YORK, S.C. 29745

3. Work Performed By Duke Power Company

3a Work Order # 98640136-01

Address 526 S. Church St. Charlotte, N.C. 28201-1006

Type Code Symbol Stamp N/A Authorization No. N/A

3b NSM or MN # NA

Expiration Date N/A

4 Identification of System CA AUXILIARY FEEDWATER SYSTEM Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Valve Cover	Flowserve	TX5-3	NA	For valve 1CA190	NA	Replaced	No
B	Valve Cover	Flowserve	HAP-4-9	NA	For valve 1CA190	NA	Replacement	No
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 I/R Leak around ICA190 valve cover._

8. Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt
Pressure 1156 psig Test Temp. 442 deg.F.

9. Remarks _ Code Cases __N-416-2 USING SECT. III 1992 NDE_ Pressure Test was performed on work order 98742786-01. Ref PIP C-05-4782. _____

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed Paul L. Smith TECH SPEC Date 8/16 ,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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-16-05 to 8-17-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert McFall

Inspector's Signature

Commissions NC 978

Date 8-17 ,2005

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 N.C. 28201-1006

1a Date 7/28/05

Sheet 1 of 2

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98644720-37

3b NSM or MN # 11432/01

4 Identification of System NS CONTAINMENT SPRAY SYSTEM Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Heat Exchanger	YUBA	74-N-008-2A	3324	Containment Spray Heat Exchanger "1A"	1978	Replaced	Yes
B	Heat Exchanger	Joseph Oat Corp.	2636C	3456	Containment Spray Heat Exchanger "1A"	2005	Replacement	Yes
C							-	-
D							-	-
E							-	-
F							-	-

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 N.C. 28201-1006

1a Date 7/28/05

Sheet 2 of 2

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98644720-37

3b NSM or MN # 11432/01

4 Identification of System NS CONTAINMENT SPRAY SYSTEM Class NF

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Sway Strut	Anvil International	2004-1015	NA	1-E-NS-0103	2004	New	Yes
B	Sway Strut	Anvil International	2004-1016	NA	1-E-NS-0103	2004	New	Yes
C	Sway Strut	Anvil International	2004-1017	NA	1-E-NS-0103	2004	New	Yes
D	Sway Strut	Anvil International	2004-1018	NA	1-E-NS-0103	2004	New	Yes
E	Brackets	Anvil International	NA	NA	1-E-NS-0103	NA	New	No
F	Welds	Duke Power Co.	C-1NS	118	Weld #1-E-NS-103-1 thru 8	2005	New	No

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 reports 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 Replace Containment Spray HX 1A_

8. Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt
Pressure 252 psig Test Temp. 60 deg.F.

9. Remarks _ Code Cases __N-416-2 USING SECT. III 1992 NDE

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed Paul L. Smith TECH SPEC Date 7/28, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 3-17-05 to 8-1-05 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Robert McNeil
Inspector's Signature

Commissions NC 978

Date 8-1, 2005

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 N.C. 28201-1006

1a Date 7/26/05

Sheet 1 of 4

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98644720-43

3b NSM or MN # 11432/01

4 Identification of System NS CONTAINMENT SPRAY SYSTEM Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Valve	Kerotest	FAL4-25	35944	Valve tag INS-89	1983	Replaced	Yes
B	Valve	BNL Industries	A981103-9-77	NA	Valve tag INS-89	2004	Replacement	Yes
C	Valve	Kerotest	HAD9-6	29173	Valve tag INS-90	1980	Replaced	Yes
D	Valve	BNL Industries	A981103-9-78	NA	Valve tag INS-90	2004	Replacement	Yes
E							-	-
F							-	-

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 N.C. 28201-1006

1a Date 7/26/05

Sheet 2 of 4

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98644720-43

3b NSM or MN # 11432/01

4 Identification of System NS CONTAINMENT SPRAY SYSTEM Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Bolting	Duke Power Co.	C-INS	118	Hex Nuts- SA194, Threaded Rod-SA193	NA	Replacement	No
B	Pipe/Fittings	Duke Power Co.	C-INS	118	2" Pipe Cap-SA182, 2" 90 ell- SA182, 2" Flange-SA182, 2x1 Red. Ins.-SA182	NA	New	No
C					2"Tee-SA182, 2"Couplg.-SB462, 2x1 Red Ins.-SB462, 2" Pipe Cap-SA105		-	-
D					10" 90/45 ell-SA403, 10" Pipe-SA403/SA312, 2" Pipe-SA376/SB675		-	-
E					10x8 Red-SA403, 2" 90 ell-SB462, 18" Pipe-SB366, 18" 90/45 ell-SB366		-	-
F					10" Tee-SA403 18"Flg.- SB462/SA105		-	-

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

As Required By The Provisions Of The ASME Code Section XI

rev 8/18/05

1. Owner DUKE POWER COMPANY
 Address 526 S. CHURCH STREET. CHARLOTTE N.C. 28201-1006

1a Date 7/26/05

Sheet 3 of 34

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98644720-43

3b NSM or MN # 11432/01

4 Identification of System NS CONTAINMENT SPRAY SYSTEM Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Pipe Welds	Duke Power Co.	C-INS	118	INS40-7, INS22-27 thru 33, INS36-25 thru 40, INS20-18, 23 thru 30		Replacement	No
B							New	No
C							-	-
D							-	-
E							-	-
F							-	-

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 N.C. 28201-1006

1a Date 7/26/05

Sheet 4 of 4

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98644720-43

3b NSM or MN # 11432/01

4 Identification of System NS CONTAINMENT SPRAY SYSTEM Class NF

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Mech Shock Extension	Anvil International	1997-96	NA	1-R-NS-030	NA	Replacement	No
B	Plate	NA	NA	NA	For S/R 1-R-NS-030	NA	New	No
C	Welds	Duke Power Co.	C-INS	118	Welds #1-R-NS-0030-2 & 4 For S/R 1-R-NS-030	2005	New	No
D							-	-
E							-	-
F							-	-

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 reports 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 Replace NS HX IA and Associated Piping_

8. Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt
Pressure 252 psig Test Temp. 60 deg.F.

9. Remarks _ Code Cases __N-416-2 USING SECT. III 1992 NDE

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed Paulton J Smith TECH SPEC Date 5/27, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 3-28-05 to 6-2-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert Medall
Inspector's Signature

Commissions NC 978

Date 6-2, 2005

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 N.C. 28201-1006

1a Date 3/29/04

Sheet / of /

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98647944-01

3b NSM or MN # NA

4 Identification of System
NV CNEMICAL VOLUME CONTROL SYSTEM

Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Valve	Dresser	TG-80174	1927	Valve tag 1NV-235	1986	Replaced	Yes
B	Valve	Dresser	TE-03781	576	Valve tag 1NV-235	1978	Replacement	Yes
C	Bolting	Duke Power Co.	NA	NA	Studs-SA193, Hex Nuts-SA194	NA	Replacement	No
D							-	-
E							-	-
F							-	-

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 reports 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 Replace Valve INV-235_

8. Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt
Pressure 27.3 psig Test Temp. 96.6 deg.F.

9. Remarks _ Code Cases ___NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed Paul L. Sita TECH SPEC Date 3/29, 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 Province of NORTH CAROLINA and employed by HSB I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 2-24-04 to 5-6-04 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert M. Sita
Inspector's Signature

Commissions NC 978

Date 5-6, 2004

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 N.C. 28201-1006

1a Date 7/6/04

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98647944-06

3b NSM or MN # NA

4 Identification of System
NV CNEMICAL VOLUME CONTROL SYSTEM

Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Valve Disc	Dresser	NA	NA	Valve tag INV-235	NA	Replaced	No
B	Valve Disc	Dresser	ACY44	NA	Valve tag INV-235	Na	Replacement	No
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 Refurbished Valve INV-235_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases _ NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 7/6, 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 Province of NORTH CAROLINA and employed by HSB I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-26-04 to 7-22-04 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NC 978
Inspector's Signature

Date 7-22, 2004

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 N.C. 28201-1006

1a Date 7/7/05

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98649526-01

3b NSM or MN # NA

4 Identification of System

Class A

NV CNEMICAL VOLUME CONTROL SYSTEM

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Load Pin	Anvil International	NA	NA	For S/R 1-R-NV-1188	NA	Replacement	No
B							-	-
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 Replace Load Pin for S/R 1-R-NV-1188_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases _ NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 7/7, 20 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-10-05 to 7-12-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]

Commissions NC 978

Inspector's Signature

Date 7-12, 20 05

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 N.C. 28201-1006

1a Date 6/13/05

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98668640-01

3b NSM or MN # NA

4 Identification of System

Class B

NV CNEMICAL VOLUME CONTROL SYSTEM

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Valve Plug	Fisher	AH 0110-1	NA	Valve tag INV-294	NA	Replaced	No
B	Valve Plug	Fisher	PE 0262-1	NA	Valve tag INV-294	NA	Replacement	No
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 I/R Valve INV-294_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases _NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 6/13, 20 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-20-05 to 6-20-05 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Commissions NC 978

Inspector's Signature

Date 6-20, 20 05

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 N.C. 28201-1006

1a Date 7/7/05

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98668644-01

3b NSM or MN # NA

4 Identification of System

Class B

NV CNEMICAL VOLUME CONTROL SYSTEM

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Valve	Dresser	TE03775	78	Valve tag 1NV-232	1978	Replaced	Yes
B	Valve	Dresser	TE03781	576	Valve tag 1NV-232	1978	Replacement	Yes
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 Replace Valve INV-232_

8. Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt
Pressure 26 psig Test Temp. Ambient deg.F.

9. Remarks _ Code Cases _ NONE_ _____

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed *Robert J. Smith* TECH SPEC Date 7/7, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-17-05 to 7-12-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert McNeil
Inspector's Signature

Commissions NC 978

Date 7-12, 2005

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 N.C. 28201-1006

1a Date 7/26/05

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98668650-01

3b NSM or MN # NA

4 Identification of System SM MAIN STEAM SYSTEM

Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Valve	Borg Warner	53015	1808	Valve tag ISM-19	1979	Replaced	Yes
B	Valve	Borg Warner	26910	737	Valve tag ISM-19	1978	Replacement	Yes
C	Pipe	Duke Power Co.	C-ISM	122	2" Pipe- SA376	NA	Replacement	No
D	Pipe Welds	Duke Power Co.	C-ISM	122	ISM55-22	2005	Replacement	No
E							-	-
F							-	-

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 reports 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 Replace Valve LSM-19_

8. Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt
Pressure 973 psig Test Temp. 544 deg.F.

9. Remarks _ Code Cases __N-416-2 USING SECT. III 1992 NDE

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed *Paul L. Smith* TECH SPEC Date 7/26, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 12-30-04 to 7-26-05 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Robert M. Smith Commissions NC 978
Inspector's Signature

Date 7-26, 2005

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 N.C. 28201-1006

1a Date 7/6/04

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98668763-01

3b NSM or MN # NA

4 Identification of System

Class B

NV CNEMICAL VOLUME CONTROL SYSTEM

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Valve	Dresser	TE03781	576	Valve tag 1NV-235	1978	Replaced	Yes
B	Valve	Dresser	TG80174	1927	Valve tag 1NV-235	1986	Replacement	Yes
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 Replace Valve INV-235_

8. Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt
Pressure 30.9 psig Test Temp. 97 deg.F.

9. Remarks _ Code Cases _ NONE_ _____

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed *Paul L. Smith* TECH SPEC Date 7/6, 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 Province of NORTH CAROLINA and employed by HSB I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 6-2-04 to 7-22-04 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert M. Li
Inspector's Signature

Commissions NC 978

Date 7-22, 2004

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 N.C. 28201-1006

1a Date 2/14/05 Sheet | of |

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98668763-05

3b NSM or MN # NA

4 Identification of System

Class B

NV CNEMICAL VOLUME CONTROL SYSTEM

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Disc	Dresser	NA	NA	Valve tag INV-235	NA	Replaced	No
B	Disc	Dresser	ACY46	NA	Valve tag INV-235	NA	Replacement	No
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 Refurbished Valve INV-235_

8. Test Conducted: Hydrostatic Pressure Pneumatic Test Temp. Nominal Operating Pressure deg.F. Other Exempt

9. Remarks _ Code Cases _ NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed Paul L. Smith TECH SPEC Date 2/14, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 1-31-05 to 2-19-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert M. Lill Commissions NC 978
Inspector's Signature

Date 2-14, 2005

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 N.C. 28201-1006

1a Date 6/03/05

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98669062-01

3b NSM or MN # CE-100184

4 Identification of System

Class B

NV CNEMICAL VOLUME CONTROL SYSTEM

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Valve Disc	Kerotest	Original Valve Part	NA	Valve tag INV-233	NA	Replaced	No
B	Valve Disc	Kerotest	14	NA	Valve tag INV-233	NA	Replacement	No
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 soft seat in valve INV-233_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases _ NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 6/3, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-16-05 to 6-28-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NC 978
Inspector's Signature

Date 6-28, 2005

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 N.C. 28201-1006

1a Date 6/16/05 Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98670596-01

3b NSM or MN # NA

4 Identification of System

Class B

NV CNEMICAL VOLUME CONTROL SYSTEM

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Plug Assembly	CCI	NA	NA	For valve tag INV849 8 C 1 2 6 1 2 1 0 5	NA	Replaced	No
B	Plug Assembly	CCI	635278	NA	For Valve tag INV849	NA	Replacement	No
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 I/R Valve INV849_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases _ NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 6/16, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-26-05 to 6-20-05 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Inspector's Signature

Commissions NC 978

Date 6-20, 2005

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 N.C. 28201-1006

1a Date 6/13/05

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98683598-05

3b NSM or MN # NA

4 Identification of System NC REACTOR COOLANT SYSTEM

Class A

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Valve	Dresser	BS-02867	NA	Valve tag 1NC-003	1979	Replaced	Yes
B	Valve	Dresser	BS-02869	NA	Valve tag 1NC-003	1980	Replacement	Yes
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 I/R Valve 1NC-29_

8. Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt
Pressure 2230 psig Test Temp. 662 deg.F.

9. Remarks _ Code Cases ___NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 6/13, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-29-05 to 6-20-05 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions NC 978
Inspector's Signature

Date 6-20, 2005

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 N.C. 28201-1006

1a Date 7/7/05

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98683543-04

3b NSM or MN # NA

4 Identification of System NC REACTOR COOLANT SYSTEM Class A

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Bolting	Duke Power Co.	NA	NA	Threaded Rod - SA193 for S/R 1-R-NC-2320	NA	Replacement	No
B	Cotter Pin	Duke Power Co.	NA	NA	For S/R 1-R-NC-2320	NA	Replacement	No
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 Restore Support 1-R-NC-2320_

8. Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt
Pressure psig Test Temp. deg.F.

9. Remarks _ Code Cases _NONE_ _____

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A Expiration Date N/A

Certificate of Authorization No. N/A

Signed *Patricia J. Smith* TECH SPEC Date 7/7 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-31-05 to 7-12-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert McNeil Commissions NC 978
Inspector's Signature

Date 7-12 2005

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 N.C. 28201-1006

1a Date 6/03/05

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98684801-01

3b NSM or MN # NA

4 Identification of System

Class B

NV CNEMICAL VOLUME CONTROL SYSTEM

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Valve Disc	Westinghouse	1627	NA	Valve tag 1NV-290	NA	Replaced	No
B	Valve Disc	Westinghouse	1836	NA	Valve tag 1NV-290	NA	Replacement	No
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 Inspect Valve 1NV-290_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases _NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 6/3, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-17-05 to 6-27-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NC 978
Inspector's Signature

Date 6-27, 20-05

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 N.C. 28201-1006

1a Date 8/2/05 Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98688771-10

3b NSM or MN # CD100115

4 Identification of System NS CONTAINMENT SPRAY SYSTEM Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Pipe/Fittings	Duke Power Co.	C-INS	118	12"Pipe-SA403, 2" Pipe-SA376, 2" H/Cplg.-SA182, 10" Tee-SA403	NA	Replacement	No
B	"	"	"	"	12" Flange-SA182	"	- "	- "
C	Bolting	Duke Power Co.	NA	NA	Hex Nuts-SA194, Threaded Rod-SA193	NA	Replacement	No
D	Pipe Welds	Duke Power Co.	C-INS	118	INS3-19 thru 21, INS1-3, 7, 11, 8, 19, 20, 25	2005	Replacement	No
E							-	-
F							-	-

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 reports 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 Test NS Test Loop_

8. Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt
Pressure 252 psig Test Temp. 83 deg.F.

9. Remarks _ Code Cases __N-416-2 USING SECT. III 1992 NDE

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed Paul L. Soto TECH SPEC Date 8/2, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 3-28-05 to 8-9-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert Medill Commissions NC 978
Inspector's Signature

Date 8-9, 2005

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

1a Date 8/3/05

Sheet 1 of 1

Address 526 S. CHURCH STREET. CHARLOTTE N.C. 28201-1006

2. Plant CATAWBA NUCLEAR STATION

2a Unit 1 2 3 Shared (specify Units)

Address 4800 CONCORD RD. YORK, S.C. 29745

3. Work Performed By Duke Power Company

3a Work Order # 98688781-11

Address 526 S. Church St. Charlotte, N.C. 28201-1006

Type Code Symbol Stamp N/A Authorization No. N/A

3b NSM or MN # CD100115

Expiration Date N/A

4 Identification of System NS CONTAINMENT SPRAY SYSTEM Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Pipe/Fittings	Duke Power Co.	C-INS	118	12" Pipe-SA403, 2" Pipe-SA376, 2" 90 Ell-SA403, 12"/10" Flange-SA182,	NA	Replacement	No
B					2" H/Cplg.-SA182 10"Tee-SA403,		-	-
C	Bolting	Duke Power Co.	NA	NA	Threaded Rod-SA193, Hex Nuts-SA194	NA	Replacement	No
D	Pipe Welds	Duke Power Co.	C-INS	118	INS6-3,7,8,11,49,50,55 INS8-9,10,11	2005	Replacement	-
E							-	-
F							-	-

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 reports 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 NS Test Loop B Train_

8. Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt
Pressure 50 psig Test Temp. 90 deg.F.

9. Remarks _ Code Cases __N-416-2 USING SECT. III 1992 NDE

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed Paulton L Smith TECH SPEC Date 8/3, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 8-25-05 to 8-10-05 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Robert McNeil

Inspector's Signature

Commissions NC 978

Date 8-10, 2005

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 N.C. 28201-1006

1a Date 3/08/05

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98690544-08

3b NSM or MN # NA

4 Identification of System

Class B

SV MAIN STEAM VENT TO ATMOSPHERE

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Plug Assembly	CCI	4	NA	For Valve 1SV-19	NA	Replaced	No
B	Plug Assembly	CCI	2	NA	For Valve 1SV-19	NA	Replacement	Yes
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 I/R Valve 1SV-19_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases _ NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 3/8, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 7-8-04 to 3-8-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NC 978
Inspector's Signature

Date 3-8, 2005

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 N.C. 28201-1006

1a Date 6/13/05

Sheet (of)

2. Plant CATAWBA NUCLEAR STATION
Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98698971-01

3b NSM or MN # NA

4 Identification of System SM MAIN STEAM SYSTEM

Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____
(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Studs/Nuts	Duke Power Co.	NA	NA	Studs- SA193 Gr B7, Nuts- SA194 Gr 2H for valve 1SM-3	NA	Replacement	No
B							-	-
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 I/R Valve ISM-3_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases __NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 6/13, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-21-05 to 6-21-05 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions NC 978
Inspector's Signature

Date 6-21, 20_05

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 N.C. 28201-1006

1a Date 6/14/05

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98698972-01

3b NSM or MN # NA

4 Identification of System SM MAIN STEAM SYSTEM

Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Bolting	Duke Power Co.	NA	NA	Nut- SA194 Gr 2H for valve 1SM-5	NA	Replacement	No
B							-	-
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 I/R Valve ISM-5_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases _NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 6/14, 2005

Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of NORTH CAROLINA and employed by HSB I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-21-05 to 6-21-05 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature]

Commissions NC 978

Inspector's Signature

Date 6-20, 2005

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 N.C. 28201-1006

1a Date 7/28/05 Sheet / of /

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98712333-14

3b NSM or MN # CD100262

4 Identification of System CA AUXILIARY FEEDWATER SYSTEM Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Valve	Anchor Darling	ET697-1-5	1784	Valve tag ICA-57	1994	Replaced	Yes
B	Valve	International	E206A-1-3	2032	Valve tag ICA-57	1998	Replacement	Yes
C	Pipe/Fittings	Duke Power Co.	C-1CA	121	4" Pipe-SA106, 4" 90 ell-SA2134, 4" Flange-SA105	NA	Replacement	No
D	Bolting	Duke Power Co.	NA	NA	Hex Nuts-SA194 Threaded Rod-SA193	NA	Replacement	No
E	Pipe Welds	Duke Power Co.	C-1CA	121	1491-CA.00-024-1 thru 6, 9, 10 ICA98-11, ICA43-16	2005	New	No
F							-	-

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 reports 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 Relocate Valve ICA-57_

8. Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt
Pressure 959 psig Test Temp. 85.8 deg.F.

9. Remarks _ Code Cases __N-416-2 USING SECT. III 1992 NDE

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed Paul D. Smith TECH SPEC Date 7/29 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 4-13-05 to 8-1-05 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

Robert McNeil Commissions NC 978
Inspector's Signature

Date 8-1 2005

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 N.C. 28201-1006

1a Date 7/24/05 Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98712362-14

3b NSM or MN # CD1000262

4 Identification of System CA AUXILIARY FEEDWATER SYSTEM Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Valve	Anchor Darling	ET697-1-6	1785	Valve tag 1CA-61	1994	Replaced	Yes
B	Valve	BWIP International	E206A-1-2	2031	Valve tag 1CA-61	1998	Replacement	Yes
C	Pipe/Fittings	Duke Power Co.	C-ICA	121	4" Pipe- SA106, 4" 90 Ell-SA234, 4" Flange- SA105	NA	Replacement	No
D	Bolting	Duke Power Co.	NA	NA	Threaded Rod- SA193, Hex Nuts- SA194	NA	Replacement	No
E	Pipe Welds	Duke Power Co.	C-ICA	121	1CA125-11, 1491-CA.00-023-1 thru 9,13	NA	Replacement	No
F							-	-

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 reports 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 Relocate Valve ICA-61_

8. Test Conducted: Hydrostatic Pneumatic Nominal Operating Pressure Other Exempt
Pressure 1780 psig Test Temp. 120 deg.F.

9. Remarks _ Code Cases __N-416-2 USING SECT. III 1992 NDE

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed Patton J. Sitt TECH SPEC Date 7/25, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 4-13-05 to 5-25-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Robert M. Sitt
Inspector's Signature

Commissions NC 978

Date 7-25, 2005

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 N.C. 28201-1006

1a Date 2/23/05 Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98714044-01

3b NSM or MN # NA

4 Identification of System
ND RESIDUAL HEAT REMOVAL SYSTEM

Class B

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____
 (b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Bolting	Duke Power Co.	NA	NA	Threaded Rod-SA193, Hex Bolt-SA194 for RHR HX 1A	NA	Replacement	No
B							-	-
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 R/R RHR HX 1A Bolting_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases _ NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 2/23, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 2-17-05 to 3-1-05 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions NC 978
Inspector's Signature

Date 3 1, 2005

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

1a Date 3/31/05

Sheet 1 of 1

Address 526 S. CHURCH STREET. CHARLOTTE N.C. 28201-1006

2. Plant CATAWBA NUCLEAR STATION

2a Unit 1 2 3 Shared (specify Units)

Address 4800 CONCORD RD. YORK, S.C. 29745

3. Work Performed By Duke Power Company

3a Work Order # 98714044-04

Address 526 S. Church St. Charlotte, N.C. 28201-1006

Type Code Symbol Stamp N/A Authorization No. N/A

3b NSM or MN # NA

Expiration Date N/A

4 Identification of System

Class B

ND RESIDUAL HEAT REMOVAL SYSTEM

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Bolting	Duke Power Co.	NA	NA	Rod- SA193, Hex Nuts- SA194 for RHR HX "1A"	NA	Replacement	No
B							-	-
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 R/R RHR HX 1A Bolting_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases _ NONE_

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 3/31, 20 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 3-15-05 to 4-4-05 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NC 978
Inspector's Signature

Date 4-4, 20 05

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 N.C. 28201-1006

1a Date 6/16/05

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98728678-01

3b NSM or MN # NA

4 Identification of System NI SAFETY INJECTION SYSTEM

Class A

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1992 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired. Replaced. or Replacement	ASME Code Stamped (yes or no)
A	Weld	Duke Power Co.	C-1NI	128	Seal weld Bonnet to Body for valve with tag # 1NI19.	NA	Replacement	No
B							-	-
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 Seal Weld Bonnet to Valve Body INI19_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. deg.F. Nominal Operating Pressure Other Exempt

9. Remarks _ Code Cases __N-416-2 USING SECT. III 1992 NDE

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 6/16, 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 I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 5-22-05 to 6-20-05 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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

[Signature] Commissions NC 978
Inspector's Signature

Date 6-20, 2005

Problem Investigation Process
Catawba Nuclear Station

PIP Serial No.	Action Category	IBER No.	Other Report
C-04-02215	3		

Problem Identification

Discovered Time/Date: 07:39 05/06/2004 **Occurred Time/Date:**

Unit(s) Affected:

<u>Unit</u>	<u>Mode</u>	<u>%Power</u>	<u>Unit Status</u>	<u>Remarks</u>
1	1	100		

System(s) Affected:

NV Chemical & Volume Control

Affected Equipment

(No Equipment Affected)

Location of Problem:

Bldg: Column Line: Elev:

Location Remarks:

Method Used to Discover Problem:

Problem Description:

NIS-2 form on work order 98588027-01 was not completed and submitted for inclusion in the 1EOC14 refueling cycle Inservice Inspection report.

Detail Problem Description:

Last Updated By: CLS4586: SMITH, CARLTON L Team: RSB2070 Group: WCG Date: 05/06/2004

ASME Section XI Repair/Replacement code requires the owner to file a Inservice inspection report within 90 days of the completion of the refueling cycle. Work order 98588027-01 was not received by the work control coordinator until after all NIS-2 (Owner Report for Repair or Replacement) forms were submitted for inclusion in the 1EOC14 recycle period Inservice inspection report. PIP C-04-1639 was written to address why this work order was not signed and completed within 30 days of Labor Complete according to MNT Directive 2.20.

Last Updated By: CLS4586: SMITH, CARLTON L Team: RSB2070 Group: WCG Date: 05/06/2004

Originated By: CLS4586: SMITH, CARLTON L Team: RSB2070 Group: WCG Date: 05/06/2004

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:

<u>Indiv</u>	<u>Team</u>	<u>Group</u>	<u>Date</u>
--------------	-------------	--------------	-------------

*Problem Investigation Process
Catawba Nuclear Station*

Problem Identified By: CLS4586 RSB2070 WCG 05/06/2004
Problem Entered By: CLS4586 RSB2070 WCG 05/06/2004

Screening

Action Category: 3 Root Cause performed? No

OEP No:

Other Report Nos:

Event Codes:

A1a Adherence\Failure to follow procedure\Administrative
X1 General Work Execution

Screening Remarks:

This PIP was screened by the PIP Centralized Screening Team on 5/10/04.

Originated By: MLS9465: STANDRIDGE, MICKEY L Team: PAM7334 Group: SRG Date: 05/10/2004

Assignments:

Responsible Groups(s) for Problem Evaluation: MNT Maintenance
Responsible Group for Present Operability: N/A
Responsible Group for Report Support Info: N/A
Responsible Group for Reportability: N/A
Responsible Group for Overall PIP Approval: WCG Work Control

Signature	Type	Indiv	Team	Group	Date
Screened By:		MLS9465	PAM7334	SRG	05/10/2004

Present Operability

Responsible Group: Status:

Sys/Comp Operable? (Y,N,C,E,T):

Required Mode:

Comments:

No Current Signatures For This Section

Reportability

Responsible Group: Status:

Problem Reportable(Y,N,E):

Reportable Per:

Comments:

No Current Signatures For This Section

Corrective Actions

No Corrective Actions for this PIP

Final and Overall PIP Approval

Responsible Group: WCG Status: Closed

Signature Type	Indiv	Team	Group	Date
Assigned To:			WCG	05/10/2004
Approval Assigned To:		RSB2070	WCG	06/08/2004
Approved By:	FAK4452	RSB2070	WCG	09/30/2004

Any Supplemental Concurrence Signatures Above Do Not Affect PIP Closure.

Closure Document Type Closure Document No

Attachments

Generic Applicability

Responsible Group: Status:
PIP No:

Assessment Remarks:
No Current Signatures For This Section

Failure Prevention Investigation

No FPI Records for this PIP.

Remarks

No Remarks for this PIP.

Maintenance Rule

No Maintenance Rule Records for this PIP.

End of the Document for PIP No: C-4-2215
The status of this PIP is: Closed
The duration of this PIP was: 147 days

Section XI Repair/Replacement Activities For 1EOC14

Work Order	Code Class	Sys	MOD No.	Type of Inspection	Description of Work	Repair, Replacement	Flaw Indication Maint/ ISI (*Yes No)	Owner Final	ANII Final
98555521-07	A	NI	NA	VT	Replace Spare Valve Disc	Replacement	No	4/28/03	4/30/03
98579251-04	A	NC	NA	VT	Repl.Piv. Pin 1-R-NC-1644	Replacement	No	12/8/03	12/22/03
98579343-05	A	NC	NA	VT	Stud for 1NC-03	Replacement	No	12/15/03	1/5/04
98607917-01	A	NI	CE72592	VT	Disc for 1NI60	Replacement	No	2/17/04	2/18/04
98466044-01	B	ND	CE-70741	Pressure Test	Replace 1ND-27	Replacement	No	1/5/04	1/12/04
98466045-01	B	ND	CNCE70741	Pressure Test	Valve 1ND26	Replacement	No	2/5/04	2/9/04
98481880-01	B	NV	NA	Pressure Test	Disc for 1NV-235	Replacement	No	2/12/04	2/17/04
98497026-01	B	CA	NA	VT	Disc for valve DMV-934	Replacement	No	9/30/03	10/1/03
98507281-01	B	SV	NA	VT	Valve Disc 1SV-14	Replacement	No	1/12/04	1/21/04
98542866-05	B	NV	NA	VT	Valve Disc 1NV186A	Replacement	No	1/12/04	1/27/04
98562071-03	B	NA	NA	VT	Weld stud to disc	Repair	No	7/29/03	8/4/03
98579406-06	B	ND	NA	Pressure Test	Valve 1ND-35	Replacement	No	1/7/04	1/8/04
98579407-05	B	ND	NA	Pressure Test	Valve 1ND-38	Replacement	No	1/6/04	1/19/04
98579408-05	B	ND	NA	Pressure Test	Replace 1ND-64	Replacement	No	12/15/03	12/23/03
98579554-06	B	NI	NA	Pressure Test	Replace 1NI-102	Replacement	No	12/15/03	12/23/03
98579555-06	B	NI	NA	Pressure Test	Replace 1NI-119	Replacement	No	12/15/03	12/23/03
98579556-06	B	NI	NA	Pressure Test	Replace 1NI-151	Replacement	No	12/15/03	12/23/03
98579557-06	B	NI	NA	Pressure Test	Replace 1NI-161	Replacement	No	12/15/03	12/23/03
98580152-07	B	NV	NA	Pressure Test	Replace 1NV-87	Replacement	No	1/5/04	1/12/04
98580153-06	B	NV	NA	Pressure Test	Repl. 1NV-222	Replacement	No	12/8/03	12/23/03
98580154-07	B	NV	NA	Pressure Test	Valve 1NV-223	Replacement	No	1/12/04	1/21/04
98580155-06	B	NV	NA	Pressure Test	Valve 1NV-273	Replacement	No	1/7/04	1/8/04
98582138-01	B	SV	NA	VT	Replace 1SV-5 Disc	Replacement	No	1/5/04	1/12/04
98582139-01	B	SV	NA	VT	Disc for 1SV-12	Replacement	No	1/19/04	1/28/04
98582140-01	B	SV	NA	VT	Repl. Disc for 1SV-16	Replacement	No	12/8/03	12/22/03
98582141-01	B	SV	NA	VT	Repl. Disc for 1SV-21	Replacement	No	12/8/03	12/22/03
98582142-01	B	SV	NA	VT	Valve Disc 1SV-22	Replacement	No	1/12/04	1/27/04
98583695-01	B	ND	NA	Pressure Test	Valve 1ND-3	Replacement	No	1/7/04	1/8/04
98588027-01	B	NV	NA	VT	Disc for 1NV338	Replacement	No	5/10/04	5/10/04
98589613-01	B	SM	NA	VT	Bolting for Valve 1SM-1	Replacement	No	1/6/04	1/20/04
98598683-01	B	SV	NA	VT	Disc for 1SV003	Replacement	No	2/25/04	2/26/04
98598685-01	B	SV	NA	VT	Valve Disc 1SV-6	Replacement	No	1/12/04	1/27/04
98598686-01	B	SV	NA	VT	Valve Disc 1SV-17	Replacement	No	1/12/04	1/21/04
98598687-01	B	SV	NA	VT	Replace 1SV-18 Disc	Replacement	No	1/5/04	1/12/04
98598689-08	B	ND	NA	Pressure Test	Valve 1ND-31	Replacement	No	1/7/04	1/8/04

* If Yes, state Maint or ISI and list PIP Number

Section XI Repair/Replacement Activities For 1EOC14

98599292-01	B	ND	NA	VT	Replace Snubbers 1-R-ND-391	Replacement	No	7/1/03	7/2/03
98608103-01	B	NV	NA	Pressure Test	Replace valve 1NV14	Replacement	No	8/26/03	8/27/03
98617265-01	B	ND	NA	Pressure Test	Rotating Assembly for RHR Pump 1B	Replacement	No	1/6/04	1/6/04
98624220-10	B	NS	11446/01	Press. Test/UT/RT/PT	NS HX 1B	Replacement	No	1/19/04	1/20/04
98626503-03	B	ND	NA	Pressure Test/RT	Weld 1ND50-15,16	Replacement	No	1/20/04	1/28/04
98626503-14	B	NS	11446/01	VT	Weld Repair to NS HX 1B	Repair	No	2/11/04	2/11/04
98626936-07	B	NS	NA	VT	Repl. Bolting to NS HX 1A	Replacement	No	12/9/03	1/5/04
98626936-07	B	NS	NA	VT	NS HX 1B End Cover	Replacement	No	12/9/03	1/5/04
98630051-01	B	NV	NA	VT	Valve Disc 1NV-75	Replacement	No	1/12/04	1/21/04
98630052-01	B	NV	NA	VT	Disc for 1NV-81	Replacement	No	1/7/04	1/8/04
98634236-11	B	NI	NA	Pressure Test/PT	Valve 1NI168	Replacement	No	1/19/04	1/28/04
98635803-01	B	SM	NA	VT	Snubber 1-R-SM-1578	Replacement	No	1/6/04	1/19/04
98636819-01	B	NV	NA	VT	Bolting for 1NVFE5150	Replacement	No	1/12/04	1/21/04
98053998-02	C	NC	NA	VT	Bolting for NC Pump Motor "1A"	Replacement	No	1/5/04	1/8/04
98055715-09	C	RN	NA	Pressure Test	Replace Piping and Clean Valve	Replacement	No	5/28/03	6/3/03
98055716-07	C	RN	NA	Pressure Test	Replace RN Piping	Replacement	No	6/5/03	6/5/03
98127762-01	C	KC	CE-70747	Pressure Test	Replace 1KC-7	Replacement	No	1/5/04	1/21/04
98127763-01	C	KC	CE-70747	Pressure Test	Valve 1KC-9	Replacement	No	1/12/04	1/27/04
98391120-01	C	YC	NA	VT	Replace Disc & plug to 1YC65	Replacement	No	9/17/02	9/17/02
98464539-01	C	RN	NA	VT	Replace Disc for 1RNE14	Replacement	No	7/1/03	7/2/03
98477579-01	C	YC	NA	VT	BMR End Bell Cover	Repair	No	4/9/02	4/9/02
98477579-03	C	YC	NA	VT	BMR End Bell Cover	Repair	No	4/9/02	4/9/02
98479788-01	C	RN	NA	Pressure Test	Replace 42" RN Piping	Replacement	No	2/4/03	2/12/03
98491077-02	C	KD	CE-72054	Pressure Test	Replace 1KD-27	Replacement	No	1/5/04	2/9/04
98494197-06	C	VG	NA	VT	Re-tube & Replace Endbell	Replacement	No	10/22/02	10/30/02
98497966-03	C	KC	NA	VT	Base Metal Repair to valve disc for 02B-326	Repair	No	2/5/03	2/10/03
98502929-03	C	KC	NA	VT	Base Metal Repair to valve disc for 02B-326	Repair	No	2/6/03	2/10/03
98504434-05	C	NS	NA	VT	Add bolting for NS HX 1A	Replacement	No	5/29/03	6/3/03
98524432-05	C	KC	NA	Pressure Test	Replace Rotating Element	Replacement	No	1/16/03	1/20/03
98542240-02	C	VG	NA	VT	Retube Aftercooler 1B2	Repair	No	3/6/03	3/7/03
98547481-01	C	RN	NA	Pressure Test	Weld Repair 1RN523-4 & 5	Repair	Maint C-02-5258	11/4/02	11/6/02
98578753-01	C	CA	NA	VT	Repl. Disc for 1CA-173	Replacement	No	12/8/03	1/5/04

* If Yes, state Maint or ISI and list PIP Number

Section XI Repair/Replacement Activities For 1EOC14

98578835-03	C	CF	NA	VT	Valve 1CF-37 Plug	Replacement	No	1/6/04	1/20/04
98580279-01	C	KD	NA	VT	Studs for D/G HX	Replacement	No	1/7/04	1/19/04
98580320-01	C	KC	NA	Pressure Test	1KC-5 Valve Bonnet	Replacement	No	1/7/04	1/20/04
98580345-04	C	KC	NA	Pressure Test	Replace 1KC-281	Replacement	No	1/5/04	1/20/04
98580367-22	C	RN	NA	VT	Replace 1-R-RN-0195	Replacement	No	12/8/03	12/22/03
98580367-34	C	YC	NA	VT	Repl. Clamp for 1-A-YC-3392	Replacement	No	12/8/03	12/22/03
98585666-06	C	NV	NA	Pressure Test	Valve 1NV-182	Replacement	No	1/13/04	1/19/04
98585667-01	C	RN	NA	Pressure Test	Replace 1RN-288	Replacement	No	1/6/04	1/21/04
98585676-04	C	KC	NA	Pressure Test	Valve 1KC-61	Replacement	No	1/19/04	1/27/04
98587157-01	C	RN	NA	VT	Disc for 1RN244A	Replacement	No	2/11/04	2/12/04
98588380-01	C	KC	NA	Pressure Test	KC Pump 1B1	Replacement	No	1/12/04	1/21/04
98592156-02	C	RN	NA	Pressure Test	NSW 1B Pump Assembly	Replacement	No	1/20/04	1/28/04
98597950-04	C	RN	NA	Pressure Test	Replace RN Piping	Replacement	No	6/2/03	6/2/03
98598049-06	C	RN	CE62231	Pressure Test	Add Flush Connection	New	No	6/3/03	6/4/03
98598083-03	C	NS	CE-72486	Pressure Test	Add Inspection Ports to NS HX 1A	Repair	No	5/29/03	6/2/03
98599190-06	C	RN	CE62232	Pressure Test	Add Connection for RN	New	No	7/2/03	7/7/03
98600348-01	C	RN	NA	VT	Disc for 1RN304A	Replacement	No	2/11/04	2/12/04
98601549-15	C	RN	CE62235	Pressure Test	Add RN Flush Line	New	No	8/7/03	8/11/03
98602830-01	C	NS	CE62237	Pressure Test	Add Inspection Ports to NS HX 1A	New	No	8/26/03	8/27/03
98617674-01	C	RN	NA	VT	Disc for 1RN-854	Replacement	No	2/5/04	2/9/04
98617674-04	C	RN	NA	Pressure Test	Replace Valve 1RN854	Replacement	No	11/11/03	11/16/03
98621567-01	C	VG	NA	VT	2VG HX Tubes	Replacement	No	1/7/04	1/19/04
98621997-01	C	RN	NA	Pressure Test	RN Piping	Replacement	No	2/5/04	2/9/04
98632492-10	C	NC	NA	VT	Attachment Weld	Replacement	No	1/19/04	1/28/04
98646314-01	C	RN	NA	Pressure Test	Valve body for 1RN351	Replacement	No	2/5/04	2/9/04
98053998-01	NF	KC	CNCE72918	VT	S/R 1-R-KC-1211	Replacement	No	2/10/04	2/11/04
98585632-05	NF	CA	NA	VT	1-R-CA-1682	Replacement	No	1/20/04	1/28/04
98633113-01	NF	KC	NA	VT	Surge Tank "1A" Support	New	No	2/10/04	2/11/04
98633114-01	NF	KC	NA	VT	Surge Tank "1B" Support	New	No	2/10/04	2/11/04

* If Yes, state Maint or ISI and list PIP Number

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 N.C. 28201-1006

1a Date 5/10/04

Sheet 1 of 1

2. Plant CATAWBA NUCLEAR STATION
 Address 4800 CONCORD RD. YORK, S.C. 29745

2a Unit 1 2 3 Shared (specify Units)

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

3a Work Order # 98588027-01

3b NSM or MN # NA

4 Identification of System

Class B

NV CNEMICAL VOLUME CONTROL SYSTEM

5. (a) Applicable Construction Code III 1974 Edition, S'75 Addenda, Code Cases _____

(b) Applicable Edition of Section XI Utilized for Repairs or Replacements 1989 Addenda NONE

6. Identification of Components Repaired or Replacement Components

	Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
	Name of Component	Name of Manufacturer	Manufacturer Serial Number	N B Number	Other Identification (Size)	Year Built	Repaired, Replaced, or Replacement	ASME Code Stamped (yes or no)
A	Valve Disc	Anchor Darling	NA	NA	For Valve 1NV338 with SN# E1581-51-1 and NB# 694	NA	Replaced	No
B	Valve Disc	Anchor Darling	See attached Data Report	NA	Valve 1NV338	NA	Replacement	No
C							-	-
D							-	-
E							-	-
F							-	-

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 reports 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 Replace Disc for 1NV338_

8. Test Conducted: Hydrostatic Pressure psig Pneumatic Test Temp. Nominal Operating Pressure deg.F. Other Exempt

9. Remarks _ Code Cases _NONE_
_Reference PIP C-04-2215

(Applicable Manufacturers 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 rules of the ASME Code, Section XI.

Type Code Symbol Stamp N/A

Expiration Date N/A

Certificate of Authorization No. N/A

Signed [Signature] TECH SPEC Date 5/10, 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 Province of NORTH CAROLINA and employed by HSB I AND I Company of Connecticut have inspected the components described in this Owners Report during the period 11-15-03 to 5-6-04 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 measure described in this Owners Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NC 978
Inspector's Signature

Date 5-10, 2004

04/10/84 ADL 00:26 FAA 000010100
HTN: RICHARD BROWN

QA LAB

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

As required by the Provision of the ASME Code Rules, Section III, Div. 1

UTC # 960839

(a) Manufactured by Anchor/Darling Valve Co., 701 First St., Williamsport, PA 17701
(Name and address of NPT Certificate Holder)

(b) Manufactured for Mill Power Supply Co./Duke Power, P.O. Box 32307, Charlotte, NC 28232-2307
(Name and address of NPT Certificate Holder for completed nuclear component)

2. Identification-Certificate Holder's Serial No. of Part ----- Nat'l Bd. No. N/A

(a) Constructed According to Drawing No. B63796 R/- Drawing Prepared by Anchor/Darling Valve Company

(b) Description of Part Inspected (6) 2"-1878-DD Disc, Heat No. 2291 D-STL6

(c) Applicable ASME Code: Section III, Edition 1980, Addenda date Sum '80, Case No. --- Class 1

3. Remarks: 2"-1878-DD Disc
(Brief description of service for which component was designed)

A/DV S.O. & Item P-4571-50

Original S.O. E-1581

No Hydrotest Performed

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III. (The applicable Design Specification and Stress Report are not the responsibility of the NPT Certificate Holder for parts. An NPT Certificate Holder for appurtenances is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 11/21 19 84 Signed Anchor/Darling Valve Co. By P. Wright
(NPT Certificate Holder)

Expiry of Authorization Expires 4/15/86 Certificate of Authorization No. N1713

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at _____

Stress analysis report on file at _____

Design specifications certified by _____ Prof. Eng. State _____ Reg. No. _____

Stress analysis report certified by _____ Prof. Eng. State _____ Reg. No. _____

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of ~~Massachusetts~~ Pennsylvania and employed by Commercial Union Insurance Company of Boston, Mass. have inspected the part of a pressure vessel described in this

Partial Data Report on Material Only 11-21-1984, and state that to the best of my knowledge and belief, the NPT Certificate Holder has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Partial 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 11-21- 19 84

L. Gardner Commissions Pennsylvania 2236
National Board, State, Province and No.

Additional sheets in form of lists, sketches or drawings may be used provided (1) size is 8 1/2" x 11", (2) information on items 1-3 on this report is included on each sheet, and (3) such sheet is numbered and numbered in order in item 3, "Remarks".

6.0 **Pressure Testing**

This summary is a pressure test completion status for the third period of the second ten-year interval. Table 6-1 shows the pressure tests completed from refueling outage EOC-14 through refueling outage EOC-15. There was no through-wall leakage observed during these pressure tests.

<i>Examination Category</i>	<i>Test Requirement</i>	<i>Total Examinations Credited For This Outage</i>
B-E	System Hydrostatic Test (IWB-5222)	0
B-P	System Leakage Test (IWB-5221)	1
B-P	System Hydrostatic Test (IWB-5222)	2
C-H	System Inservice/Functional Test (IWC-5221)	0
C-H	System Hydrostatic Test (IWC-5222)	22

Table 6-2 shows a completion status of pressure tests conducted during the third period of the second ten-year interval.

<i>Examination Category</i>	<i>Test Requirement</i>	<i>Total Examinations Required For This Period</i>	<i>Total Examinations Credited For This Period</i>	<i>(%) Examinations Complete For This Period</i>
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)	12	12	100%
C-H	System Inservice/Functional Test (IWC-5221)	0	0	0%
C-H	System Hydrostatic Test (IWC-5222)	31	22	100%

Table 6-3 shows the completion data of the Class 1 (Category B-P) Leakage and Hydrostatic tests conducted during refueling cycle EOC15.

Table 6-3 Detailed Class 1 Listing				
Test Type	Zone Number	Boundary Dwg	EOC15 Completion Status	EOC15 VT-2 Examination Date
<i>Leakage</i>	1NC-001L-A	CN-ISIL-1553-1.0	Complete	04-Jun-05
		CN-ISIL-1553-1.1	Complete	04-Jun-05
		CN-ISIL-1554-1.0	Complete	04-Jun-05
		CN-ISIL-1554-1.5	Complete	04-Jun-05
		CN-ISIL-1561-1.0	Complete	04-Jun-05
		CN-ISIL-1561-1.1	Complete	04-Jun-05
		CN-ISIL-1562-1.0	Complete	04-Jun-05
		CN-ISIL-1562-1.1	Complete	04-Jun-05
		CN-ISIL-1562-1.2	Complete	04-Jun-05
	CN-ISIL-1562-1.3	Complete	04-Jun-05	
	1MJ-001L-A	CN-ISIL-1553-1.0	Complete	14-May-05
		CN-ISIL-1553-1.1	Complete	14-May-05
		CN-ISIL-1554-1.0	Complete	14-May-05
		CN-ISIL-1562-1.1	Complete	14-May-05
<i>Hydrostatic</i>	1NC-004H-A	CN-ISIH-1554-1.0	Complete	04-Jun-05
	1NC-009H-A	CN-ISIH-1562-1.0	Complete	04-Jun-05

Table 6-4 shows the completion data of the Class 2 (Category C-H) Hydrostatic tests conducted during refueling cycle EOC15.

Table 6-4 Detailed Class 2 Listing				
	Zone Number	-Boundary Dwg	EOC15 Completion Status	EOC15 VT-2 Examination Date
1	1FW-001H-B	CN-ISIH-1554-1.2	Complete	27-Jan-04
		CN-ISIH-1554-1.7	Complete	27-Jan-04
		CN-ISIH-1561-1.0	Complete	27-Jan-04
		CN-ISIH-1562-1.2	Complete	27-Jan-04
		CN-ISIH-1563-1.0	Complete	27-Jan-04
		CN-ISIH-1570-1.0	Complete	27-Jan-04
		CN-ISIH-1571-1.0	Complete	27-Jan-04
2	1FW-002H-B	CN-ISIH-1571-1.0	Complete	02-Jun-04
3	1KF-001H-B	CN-ISIH-1570-1.0	Complete	12-Jan-04
4	1NI-002H-B	CN-ISIH-1562-1.1	Complete	03-Jun-05
		CN-ISIH-1562-1.2	Complete	03-Jun-05
5	1NI-003H-B	CN-ISIH-1562-1.2	Complete	26-May-05
		CN-ISIH-1562-1.3	Complete	26-May-05

	Zone Number	Boundary Dwg	EOC15 Completion Status	EOC15 VT-2 Examination Date
6	1NI-005H-B	CN-ISIH-1562-1.2	Complete	25-Mar-04
7	1NI-006H-B	CN-ISIH-1562-1.2	Complete	04-Jun-05
8	1NI-007H-B	CN-ISIH-1562-1.2	Complete	26-May-05
9	1NI-008H-B	CN-ISIH-1562-1.2	Complete	26-May-05
10	1NI-009H-B	CN-ISIH-1562-1.2	Complete	26-May-05
11	1NI-010H-B	CN-ISIH-1562-1.0	Complete	26-May-05
12	1NM-001H-B	CN-ISIH-1572-1.0	Complete	04-Jun-05
13	1NM-002H-B	CN-ISIH-1572-1.0	Complete	04-Jun-05
14	1NS-001H-B	CN-ISIH-1563-1.0	Complete	07-Apr-04
15	1NS-002H-B	CN-ISIH-1563-1.0	Complete	24-Jun-04
16	1NV-002H-B	CN-ISIH-1554-1.7	Complete	01-Jun-04
17	1NV-003H-B	CN-ISIH-1554-1.7	Complete	19-Apr-04
18	1NV-004H-B	CN-ISIH-1554-1.2	Complete	28-Feb-05
19	1NV-005H-B	CN-ISIH-1554-1.2	Complete	16-Feb-05
20	1NV-006H-B	CN-ISIH-1554-1.0	Complete	21-Apr-04
		CN-ISIH-1554-1.1	Complete	21-Apr-04
		CN-ISIH-1554-1.2	Complete	21-Apr-04
		CN-ISIH-1554-1.4	Complete	21-Apr-04
		CN-ISIH-1554-1.5	Complete	21-Apr-04
		CN-ISIH-1554-1.6	Complete	21-Apr-04
		CN-ISIH-1554-1.7	Complete	21-Apr-04
		CN-ISIH-1556-1.0	Complete	21-Apr-04
		CN-ISIH-1562-1.0	Complete	21-Apr-04
		CN-ISIH-1562-1.2	Complete	21-Apr-04
21	1NV-008H-B	CN-ISIH-1554-1.2	Complete	04-Jun-05
		CN-ISIH-1554-1.0	Complete	04-Jun-05
22	1SA-001H-B	CN-ISIH-1593-1.1	Complete	12-Jan-05

Section 6 Prepared By:	Date:
<i>Jim Baylman</i>	<i>6/15/05</i>

Section 6 Reviewed By:	Date:
<i>T.E. Hawkins</i>	<i>6/21/05</i>

Steam Generator Outage Summary Report

Catawba Unit 1 2005 Outage EOC 15

Location: 4800 Concord Road, York South Carolina 29745

NRC Docket No. 50-413

National Board No. 130

Commercial Service Date: June 29, 1985

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

Revision 0

Prepared By: *CB Cawthon* Date: *8-18-05*

Reviewed By: *T.E. Hill* Date: *8/25/05*

Approved By: *Am Peter* Date: *8/25/05*

Copy No. *1*

Assigned To: *NRC DOC. CONTROL*

Controlled: *X*

Uncontrolled: _____

Controlled Distribution

<u>Copy No.</u>	<u>Assigned To</u>
Original	Catawba Nuclear Station Document Control Master File CN-208.21
1	NRC Document Control

Uncontrolled Distribution

2	Hartford Steam Boiler Inspection and Insurance Co. (AIA)
Electronic	Steam Generator Desktop

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: Catawba Nuclear Station, 4800 Concord Road, York, S. C. 29745
(Name and Address of Plant)
3. Plant Unit: 1
4. Owner Certificate of Authorization (if required) N/A
5. Commercial Service Date: June 29, 1985
6. National Board Number for Unit 130
7. Components Inspected:

<u>Component</u>	<u>Manufacturer</u>	<u>Manufacturer Serial No.</u>	<u>State or Province No.</u>	<u>National Board No.</u>
Steam Generator 1A	BWI	770101	N/A	151
Steam Generator 1B	BWI	769304	N/A	150
Steam Generator 1C	BWI	769302	N/A	147
Steam Generator 1D	BWI	769303	N/A	149

Note: Supplemental sheets in form of lists, sketches, or drawings may be used provided (1) size is 8¹/₂ 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.

FORM NIS-1 (Back)

- 8. Examination Dates 12-31-03 to 10-10-05
- 9. Inspection Period Identification: Third
- 10. Inspection Interval Identification: Second
- 11. Applicable Edition of Section XI 1989 Addenda None
- 12. Date/Revision of Inspection Plan: Per CNS Technical Specification

- 13. Abstract of Examinations and Test. Include a list of examinations and tests and a statement concerning status of work required for the Inspection Plan.
- 14. Abstract of Results of Examination and Tests.
- 15. Abstract of Corrective Measures.

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 8/25/2005 Signed Duke Energy Corp. By [Signature]
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 of Province of NC employed by *The Hartford Steam Boiler Inspection & Insurance Company of Connecticut have inspected the components described in this Owners' Report during the period 12-31-03 to 8-25-05, 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 Owners' 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 Owners' Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection

[Signature] Commissions NC978
Inspector's Signature National Board, State, Province, and Endorsements

Date 8-25 20 05

* The Hartford Steam Boiler Inspection & Insurance Company of Connecticut
200 Ashford Center North
Suite 205
Atlanta, GA. 30338

August 16, 2005

Subject: Catawba Nuclear Station, Unit 1
Steam Generator Tube Inspection Report
End of Core (EOC) 15

The following provides the quantity of tubes inspected and tubes removed by from service by plugging.

Steam Generator	Tubes Inspected Full Length (Bobbin)	Tubes Removed by Plugging
A	3761	0
B	3775	0
C	3740	0
D	3758	0

In addition to the full length analysis of the bobbin data; some portions of the tubes were evaluated using array data to better detect or characterize indications. Following is a summary of the array probe evaluations.

Steam Generator	Tubes Inspected with Array Probe	Examination Extent
A	809	Periphery tubes from tube end to 1 st support (hot leg)
	809	Periphery tubes from tube sheet to 1 st support (cold leg)
	25	Special Interest locations identified by bobbin
B	814	Periphery tubes from tube end to 1 st support (hot leg)
	814	Periphery tubes from tube sheet to 1 st support (cold leg)
	929	Hot Leg Tubesheet sample (TEH to TSH +2")
	52	Special Interest locations identified by bobbin.

C	803	Periphery tubes from tube end to 1 st support (hot leg)
	803	Periphery tubes from tube sheet to 1 st support (cold leg)
	920	Hot Leg Tubesheet sample (TEH to TSH +2")
	44	Special Interest locations identified by bobbin.
D	812	Periphery tubes from tube end to 1 st support (hot leg)
	812	Periphery tubes from tube sheet to 1 st support (cold leg)
	22	Special Interest locations identified by bobbin.

Attachments 1, 2, 3, and 4 identify tube imperfections in steam generators A, B, C, and D respectively. The location and size of the imperfections are also provided.

Table 1 lists all the eddy current codes and figure 1 represents the tubesheet row and column configuration. Figure 2 is provides the support structure profile for location orientation.

Table 1
Characterization Codes

<u>#</u>	<u>CODE</u>	<u>DESCRIPTION</u>
1	ADI	Absolute Drift Indication
2 *	AXI	Axial Indication
3	BLG	Bulge
4	BOR	Boron
5	CHT	Chatter
7	DNT	Dent
8	DWI	Dent With Indication
9	FC	Final Calibration
10	FCL	Final Calibration Late
11	ICR	Incomplete Roll
12	IC	Initial Calibration
13	IV	Independent Verification of tube identification
14 *	IDOK	Tube ID Verified; This code shall be used to identify tubes acquired more than once during the current outage. Use of this code requires tube to tube comparison or fingerprinting of the affected tube(s).
15	INF	Indication Not Found
16	INR	Indication Not Reportable
17	IRR	Irregular Roll
18 *	L3R	Level III Review
19	MSG	Analyst Message
20	NEX	No Expansion
21	NFC	No Final Calibration
22	NQI	Non-Quantifiable Indication
23	NSR	Needs SGME Review
24	OBS	Obstructed
25	OVR	Over Roll
26	OXP	Over Expansion
27	PID	Positive Identification
28 *	PLG	Plugged Tube
29	PLP	Possible Loose Parts
30	PVN	Permeability Variation
31	RBD	Retest - Bad Data
32	RFB	Retest - Fan Bar using a wear standard for sizing
33	RIC	Retest - Incomplete
34	RNC	Retest - Tube Number Check
35	ROB	Retest - Obstructed
36	RRC	Retest - Rotating Coil
37	RPD	Retest - Positive Identification
38	SAT	Satisfactory
39	SLG	Sludge
40	SKR	Skip Roll
41 *	WAR	Wear
42	WTG	Wetting/Leaking

* Denotes code to be used in the "UTIL 1" field

Table 1
Three Letter Characterization Codes

<u>#</u>	<u>CODE</u>	<u>DESCRIPTION</u>
1	* AXI	Axial Indication
2	DNT	Dent
3	* L3R	Level III Review
4	MAI	Multiple Axial Indication
5	MCI	Multiple Circumferential Indication
6	MMI	Mixed-Mode Indication
7	MSG	Analyst Message
8	MVI	Multiple Volumetric Indications
9	NDF	No Defect Found
10	OBS	Obstructed
11	PID	Positive Identification
12	PLP	Possible Loose Part
13	PVN	Permeability Variation
14	RBD	Retest - Bad Data
15	RIC	Retest - Incomplete
16	RNC	Retest - Tube Number Check
17	ROB	Retest - Obstructed
18	SAI	Single Axial Indication
19	SCI	Single Circumferential Indication
20	SVI	Single Volumetric Indication
21	VOL	Volumetric
22	* WAR	Wear

* Denotes code to be used in the "UTIL 1" field.

7 07 33

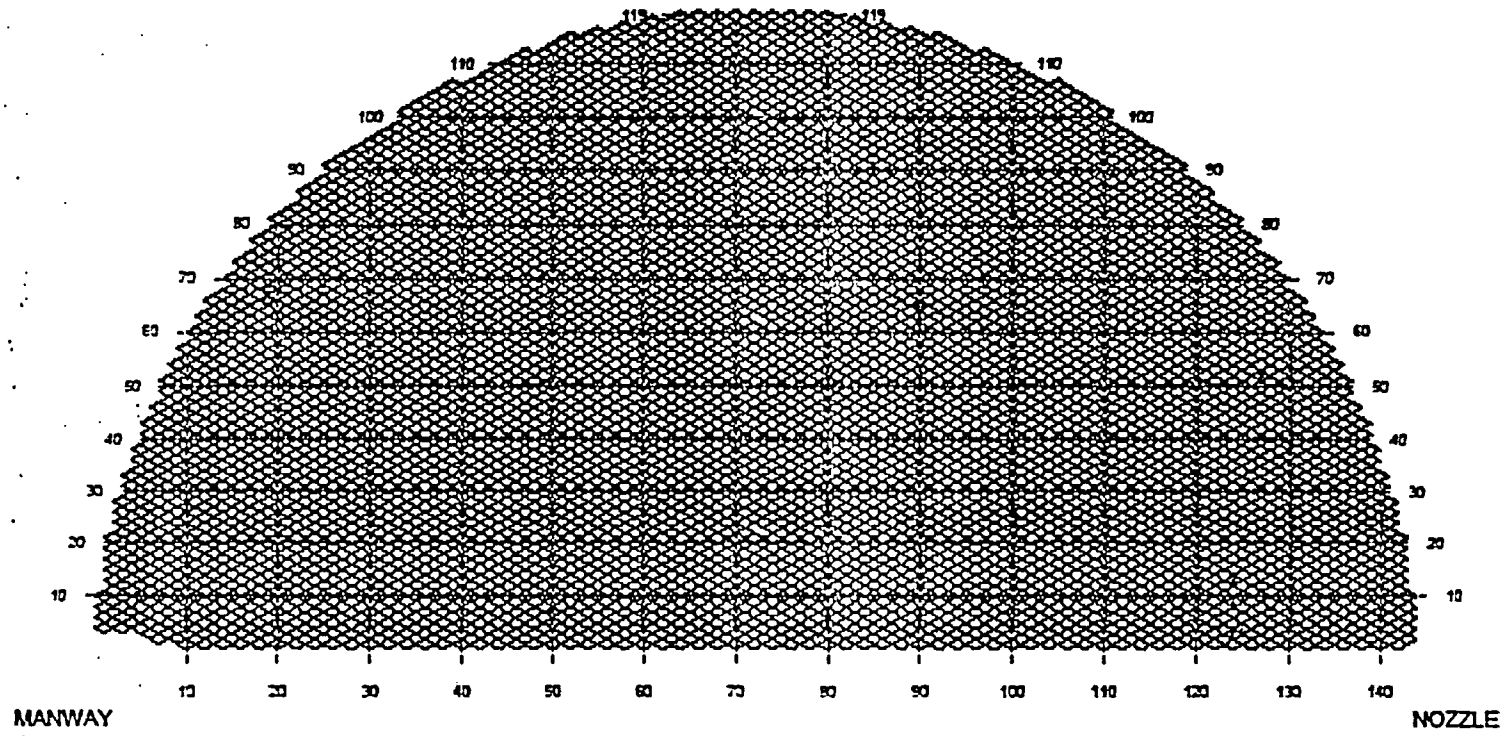
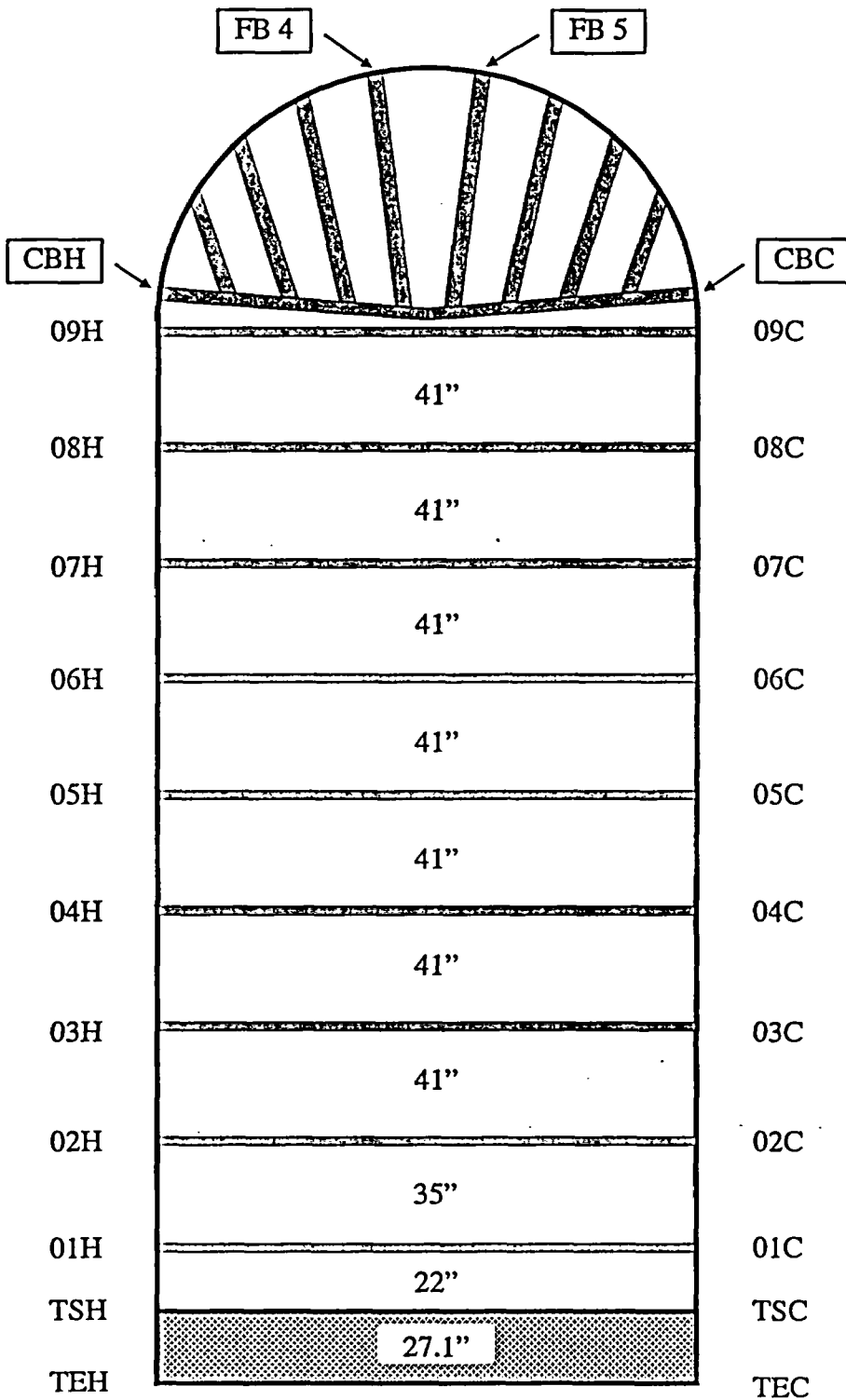


Figure 1

Figure 2
CFR 80 Steam Generator



CFR 80	
Tube Information:	
No. of Tubes	6633
Material:	Inconel 690
Nominal Dia.:	0.688"
Nominal Wall:	0.040"
Row 1 Radius:	3.973"
Straight Length:	31.9'/32.7'
Tube Pitch:	.930"
Tube Support Information	
Type:	Lattice
Material	410 Stainless
Thickness:	
High:	3.150"
Med.:	2.562"
Low:	1.000"
Connector Bar	
Material:	410 Stainless
Fan Bars	
Material:	410 Stainless
Thickness	0.110"
Width	1.25"

NOTE: Dimensions are to the centerline of the tube support structures.

Query Name : bobbin_query.qry

Query Title: Current bobbin non retest codes

Selected Outages/Scopes: 05/05 - EOC15 BOBBIN EXAM
Input Selected : All Tubes
Output File Selected :
Selected Indications : ADI, CHT, DNT, DPS, DWI, HNI, ICR, IRR, NEX, NQI, NQS, ODI, OVR, OXP, PLP, PVN, SKR, TWD,
Selected Probes : ALL
Selected Channels : ALL
Selected Cals : ALL
Selected Extent1 : ALL
Selected Extent2 : ALL
Selected Util 1 :
Selected Util 2 :
Selected Tube Heat :
TWD Range :
Volts Range :
Degrees Range :
Radius from Center Range :
Location Range :
Inspection Leg Queried : BOTH
Include In-Service or Out-Service Tubes : Both
Advanced User Query :

ATTACHMENT 1

5 PAGES

Current bobbin non retest codes

QUERY: bobbin_query

ROW	COL	VOLTS	DEG	CHN	IND	WTW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE
1	40	0.22	80	6	ADI	04C	+32.64	09C	TEC					4		COLD	540UL
4	35	1.00	60	6	HNI	08H	+26.49	09C	TEH					103		HOT	540UL
5	14	0.85	62	6	ADI	08H	+34.85	09C	TEH					105		HOT	540UL
9	26	0.29	83	6	ADI	04C	+23.87	09C	TEC					4		COLD	540UL
9	52	0.22	75	6	ADI	08C	+32.50	09C	TEC					4		COLD	540UL
14	81	0.26	79	6	HNI	03C	+25.46	TEC	TEH					68		HOT	540UL
15	64	0.21	156	1	HNI	07H	+15.35	TEC	TEH					54		HOT	540UL
17	32	0.21	163	1	HNI	04H	+21.72	TEC	TEH					38		HOT	540UL
20	91	0.15	153	1	HNI	02H	+7.13	TEC	TEH					68		HOT	540UL
22	53	0.47	80	6	HNI	02C	+3.48	TEC	TEH					52		HOT	540UL
		0.24	70	6	ADI	03C	+14.22	TEC	TEH					52		HOT	540UL
27	10	0.42	171	1	HNI	03H	+3.57	TEC	TEH					42		HOT	540UL
27	124	0.33	71	6	ADI	06C	+19.27	TEC	TEH					60		HOT	540UL
28	11	0.13	150	1	HNI	01H	+26.59	TEC	TEH					40		HOT	540UL
28	13	0.09	163	1	HNI	04H	+23.21	TEC	TEH					40		HOT	540UL
29	36	3.27	180	1	DNT	TSH	+2.53	TEC	TEH					38		HOT	540UL
30	51	0.53	71	6	ADI	FB3	+4.62	TEC	TEH					52		HOT	540UL
		0.26	69	6	HNI	03H	+36.67	TEC	TEH					52		HOT	540UL
32	49	0.21	70	6	HNI	02H	+27.39	TEC	TEH					52		HOT	540UL
		0.57	84	6	HNI	02H	+19.30	TEC	TEH					52		HOT	540UL
33	10	0.24	164	1	HNI	04C	+25.10	TEC	TEH					40		HOT	540UL
33	24	0.61	78	6	ADI	06C	+7.96	TEC	TEH					38		HOT	540UL
33	36	0.62	80	6	ADI	07C	+24.86	TEC	TEH					38		HOT	540UL
34	55	0.41	74	6	HNI	01H	+20.37	TEC	TEH					52		HOT	540UL
35	52	0.43	85	6	HNI	01H	+10.94	TEC	TEH					52		HOT	540UL
37	36	2.64	182	P1	DNT	FB3	+0.42	TEC	TEH					38		HOT	540UL
37	50	0.54	80	6	HNI	TSH	+12.02	TEC	TEH					54		HOT	540UL
37	58	0.36	85	6	ADI	01H	+30.43	TEC	TEH					50		HOT	540UL
37	60	0.27	75	6	HNI	06H	+25.50	TEC	TEH					50		HOT	540UL
39	28	0.59	172	1	NQI	09H	+8.42	TEC	TEH					36		HOT	540UL
40	53	0.64	85	6	HNI	06C	+21.34	TEC	TEH					52		HOT	540UL
43	46	2.31	183	1	DNT	CBH	+12.95	TEC	TEH					52		HOT	540UL
43	104	2.47	181	1	DNT	07C	+30.02	TEC	TEH					64		HOT	540UL
49	66	0.29	79	6	HNI	01C	+20.68	TEC	TEH					48		HOT	540UL
49	82	0.17	82	P2	TWD	6	+1.35	TEC	TEH	WAR				70		HOT	540UL
51	78	0.21	122	P1	HNI	01H	-1.65	TEC	TEH					68		HOT	540UL
52	55	0.16	161	1	HNI	02H	+8.37	TEC	TEH					48		HOT	540UL
		0.26	163	1	HNI	02H	+6.63	TEC	TEH					48		HOT	540UL
57	38	0.15	48	P2	TWD	5	+1.09	TEC	TEH	WAR				50		HOT	540UL
59	122	1.28	71	6	HNI	TSH	+6.19	TEC	TEH					60		HOT	540UL

Current bobbin non retest codes

QUERY: bobbin_query.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
61	70	0.30	75	P2	TWD	13	FB4	+0.62	TEC	TEH	WAR			48	HOT	540UL
63	50	0.22	162	1	HNI		04C	+35.09	TEC	TEH				52	HOT	540UL
73	106	2.18	178	1	DNT		01H	+20.15	TEC	TEH				6	HOT	540UL
75	50	0.32	161	1	HNI		05H	+9.85	TEC	TEH				30	HOT	540UL
75	70	3.56	183	1	DNT		FB1	-2.79	TEC	TEH				16	HOT	540UL
77	82	0.29	99	P2	TWD	9	FB5	-0.68	TEC	TEH	WAR			12	HOT	540UL
77	90	0.26	99	P2	TWD	10	FB5	-0.64	TEC	TEH	WAR			10	HOT	540UL
81	80	0.26	107	P2	TWD	10	FB7	-0.67	TEC	TEH	WAR			10	HOT	540UL
84	27	0.93	78	6	HNI		FB4	+4.96	TEC	TEH				32	HOT	540UL
85	86	0.27	66	6	ADI		04H	+26.13	TEC	TEH				12	HOT	540UL
89	78	0.33	103	P2	TWD	12	FB5	-0.59	TEC	TEH	WAR			10	HOT	540UL
89	80	0.34	105	P2	TWD	13	FB5	-0.67	TEC	TEH	WAR			10	HOT	540UL
91	80	0.31	116	P2	TWD	10	FB6	+1.72	TEC	TEH	WAR			12	HOT	540UL
91	84	0.25	99	P2	TWD	9	FB4	-0.73	TEC	TEH	WAR			10	HOT	540UL
92	79	0.35	92	P2	TWD	13	FB4	-0.53	TEC	TEH	WAR			10	HOT	540UL
94	81	0.21	111	P2	TWD	8	FB5	+1.73	TEC	TEH	WAR			10	HOT	540UL
95	74	0.30	69	6	ADI		03H	+17.24	TEC	TEH				16	HOT	540UL
95	88	0.25	119	P2	TWD	8	FB4	-0.68	TEC	TEH	WAR			12	HOT	540UL
		0.33	58	6	ADI		02H	+6.31	TEC	TEH	CHG			12	HOT	540UL
96	47	0.70	82	6	HNI		02H	+16.53	TEC	TEH				28	HOT	540UL
96	109	0.20	101	P2	TWD	7	FB5	+1.26	TEC	TEH	WAR			58	HOT	540UL
99	46	0.20	72	6	HNI		08C	+20.96	TEC	TEH				28	HOT	540UL
99	72	3.12	182	P 1	DNT		FB6	-0.31	TEC	TEH				16	HOT	540UL
101	78	0.35	123	P2	TWD	13	FB4	-1.67	TEC	TEH	WAR			10	HOT	540UL
103	78	0.31	0	P2	TWD	10	FB5	-0.56	TEC	TEH	WAR			12	HOT	540UL
105	38	0.32	79	6	HNI		02H	+21.82	TEC	TEH				34	HOT	540UL
114	75	0.38	69	6	HNI		05H	+35.37	TEC	TEH				14	HOT	540UL

Total Tubes : 62
 Total Records: 67

110733

3075

Query Name : array_query.qry

Query Title: Current array codes

Selected Outages/Scopes: 05/05 - EOC15 TTS Array Exam
 05/05 - EOC15 Special Interest
Input Selected : All Tubes
Output File Selected :
Selected Indications : DNT,MAI,MCI,MMI,MVI,NQI,ODI,PLP,PVN,SAI,SCI,SVI,TWD,VOL,
Selected Probes : ALL
Selected Channels : ALL
Selected Cals : ALL
Selected Extent1 : ALL
Selected Extent2 : ALL
Selected Util 1 :
Selected Util 2 :
Selected Tube Heat :
TWD Range :
Volts Range :
Degrees Range :
Radius from Center Range :
Location Range :
Inspection Leg Queried : BOTH
Include In-Service or Out-Service Tubes : Both
Advanced User Query :

12 07 33

4 07 5

Current array codes

QUERY: array_query

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
9	26	0.26	96	82	VOL		04C +22.36	05C	04C					3	COLD	540XP
39	28	1.01	86	130	VOL		09H +8.66	CBH	09H					35	HOT	540XP
29	36	3.30	189	6	DNT		TSH +2.57	01H	TSH					37	HOT	540XP
37	36	1.87	188	42	DNT		FB3 +0.42	FB3	FB3					37	HOT	540XP
1	40	0.43	116	86	VOL		04C +32.12	05C	04C					3	COLD	540XP
43	46	1.72	188	18	DNT		CBH +12.83	FB3	CBH					51	HOT	540XP
30	51	1.16	24	10	VOL		FB3 +5.42	FB4	FB3					51	HOT	540XP
37	58	0.31	87	78	VOL		01H +30.09	02H	01H					49	HOT	540XP
99	72	1.72	12	138	DNT		FB6 -0.31	FB6	FB6					15	HOT	540XP
95	74	0.23	107	102	VOL		03H +17.23	04H	03H					15	HOT	540XP
49	82	0.35	87	Q9	VOL		FB2 +0.98	FB2	FB2	WAR				69	HOT	540XP
85	86	0.24	57	110	VOL		04H +25.97	04H	05H					11	HOT	540XP
95	88	0.51	76	Q9	VOL		FB4 +0.00	09C	09H	WAR				11	HOT	540XP
43	104	3.57	188	90	DNT		07C +29.77	07C	08C					63	HOT	540XP

Total Tubes : 14
 Total Records: 14

13 0733

5 075

Query Name : bobbin_query.qry

Query Title: Current bobbin non retest codes

Selected Outages/Scopes: 05/05 - EOC15 BOBBIN EXAM
Input Selected : All Tubes
Output File Selected :
Selected Indications : ADI,CHT,DNT,DPS,DWI,HNI,ICR,NEX,NQI,NQS,NSR,ODI,OVR,EXP,PLP,PVN,TWD,
Selected Probes : ALL
Selected Channels : ALL
Selected Cals : ALL
Selected Extent1 : ALL
Selected Extent2 : ALL
Selected Util 1 :
Selected Util 2 :
Selected Tube Heat :
TWD Range :
Volts Range :
Degrees Range :
Radius from Center Range :
Location Range :
Inspection Leg Queried : BOTH
Include In-Service or Out-Service Tubes : Both
Advanced User Query :

ATTACHMENT - 2

7 PAGES

14 07 33

1 07 7

Current bobbin non retest codes

QUERY: bobbin_query

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
1	54	1.75	52	1	OV		TSC	+0.32	09C	TEC				10	COLD	540UL
12	103	0.41	81	6	HNI		TSH	+3.73	09C	TEH				69	HOT	540UL
13	28	0.41	82	6	HNI		02C	+28.06	TEC	TEH				40	HOT	540UL
13	38	0.37	168	1	NQI		01C	+25.07	TEC	TEH				34	HOT	540UL
16	39	0.42	167	1	HNI		01C	+18.57	TEC	TEH				36	HOT	540UL
17	10	0.58	82	6	ADI		01C	+3.14	TEC	TEH				40	HOT	540UL
17	22	0.35	83	6	ADI		01C	+6.27	TEC	TEH				40	HOT	540UL
19	72	0.95	63	6	HNI		CBH	+6.79	TEC	TEH				62	HOT	540UL
20	33	0.37	75	6	ADI		04C	+14.33	TEC	TEH				34	HOT	540UL
22	25	0.23	75	6	ADI		03C	+31.58	TEC	TEH				36	HOT	540UL
23	36	0.25	82	6	ADI		02H	+6.73	TEC	TEH				34	HOT	540UL
25	24	0.21	70	6	HNI		07H	+35.57	TEC	TEH				38	HOT	540UL
		0.18	76	6	HNI		07H	+23.76	TEC	TEH				38	HOT	540UL
25	106	0.31	80	6	ADI		02C	+34.93	TEC	TEH				20	HOT	540UL
28	13	0.27	80	6	ADI		02H	+25.64	TEC	TEH				38	HOT	540UL
28	141	0.08	172	1	NQI		04H	+23.52	TEC	TEH				66	HOT	540UL
33	54	0.24	82	6	HNI		03H	+25.83	TEC	TEH				34	HOT	540UL
33	140	0.44	82	6	ADI		02C	+7.71	TEC	TEH				66	HOT	540UL
34	13	0.25	72	6	ADI		TSH	+12.00	TEC	TEH				40	HOT	540UL
35	136	7.18	182	P1	DNT		FB6	+2.29	TEC	TEH				58	HOT	540UL
37	24	0.33	162	1	HNI		03C	+23.56	TEC	TEH				38	HOT	540UL
39	40	0.20	82	6	ADI		01H	+22.61	TEC	TEH				34	HOT	540UL
39	48	0.98	85	6	ADI		01C	+20.56	TEC	TEH				32	HOT	540UL
39	58	0.45	81	6	HNI		01H	+20.31	TEC	TEH				66	HOT	540UL
39	88	0.21	76	6	ADI		08C	+8.79	TEC	TEH				16	HOT	540UL
40	65	0.39	82	6	ADI		01H	+20.09	TEC	TEH				66	HOT	540UL
41	20	0.34	82	6	ADI		04C	+6.37	TEC	TEH				40	HOT	540UL
41	58	0.26	83	6	ADI		01H	+21.24	TEC	TEH				68	HOT	540UL
41	60	0.38	78	6	HNI		01H	+14.09	TEC	TEH				68	HOT	540UL
45	60	0.32	80	6	ADI		06C	+24.01	TEC	TEH				68	HOT	540UL
45	66	0.26	166	1	HNI		02H	+21.88	TEC	TEH				66	HOT	540UL
47	58	0.29	74	6	ADI		03C	+33.47	TEC	TEH				66	HOT	540UL
49	100	0.33	73	6	HNI		01H	+25.17	TEC	TEH				20	HOT	540UL
50	83	0.28	75	6	ADI		05C	+9.88	TEC	TEH	IV			14	HOT	540UL
52	63	0.39	75	6	ADI		02C	+15.69	TEC	TEH				66	HOT	540UL
59	92	0.33	80	6	ADI		04C	+27.19	TEC	TEH				16	HOT	540UL
60	11	0.24	79	6	ADI		04C	+20.76	TEC	TEH				38	HOT	540UL
61	96	0.35	71	6	HNI		02H	+25.13	TEC	TEH				18	HOT	540UL
63	60	0.12	118	P1	HNI		02C	+0.22	TEC	TEH				66	HOT	540UL

15 03 33

7 02 7

Current bobbin non retest codes

QUERY: bobbin_query.qry

ROW	COL	VOLTS	DEG	CHN	IND	TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE
64	35	0.26	71	6	ADI	01H	+24.01	TEC	TEH					34		HOT	54OUL
66	73	0.31	96	P2	TWD	10	FB5	+0.63	TEC	TEH	WAR			10		HOT	54OUL
69	70	0.44	94	P2	TWD	14	FB4	+1.38	TEC	TEH	WAR			30		HOT	54OUL
69	72	0.29	79	6	ADI	07C	+27.21	TEC	TEH					30		HOT	54OUL
69	104	0.23	159	1	NQI	08H	+3.69	TEC	TEH					14		HOT	54OUL
		0.21	81	6	HNI	03H	+28.52	TEC	TEH					14		HOT	54OUL
74	83	0.36	116	P2	TWD	11	FB4	+1.26	TEC	TEH	WAR			62		HOT	54OUL
77	106	0.41	81	6	ADI	07C	+16.46	TEC	TEH					14		HOT	54OUL
79	24	0.14	148	1	HNI	FB1	+10.83	TEC	TEH					42		HOT	54OUL
79	96	0.67	168	8	PLP	TSH	+0.68	TEC	TEH					60		HOT	54OUL
80	105	0.62	110	6	HNI	07H	+35.62	TEC	TEH					14		HOT	54OUL
		0.16	166	1	HNI	08H	+3.93	TEC	TEH	IV				14		HOT	54OUL
82	67	0.17	166	1	NQI	05H	+10.21	TEC	TEH					32		HOT	54OUL
82	75	0.33	99	P2	TWD	10	FB4	-1.10	TEC	TEH	WAR			58		HOT	54OUL
82	83	0.37	81	P2	TWD	11	FB4	+1.16	TEC	TEH	WAR			62		HOT	54OUL
84	115	0.80	48	7	PLP	TSH	+3.50	TEC	TEH					46		HOT	54OUL
85	98	0.29	82	6	HNI	01H	+15.57	TEC	TEH					10		HOT	54OUL
86	83	0.43	87	P2	TWD	13	FB5	+1.04	TEC	TEH	WAR			62		HOT	54OUL
		0.39	85	P2	TWD	12	FB4	+1.29	TEC	TEH	WAR			62		HOT	54OUL
86	115	0.45	51	7	PLP	TSH	+3.51	TEC	TEH					48		HOT	54OUL
87	36	1.33	59	6	HNI	TSH	+3.77	TEC	TEH					42		HOT	54OUL
87	64	0.75	66	6	ADI	02C	+7.00	TEC	TEH					32		HOT	54OUL
89	60	0.29	86	P2	TWD	10	FB6	-1.23	TEC	TEH	WAR			28		HOT	54OUL
91	70	0.28	74	P2	TWD	10	FB6	+1.37	TEC	TEH	WAR			32		HOT	54OUL
94	95	0.29	169	1	NQI	06H	+7.87	TEC	TEH					10		HOT	54OUL
95	64	0.24	123	P2	TWD	9	FB5	-1.13	TEC	TEH	WAR			32		HOT	54OUL
		0.36	77	6	HNI	02H	+19.43	TEC	TEH					32		HOT	54OUL
97	70	0.18	106	P2	TWD	6	FB8	+1.98	TEC	TEH	WAR			30		HOT	54OUL
		0.39	102	P2	TWD	12	FB6	-1.18	TEC	TEH	WAR			30		HOT	54OUL
		0.61	100	P2	TWD	18	FB5	-1.28	TEC	TEH	WAR			30		HOT	54OUL
98	83	0.57	85	P2	TWD	17	FB5	+1.04	TEC	TEH	WAR			62		HOT	54OUL
99	100	1.31	154	8	PLP	TSH	+0.69	TEC	TEH					14		HOT	54OUL
100	99	0.64	149	8	PLP	TSH	+0.77	TEC	TEH					14		HOT	54OUL
102	39	0.73	84	6	HNI	01H	+19.01	TEC	TEH					22		HOT	54OUL
103	70	0.28	83	P2	TWD	10	FB4	-1.01	TEC	TEH	WAR			32		HOT	54OUL
103	78	0.40	78	6	HNI	05H	+37.49	TEC	TEH					60		HOT	54OUL
105	104	0.57	47	7	PLP	TSH	+13.24	TEC	TEH	LAR				14		HOT	54OUL
106	103	0.13	157	1	NQI	TSH	+6.93	TEC	TEH					14		HOT	54OUL
		0.28	79	6	ADI	01C	+29.88	TEC	TEH	IV				14		HOT	54OUL
		0.50	55	7	PLP	TSH	+13.37	TEC	TEH					14		HOT	54OUL
107	88	0.25	85	6	HNI	03H	+8.82	TEC	TEH					8		HOT	54OUL
111	70	0.33	82	6	ADI	05H	+4.63	TEC	TEH					32		HOT	54OUL

Current bobbin non retest codes

QUERY: bobbin_query.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
119	74	2.57	179	1	DNT	TSC	+2.18	TEC	TEH					60	HOT	540UL
119	80	4.32	183	1	DNT	FB4	+6.41	TEC	TEH					64	HOT	540UL

Total Tubes : 74
Total Records: 83

Query Name : array_query.qry

Query Title: Current array codes

Selected Outages/Scopes: 05/05 - EOC15 TTS Array Exam
 05/05 - EOC15 Special Interest
 05/05 - EOC15 SSI P/LP bounding

Input Selected : All Tubes
Output File Selected :
Selected Indications : DNT,MAI,MCI,MMI,MVI,NQI,ODI,PLP,PVN,SAI,SCI,SVI,TWD,VOL,
Selected Probes : ALL
Selected Channels : ALL
Selected Cals : ALL
Selected Extent1 : ALL
Selected Extent2 : ALL
Selected Util 1 :
Selected Util 2 :
Selected Tube Heat :
TWD Range :
Volts Range :
Degrees Range :
Radius from Center Range :
Location Range :
Inspection Leg Queried : BOTH
Include In-Service or Out-Service Tubes : Both
Advanced User Query :

180733

5077

Current array codes

QUERY: array_query

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
17	10	0.45	101	86	VOL		01C +3.12	01C	02C					39	HOT	540XP
17	22	0.29	102	38	VOL		01C +6.00	01C	02C					39	HOT	540XP
22	25	0.27	97	114	VOL		03C +31.73	03C	04C					35	HOT	540XP
20	33	0.38	80	18	VOL		04C +14.51	04C	05C					33	HOT	540XP
13	38	0.56	107	94	VOL		01C +25.04	01C	02C					33	HOT	540XP
70	45	5.92	87	12	PLP		TSH +0.51	TSH	TEH	LAR				21	HOT	540XP
39	48	0.34	116	46	VOL		01C +20.94	01C	02C					31	HOT	540XP
45	60	0.44	107	26	VOL		06C +24.42	06C	07C					67	HOT	540XP
82	67	0.35	86	162	VOL		05H +10.43	06H	05H					31	HOT	540XP
69	70	0.49	51	Q4	VOL		FB4 +1.38	FB4	FB4	WAR				29	HOT	540XP
91	70	0.42	74	Q11	VOL		FB6 +1.76	FB6	FB6	WAR				31	HOT	540XP
97	70	0.55	96	Q11	VOL		FB6 -1.18	FB6	FB6	WAR				29	HOT	540XP
		0.30	103	Q4	VOL		FB8 +1.91	FB8	FB8	WAR				29	HOT	540XP
		0.75	87	Q11	VOL		FB5 -1.28	FB5	FB5	WAR				29	HOT	540XP
103	70	1.31	62	102	VOL		FB4 -1.40	FB4	FB4	WAR				31	HOT	540XP
111	70	0.35	102	102	VOL		05H +5.47	06H	05H					31	HOT	540XP
		0.20	113	114	VOL		05H +4.33	06H	05H					31	HOT	540XP
69	72	0.22	91	30	VOL		07C +27.09	07C	08C					29	HOT	540XP
119	74	2.87	175	22	DNT		TSC +1.90	TSC	01C					59	HOT	540XP
82	75	0.43	58	Q3	VOL		FB4 -1.35	FB4	FB4	WAR				57	HOT	540XP
119	80	4.39	177	62	DNT		FB4 +6.22	FB5	FB4					63	HOT	540XP
74	83	0.76	88	PL9	VOL		FB4 +1.65	FB4	FB4	WAR				61	HOT	540XP
82	83	0.43	67	Q10	VOL		FB4 +0.63	FB4	FB4	WAR				61	HOT	540XP
86	83	0.57	109	Q10	VOL		FB4 +0.71	FB4	FB4	WAR				61	HOT	540XP
		0.48	68	Q10	VOL		FB5 +1.15	FB5	FB5	WAR				61	HOT	540XP
98	83	0.61	59	Q10	VOL		FB5 +1.18	FB5	FB5	WAR				61	HOT	540XP
48	85	13.09	99	132	PLP		TSH +0.50	TSH	TEH	LAR				15	HOT	540XP
61	88	11.40	106	140	PLP		TSH +0.35	TSH	TEH	LAR				15	HOT	540XP
63	88	12.84	96	104	PLP		TSH +0.13	01H	TEH	LAR				15	HOT	540XP
44	95	6.64	100	164	PLP		TSH +0.20	TSH	TEH	LAR				17	HOT	540XP
46	95	3.08	68	144	PLP		TSH +0.35	01H	TEH	LAR				19	HOT	540XP
80	95	6.09	109	60	PLP		TSH +0.74	TSH	TEH	LAR				9	HOT	540XP
86	95	5.10	87	168	PLP		TSH +0.40	TSH	TEH	LAR				9	HOT	540XP
94	95	0.57	109	94	VOL		06H +7.93	07H	06H					9	HOT	540XP
79	96	9.56	128	96	PLP		TSH +0.77	01H	TEH	LAR				59	HOT	540XP
87	96	8.52	109	132	PLP		TSH +0.45	01H	TEH	LAR				57	HOT	540XP
111	96	3.51	84	164	PLP		TSH +0.23	01H	TEH	LAR				9	HOT	540XP
112	97	6.82	108	128	PLP		TSH +0.42	01H	TEH	LAR				9	HOT	540XP
109	98	14.39	107	140	PLP		TSH +0.44	01H	TEH	LAR				9	HOT	540XP
100	99	10.38	104	56	PLP		TSH +0.79	01H	TEH	LAR				13	HOT	540XP

19 07 33

16 07 7

Current array codes

QUERY: array_query.qry

ROW	COL	VOLTS	DEG	CHN	IND	WTW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
110	99	18.79	110	8	PLP	TSH	+0.47	01H	TEH	LAR				13	HOT	540XP
99	100	11.52	114	72	PLP	TSH	+0.88	TSH	TEH	LAR				13	HOT	540XP
101	100	11.69	104	80	PLP	TSH	+0.42	TSH	TEH	LAR				13	HOT	540XP
105	102	9.85	123	144	PLP	TSH	+0.54	01H	TEH	LAR				13	HOT	540XP
107	102	8.98	123	104	PLP	TSH	+0.52	01H	TEH	LAR				13	HOT	540XP
106	103	10.89	126	32	PLP	TSH	+13.54	01H	TEH	LAR				13	HOT	540XP
		0.20	95	30	VOL	TSH	+7.17	01H	TSH					13	HOT	540XP
69	104	0.51	105	114	VOL	08H	+3.81	09H	08H					13	HOT	540XP
105	104	12.04	116	44	PLP	TSH	+13.61	01H	TEH	LAR				13	HOT	540XP
		10.93	121	44	PLP	TSH	+13.58	01H	TSH					13	HOT	540XP
25	106	0.48	82	30	VOL	02C	+34.31	02C	03C					19	HOT	540XP
84	115	15.34	117	108	PLP	TSH	+3.79	01H	TEH	LAR				45	HOT	540XP
86	115	12.42	116	104	PLP	TSH	+6.78	TSH	TEH	LAR				47	HOT	540XP
15	128	9.82	101	108	PLP	TSH	+0.21	TSH	TEH	LAR				53	HOT	540XP
33	140	0.39	77	46	VOL	02C	+7.94	02C	03C					65	HOT	540XP
28	141	0.29	101	46	VOL	04H	+23.36	05H	04H					65	HOT	540XP

Total Tubes : 50
 Total Records: 56

200933

7097

Query Name : bobbin_query.qry

Query Title: Current bobbin non retest codes

Selected Outages/Scopes: 05/05 - EOC15 BOBBIN EXAM
Input Selected : All Tubes
Output File Selected :
Selected Indications : ADI, CHT, DNT, DPS, DWI, HNI, ICR, NEX, NQI, NQS, ODI, OXP, PLP, PVN, TWD,
Selected Probes : ALL
Selected Channels : ALL
Selected Cals : ALL
Selected Extent1 : ALL
Selected Extent2 : ALL
Selected Util 1 :
Selected Util 2 :
Selected Tube Heat :
TWD Range :
Volts Range :
Degrees Range :
Radius from Center Range :
Location Range :
Inspection Leg Queried : BOTH
Include In-Service or Out-Service Tubes : Both
Advanced User Query :

ATTACHMENT -3

7 PAGES

210733

1077

Current bobbin non retest codes

QUERY: bobbin_query

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
1	70	0.33	164	1	NQI	TSC	+1.53	09C	TEC					4	COLD	540UL
2	67	0.24	157	1	HNI	TSC	+1.39	09C	TEC					4	COLD	540UL
3	66	0.09	156	1	NQI	TSC	+1.93	09C	TEC					2	COLD	540UL
5	54	2.68	12	1	HNI	TSH	+0.87	09C	TEH					85	HOT	540UL
5	132	0.90	85	6	HNI	05C	+27.07	09C	TEC					6	COLD	540UL
7	50	2.77	183	P1	DNT	09H	-0.49	09C	TEH					85	HOT	540UL
19	34	0.15	164	1	HNI	02H	+29.64	TEC	TEH					26	HOT	540UL
21	66	0.35	170	1	HNI	09H	-2.99	TEC	TEH					82	HOT	540UL
23	4	0.60	185	8	PLP	TSH	+1.34	TEC	TEH					82	HOT	540UL
24	5	0.32	69	7	PLP	TSH	+1.44	01H	TEH					62	HOT	540UL
		0.27	50	7	PLP	TSH	+0.76	TEC	TEH	LAR				30	HOT	540UL
25	4	0.33	192	8	PLP	TSH	+0.50	TEC	TEH					30	HOT	540UL
27	10	6.01	10	1	NQI	TSC	+0.92	TEC	TEH					32	HOT	540UL
29	10	3.17	11	1	HNI	TSC	+0.95	TEC	TEH					30	HOT	540UL
31	10	3.53	11	1	NQI	TSC	+0.95	TEC	TEH					32	HOT	540UL
34	85	1.11	53	6	HNI	08C	+10.92	TEC	TEH					80	HOT	540UL
43	10	0.80	178	8	PLP	TSH	+1.88	TEC	TEH					32	HOT	540UL
		0.53	188	8	PLP	TSH	+0.73	TEC	TEH					32	HOT	540UL
43	138	2.23	177	1	DNT	03H	+11.52	TEC	TEH					70	HOT	540UL
44	11	0.92	175	8	PLP	TSH	+1.75	TEC	TEH					30	HOT	540UL
46	7	0.12	158	1	NQI	TSH	+9.35	TEC	TEH					30	HOT	540UL
46	9	1.03	62	6	HNI	01C	+28.78	TEC	TEH					30	HOT	540UL
52	95	0.54	86	6	ADI	02C	+31.45	TEC	TEH					72	HOT	540UL
54	19	0.70	87	6	HNI	02H	+23.35	TEC	TEH					26	HOT	540UL
59	122	0.18	75	6	ADI	02H	+4.84	TEC	TEH					58	HOT	540UL
63	44	0.17	99	P2	TWD	5	FB4	-1.72	TEC	TEH	WAR			30	HOT	540UL
67	88	1.11	82	6	HNI	07C	+24.41	TEC	TEH					6	HOT	540UL
		0.38	162	1	HNI	07C	+29.45	TEC	TEH					6	HOT	540UL
		0.42	164	1	HNI	07C	+24.70	TEC	TEH					6	HOT	540UL
70	55	0.30	72	P2	TWD	9	FB5	-1.19	TEC	TEH	WAR			14	HOT	540UL
72	23	0.24	82	6	HNI	01C	+15.54	TEC	TEH					24	HOT	540UL
72	61	0.45	0	P2	TWD	12	FB5	+1.59	TEC	TEH	WAR			10	HOT	540UL
73	62	0.17	0	P2	TWD	6	FB6	-0.69	TEC	TEH	WAR			12	HOT	540UL
74	65	0.20	0	P2	TWD	5	FB6	-1.94	TEC	TEH	WAR			10	HOT	540UL
		0.23	0	P2	TWD	6	FB5	+1.54	TEC	TEH	WAR			10	HOT	540UL
		0.18	0	P2	TWD	5	FB4	+0.62	TEC	TEH	WAR			10	HOT	540UL
74	87	0.44	0	P2	TWD	12	FB4	-1.77	TEC	TEH	WAR			6	HOT	540UL
75	60	0.50	82	P2	TWD	14	FB4	-1.13	TEC	TEH	WAR			14	HOT	540UL
		0.27	107	P2	TWD	8	FB6	-0.70	TEC	TEH	WAR			14	HOT	540UL
75	62	0.61		P2	TWD	15	FB4	-0.67	TEC	TEH	WAR			10	HOT	540UL
75	76	0.60		P2	TWD	16	FB5	+1.24	TEC	TEH	WAR			6	HOT	540UL
76	59	0.23	0	P2	TWD	8	FB6	-1.76	TEC	TEH	WAR			16	HOT	540UL

220733

2077

Current bobbin non retest codes

QUERY: bobbin_query.qry

ROW	COL	VOLTS	DEG	CHN	IND	WTW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE
76	61	0.51		P2	TWD	13	FB5	+1.59	TEC	TEH	WAR			10		HOT	54OUL
77	68	0.23	0	P2	TWD	6	FB6	-0.59	TEC	TEH	WAR			10		HOT	54OUL
79	34	0.45	85	6	HNI		02H	+26.96	TEC	TEH				22		HOT	54OUL
79	60	0.28	103	P2	TWD	8	FB4	-0.89	TEC	TEH	WAR			14		HOT	54OUL
79	62	0.31	0	P2	TWD	8	FB5	+0.68	TEC	TEH	WAR			10		HOT	54OUL
		0.71	0	P2	TWD	17	FB4	-1.24	TEC	TEH	WAR			10		HOT	54OUL
79	66	0.16	0	P2	TWD	4	FB8	+0.81	TEC	TEH	WAR			10		HOT	54OUL
79	80	0.18	0	P2	TWD	6	FB4	+0.63	TEC	TEH	WAR			8		HOT	54OUL
79	86	0.26	0	P2	TWD	9	FB6	-0.49	TEC	TEH	WAR			8		HOT	54OUL
		0.34	0	P2	TWD	11	FB5	-0.87	TEC	TEH	WAR			8		HOT	54OUL
80	59	0.25	0	P2	TWD	9	FB5	+1.71	TEC	TEH	WAR			16		HOT	54OUL
80	81	0.39	0	P2	TWD	11	FB4	-1.11	TEC	TEH	WAR			6		HOT	54OUL
83	76	1.02		P2	TWD	23	FB5	-0.60	TEC	TEH	WAR			6		HOT	54OUL
85	62	0.20	0	P2	TWD	7	FB5	-0.69	TEC	TEH	WAR			12		HOT	54OUL
85	64	0.31	0	P2	TWD	8	FB5	-0.65	TEC	TEH	WAR			10		HOT	54OUL
85	76	0.91	0	P2	TWD	25	FB5	-1.15	TEC	TEH	WAR			8		HOT	54OUL
86	59	0.28	78	P2	TWD	8	FB4	+1.73	TEC	TEH	WAR			14		HOT	54OUL
86	61	0.52	0	P2	TWD	13	FB5	-0.59	TEC	TEH	WAR			10		HOT	54OUL
		0.27	0	P2	TWD	7	FB4	-0.67	TEC	TEH	WAR			10		HOT	54OUL
86	77	0.34	0	P2	TWD	11	FB8	+0.69	TEC	TEH	WAR			8		HOT	54OUL
90	87	0.51	0	P2	TWD	14	FB5	+1.66	TEC	TEH	WAR			6		HOT	54OUL
90	115	0.34	89	6	HNI		02H	+13.81	TEC	TEH				40		HOT	54OUL
91	40	1.00	10	1	HNI		02C	+4.65	TEC	TEH				18		HOT	54OUL
91	62	0.42	0	P2	TWD	11	FB5	+0.62	TEC	TEH	WAR			10		HOT	54OUL
		0.38	0	P2	TWD	10	FB5	-0.67	TEC	TEH	WAR			10		HOT	54OUL
		0.24	0	P2	TWD	6	FB4	+0.59	TEC	TEH	WAR			10		HOT	54OUL
92	87	0.42	0	P2	TWD	14	FB5	-1.67	TEC	TEH	WAR			8		HOT	54OUL
94	63	0.25	0	P2	TWD	7	FB6	-1.70	TEC	TEH	WAR			10		HOT	54OUL
96	87	0.38	0	P2	TWD	11	FB5	+1.63	TEC	TEH	WAR			6		HOT	54OUL
		0.28	0	P2	TWD	8	FB4	+1.61	TEC	TEH	WAR			6		HOT	54OUL
97	86	0.31	0	P2	TWD	9	FB6	-0.63	TEC	TEH	WAR			6		HOT	54OUL
98	77	0.62	0	P2	TWD	19	FB5	-1.12	TEC	TEH	WAR			8		HOT	54OUL
98	85	0.22	0	P2	TWD	6	FB5	-1.76	TEC	TEH	WAR			6		HOT	54OUL
		0.21	0	P2	TWD	6	FB4	+1.87	TEC	TEH	WAR			6		HOT	54OUL
		0.17	0	P2	TWD	5	FB3	+1.85	TEC	TEH	WAR			6		HOT	54OUL
98	87	0.35	0	P2	TWD	12	FB6	-1.61	TEC	TEH	WAR			8		HOT	54OUL
		0.34	0	P2	TWD	11	FB5	-1.53	TEC	TEH	WAR			8		HOT	54OUL
99	68	0.15	0	P2	TWD	5	FB7	-0.64	TEC	TEH	WAR			12		HOT	54OUL
100	49	0.62	14	1	HNI		TSH	+0.85	TEC	TEH				14		HOT	54OUL
		0.40	77	6	ADI		04H	+8.04	TEC	TEH				14		HOT	54OUL
100	87	0.46	0	P2	TWD	13	FB4	+1.66	TEC	TEH	WAR			6		HOT	54OUL
101	78	0.51		P2	TWD	14	FB5	-1.68	TEC	TEH	WAR			6		HOT	54OUL
		0.49		P2	TWD	13	FB4	+1.66	TEC	TEH	WAR			6		HOT	54OUL
		0.42		P2	TWD	12	FB4	-0.71	TEC	TEH	WAR			6		HOT	54OUL

11 12 33

3077

Current bobbin non retest codes

QUERY: bobbin_query.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
		0.42		P2	TWD	12	FB4	-1.68	TEC	TEH	WAR			6	HOT	540UL
102	77	0.51	0	P2	TWD	16	FB7	-1.04	TEC	TEH	WAR			8	HOT	540UL
		0.52	0	P2	TWD	16	FB5	-1.15	TEC	TEH	WAR			8	HOT	540UL
		0.75	0	P2	TWD	22	FB4	-1.15	TEC	TEH	WAR			8	HOT	540UL
		0.39	0	P2	TWD	13	FB3	+0.98	TEC	TEH	WAR			8	HOT	540UL
102	83	0.30	0	P2	TWD	10	FB5	-1.64	TEC	TEH	WAR			8	HOT	540UL
102	87	0.45	0	P2	TWD	14	FB5	-1.67	TEC	TEH	WAR			8	HOT	540UL
104	37	0.85	194	8	PLP		TSH	+0.69	TEC	TEH				24	HOT	540UL
104	75	0.20	0	P2	TWD	6	FB4	-0.65	TEC	TEH	WAR			6	HOT	540UL
105	38	0.64	188	8	PLP		TSH	+1.04	TEC	TEH				20	HOT	540UL
106	69	0.39		P2	TWD	10	FB6	+1.73	TEC	TEH	WAR			10	HOT	540UL
109	62	0.14	0	P2	TWD	5	FB4	-0.83	TEC	TEH	WAR			12	HOT	540UL
110	99	0.96	151	8	PLP		TSH	+3.78	TEC	TEH				4	HOT	540UL
111	98	0.62	90	7	PLP		TSH	+4.35	01H	TEH				62	HOT	540UL
		0.56	90	7	PLP		TSH	+3.46	TEC	TEH				4	HOT	540UL
113	70	0.20	83	6	HNI		02H	-3.52	TEC	TEH				10	HOT	540UL
116	73	0.67	86	6	ADI		03C	+26.94	TEC	TEH				2	HOT	540UL
117	62	0.44	79	6	HNI		05C	+13.74	TEC	TEH				12	HOT	540UL
117	66	0.55	93	6	HNI		TSC	+17.99	TEC	TEH				10	HOT	540UL
118	73	0.10	117	8	PLP		TSH	+5.24	TEC	TEH				4	HOT	540UL

Total Tubes : 82
 Total Records: 106

17

13
 39
 10
 62 WPR

Query Name : array_query.qry

Query Title: Current array codes

Selected Outages/Scopes: 05/05 - EOC15 TTS Array Exam
 05/05 - EOC15 Special Interest
Input Selected : All Tubes
Output File Selected :
Selected Indications : DNT,MAI,MCI,MMI,MVI,NQI,ODI,PLP,PVN,SAI,SCI,SVI,TWD,VOL,
Selected Probes : ALL
Selected Channels : ALL
Selected Cals : ALL
Selected Extent1 : ALL
Selected Extent2 : ALL
Selected Util 1 :
Selected Util 2 :
Selected Tube Heat :
TWD Range :
Volts Range :
Degrees Range :
Radius from Center Range :
Location Range :
Inspection Leg Queried : BOTH
Include In-Service or Out-Service Tubes : Both
Advanced User Query :

Current array codes

QUERY: array_query

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE
24	3	4.75	99	84	PLP		TSH	+0.19	01H	TEH				61		HOT	540XP
		3.58	72	164	PLP		TSH	+0.06	01H	TEH	LAR			29		HOT	540XP
23	4	10.22	130	144	PLP		TSH	+0.89	01H	TEH	LAR			81		HOT	540XP
25	4	10.06	124	24	PLP		TSH	+1.72	01H	TEH				61		HOT	540XP
		5.30	121	152	PLP		TSH	+1.27	01H	TEH				61		HOT	540XP
		5.46	113	128	PLP		TSH	+0.65	01H	TEH	LAR			29		HOT	540XP
24	5	8.55	120	144	PLP		TSH	+1.54	01H	TEH				61		HOT	540XP
		6.63	118	156	PLP		TSH	+1.02	01H	TEH	LAR			29		HOT	540XP
		7.35	126	156	PLP		TSH	+0.47	01H	TEH	LAR			29		HOT	540XP
46	7	0.24	112	126	VOL		TSH	+9.07	01H	TEH				29		HOT	540XP
43	10	7.02	113	164	PLP		TSH	+1.84	01H	TEH				61		HOT	540XP
		3.90	83	56	PLP		TSH	+0.16	01H	TEH				61		HOT	540XP
		5.68	121	104	PLP		TSH	+1.91	TSH	TEH	LAR			31		HOT	540XP
		7.96	117	68	PLP		TSH	+0.75	TSH	TEH	LAR			31		HOT	540XP
42	11	11.10	124	84	PLP		TSH	+0.75	01H	TEH	LAR			31		HOT	540XP
44	11	21.70	131	48	PLP		TSH	+1.72	01H	TEH	LAR			29		HOT	540XP
102	37	4.58	108	144	PLP		TSH	+0.40	01H	TEH				61		HOT	540XP
		4.62	113	156	PLP		TSH	+0.43	01H	TEH	LAR			51		HOT	540XP
104	37	16.30	125	168	PLP		TSH	+0.37	01H	TEH				61		HOT	540XP
		12.08	126	44	PLP		TSH	+0.40	01H	TEH	LAR			23		HOT	540XP
103	38	4.70	124	128	PLP		TSH	+0.37	01H	TEH				61		HOT	540XP
		5.70	116	72	PLP		TSH	+0.58	01H	TEH	LAR			17		HOT	540XP
105	38	10.70	123	152	PLP		TSH	+0.88	01H	TEH				61		HOT	540XP
		9.63	119	36	PLP		TSH	+0.92	01H	TEH	LAR			19		HOT	540XP
100	49	0.34	95	10	VOL		04H	+8.08	05H	04H				13		HOT	540XP
80	59	0.55	89	Q5	VOL		FB5	+1.86	FB5	FB5	WAR			15		HOT	540XP
75	60	0.43	75	Q14	VOL		FB4	-1.08	FB4	FB4	WAR			13		HOT	540XP
79	60	0.43	58	Q14	VOL		FB4	-1.10	FB4	FB4	WAR			13		HOT	540XP
75	62	0.56	51	Q14	VOL		FB4	-0.94	FB4	FB4	WAR			9		HOT	540XP
85	62	0.26	54	Q5	VOL		FB5	-0.78	FB5	FB5	WAR			11		HOT	540XP
91	62	0.51	43	Q8	VOL		FB4	+0.92	FB4	FB4	WAR			9		HOT	540XP
109	62	0.28	76	98	VOL		FB4	-0.75	FB4	FB4	WAR			11		HOT	540XP
74	65	0.34	97	Q14	VOL		FB5	+1.54	FB5	FB5	WAR			9		HOT	540XP
		0.61	44	Q14	VOL		FB4	+0.43	FB4	FB4	WAR			9		HOT	540XP
3	66	0.25	103	18	VOL		TSC	+1.95	01C	TSC				1		COLD	540XP
2	67	0.43	97	22	VOL		TSC	+1.72	01C	TSC				3		COLD	540XP
77	68	0.44	76	Q14	VOL		FB6	-0.84	FB6	FB6	WAR			9		HOT	540XP
1	70	0.28	73	18	VOL		TSC	+1.44	01C	TSC				3		COLD	540XP
49	70	18.21	103	156	PLP		TSH	+0.24	TSH	TEH	LAR			71		HOT	540XP
118	73	2.26	125	120	PLP		TSH	+6.10	01H	TEH	LAR			3		HOT	540XP
		2.40	124	164	PLP		TSH	+5.73	01H	TEH				61		HOT	540XP
104	75	0.22	86	Q13	VOL		FB4	-1.33	FB4	FB4	WAR			5		HOT	540XP
98	77	0.88	61	Q4	VOL		FB5	-0.86	FB5	FB5	WAR			7		HOT	540XP
102	77	1.07	76	Q5	VOL		FB7	-0.69	FB7	FB7	WAR			7		HOT	540XP
		0.53	109	Q5	VOL		FB5	-0.74	FB5	FB5	WAR			7		HOT	540XP
		1.19	74	Q5	VOL		FB4	-1.09	FB4	FB4	WAR			7		HOT	540XP
		0.55	84	Q11	VOL		FB3	+0.63	FB3	FB3	WAR			7		HOT	540XP

Current array codes

QUERY: array_query.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE
98	85	0.44	61	Q6	VOL		FB4	+1.41	FB4	FB4	WAR			5		HOT	540XP
		0.57	97	Q13	VOL		FB5	-1.25	FB5	FB5	WAR			5		HOT	540XP
		0.32	54	Q6	VOL		FB3	+1.30	FB3	FB3	WAR			5		HOT	540XP
79	86	0.45	71	Q12	VOL		FB6	-1.16	FB6	FB6	WAR			7		HOT	540XP
		0.59	79	Q12	VOL		FB5	-1.19	FB5	FB5	WAR			7		HOT	540XP
97	86	0.41	33	Q6	VOL		FB6	-0.88	FB6	FB6	WAR			5		HOT	540XP
96	87	0.38	54	Q6	VOL		FB4	+1.42	FB4	FB4	WAR			5		HOT	540XP
		0.49	64	Q6	VOL		FB5	+1.69	FB5	FB5	WAR			5		HOT	540XP
52	95	0.45	87	78	VOL		O2C	+30.76	O2C	O3C				71		HOT	540XP
111	98	11.42	132	96	PLP		TSH	+4.55	O1H	TEH				61		HOT	540XP
		12.34	130	68	PLP		TSH	+4.82	O1H	TEH	LAR			3		HOT	540XP
110	99	7.37	122	84	PLP		TSH	+4.47	O1H	TEH				61		HOT	540XP
		7.92	117	84	PLP		TSH	+5.12	O1H	TEH	LAR			3		HOT	540XP

Total Tubes : 37
 Total Records: 60

Query Name : bobbin_query.qry

Query Title: Current bobbin non retest codes

Selected Outages/Scopes: 05/05 - EOC15 BOBBIN EXAM
Input Selected : All Tubes
Output File Selected :
Selected Indications : ADI, CHT, DNT, DPS, DWI, HNI, ICR, NEX, NQI, NQS, NSR, OBS, ODI, OVR, OXP, PLP, PVN, TWD,
Selected Probes : ALL
Selected Channels : ALL
Selected Cals : ALL
Selected Extent1 : ALL
Selected Extent2 : ALL
Selected Util 1 :
Selected Util 2 :
Selected Tube Heat :
TWD Range :
Volts Range :
Degrees Range :
Radius from Center Range :
Location Range :
Inspection Leg Queried : BOTH
Include In-Service or Out-Service Tubes : Both
Advanced User Query :

ATTACHMENT-4

6 PAGES

1 of 6

10 of 33

Current bobbin non retest codes

QUERY: bobbin_query

ROW	COL	VOLTS	DEG	CHN	IND	WTW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
4	45	0.27	76	6	HNI	04H	+21.16	09C	TEH					95	HOT	540UL
4	133	10.84	182	1	DNT	09H	+6.42	09C	TEH					91	HOT	540UL
5	96	0.31	78	6	ADI	TSC	+9.29	09C	TEC					4	COLD	540UL
7	32	0.24	67	6	HNI	03H	+36.37	09C	TEH					95	HOT	540UL
7	112	0.63	83	6	HNI	08C	+3.37	09C	TEC					2	COLD	540UL
		1.25	86	6	HNI	06C	+34.37	09C	TEC					2	COLD	540UL
		0.24	163	1	HNI	04H	+8.80	09C	TEH					91	HOT	540UL
8	83	5.64	183	1	DNT	CBC	+10.70	09C	TEH					95	HOT	540UL
11	108	0.43	167	1	HNI	08H	+30.81	09C	TEH					91	HOT	540UL
12	131	0.57	85	6	HNI	05H	+33.37	09C	TEH					91	HOT	540UL
15	46	0.78	59	6	HNI	09H	+4.76	TEC	TEH					66	HOT	540UL
19	32	0.36	75	6	HNI	05H	+24.79	TEC	TEH					38	HOT	540UL
21	74	0.89	70	6	ADI	CBH	+9.23	TEC	TEH					68	HOT	540UL
23	40	0.51	70	6	ADI	08C	+7.57	TEC	TEH					66	HOT	540UL
		0.41	68	6	ADI	08H	+18.65	TEC	TEH					66	HOT	540UL
28	9	0.42	172	1	HNI	09C	+4.40	TEC	TEH					30	HOT	540UL
29	82	0.36	73	6	ADI	02H	+38.06	TEC	TEH					56	HOT	540UL
32	65	0.05	53	1	HNI	TSH	+13.35	TEC	TEH					70	HOT	540UL
32	139	0.21	158	1	HNI	06H	+21.72	TEC	TEH					44	HOT	540UL
35	104	2.40	9	1	NQI	04H	+5.90	TEC	TEH					62	HOT	540UL
37	42	0.31	76	6	HNI	02C	+6.38	TEC	TEH					68	HOT	540UL
37	104	1.38	11	1	NQI	04H	+6.85	TEC	TEH					64	HOT	540UL
52	79	0.36	103	P2	TWD	12	FB5	-0.84	TEC	TEH	WAR			56	HOT	540UL
52	91	0.31	120	P2	TWD	12	FB4	-0.90	TEC	TEH	WAR			62	HOT	540UL
53	76	0.69	74	P2	TWD	21	FB4	+1.66	TEC	TEH	WAR			56	HOT	540UL
53	116	0.28	82	6	ADI	TSC	+10.52	TEC	TEH					52	HOT	540UL
56	83	17.62	180	P1	DNT	09C	+1.53	TEC	TEH					54	HOT	540UL
57	46	2.12	178	P1	DNT	08C	+1.52	TEC	TEH					68	HOT	540UL
57	66	0.67		P2	TWD	20	FB5	-1.23	TEC	TEH	WAR			72	HOT	540UL
62	53	0.08	144	1	HNI	FB4	+6.50	TEC	TEH					70	HOT	540UL
62	95	0.08	83	P2	TWD	4	FB4	-0.93	TEC	TEH	WAR			62	HOT	540UL
65	72	0.89	81	6	HNI	08C	+3.43	TEC	TEH					18	HOT	540UL
66	85	0.37	104	P2	TWD	14	FB4	+1.50	TEC	TEH	WAR			10	HOT	540UL
67	74	0.37	84	P2	TWD	13	FB5	+0.51	TEC	TEH	WAR			8	HOT	540UL
69	74	0.32	0	P2	TWD	13	FB5	+0.71	TEC	TEH	WAR			6	HOT	540UL
71	66	0.23	100	P2	TWD	8	FB5	+1.49	TEC	TEH	WAR			20	HOT	540UL
75	42	0.28	73	6	HNI	07H	+22.37	TEC	TEH					28	HOT	540UL
77	66	0.13		P2	TWD	6	FB5	+1.09	TEC	TEH	WAR			78	HOT	540UL
79	66	0.29	109	P2	TWD	10	FB5	+1.58	TEC	TEH	WAR			20	HOT	540UL
80	45	0.64	84	6	HNI	TSC	+3.59	TEC	TEH					26	HOT	540UL

10 - 2 3 3

2 of 6

Current bobbin non retest codes

QUERY: bobbin_query.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1 UTIL	2 CAL	# LEG	PROBE
80	73	0.59	0	P2	TWD 22	FB5	+1.67	TEC	TEH	WAR		6	HOT	54OUL
		0.39	0	P2	TWD 16	FB4	+1.36	TEC	TEH	WAR		6	HOT	54OUL
80	95	0.33	77	6	HNI	05H	+33.89	TEC	TEH			14	HOT	54OUL
		0.15	92	6	HNI	05H	+32.53	TEC	TEH			14	HOT	54OUL
81	68	0.44		P2	TWD 16	FB6	-1.75	TEC	TEH	WAR		78	HOT	54OUL
		0.38		P2	TWD 15	FB4	+1.67	TEC	TEH	WAR		78	HOT	54OUL
85	84	0.33	87	P2	TWD 12	FB5	-1.13	TEC	TEH	WAR		12	HOT	54OUL
86	73	0.74	0	P2	TWD 26	FB5	+1.62	TEC	TEH	WAR		6	HOT	54OUL
		0.60	0	P2	TWD 22	FB4	+1.45	TEC	TEH	WAR		6	HOT	54OUL
		0.57	0	P2	TWD 21	FB6	-1.70	TEC	TEH	WAR		6	HOT	54OUL
87	82	0.42	85	6	HNI	03C	+17.43	TEC	TEH			10	HOT	54OUL
88	73	0.53	92	P2	TWD 17	FB5	+1.60	TEC	TEH	WAR		8	HOT	54OUL
88	77	0.89	65	6	HNI	08H	+14.80	TEC	TEH			6	HOT	54OUL
89	62	0.31		P2	TWD 12	FB5	-0.56	TEC	TEH	WAR		78	HOT	54OUL
90	69	0.33	115	P2	TWD 12	FB4	+0.79	TEC	TEH	WAR		18	HOT	54OUL
91	62	0.23	67	P2	TWD 9	FB5	-0.51	TEC	TEH	WAR		18	HOT	54OUL
92	69	0.36	99	P2	TWD 12	FB4	+0.65	TEC	TEH	WAR		20	HOT	54OUL
92	73	0.44	0	P2	TWD 16	FB5	+1.62	TEC	TEH	WAR		6	HOT	54OUL
93	62	0.64	90	P2	TWD 20	FB5	-0.62	TEC	TEH	WAR		20	HOT	54OUL
93	70	0.20		P2	TWD 8	FB6	-1.19	TEC	TEH	WAR		18	HOT	54OUL
		0.51	0	P2	TWD 18	FB5	-1.08	TEC	TEH	WAR		18	HOT	54OUL
95	62	0.20	117	P2	TWD 8	FB5	-0.68	TEC	TEH	WAR		18	HOT	54OUL
95	68	0.43	97	P2	TWD 14	FB7	-0.73	TEC	TEH	WAR		20	HOT	54OUL
		0.59	106	P2	TWD 18	FB5	-1.30	TEC	TEH	WAR		20	HOT	54OUL
		0.37	81	P2	TWD 12	FB3	-0.54	TEC	TEH	WAR		20	HOT	54OUL
97	68	0.69	0	P2	TWD 23	FB5	-1.24	TEC	TEH	WAR		18	HOT	54OUL
99	64	0.19		P2	TWD 9	FB5	+1.70	TEC	TEH	WAR		78	HOT	54OUL
100	69	0.34	62	P2	TWD 13	FB6	+1.84	TEC	TEH	WAR		18	HOT	54OUL
		0.29	101	P2	TWD 11	FB5	+0.68	TEC	TEH	WAR		18	HOT	54OUL
101	80	0.38	92	P2	TWD 15	FB6	-0.99	TEC	TEH	WAR		10	HOT	54OUL
102	55	0.09	158	1	HNI	07H	+34.38	TEC	TEH			22	HOT	54OUL
108	71	0.21	81	P2	TWD 8	FB5	+0.48	TEC	TEH	WAR		18	HOT	54OUL
108	73	0.27	0	P2	TWD 10	FB4	+1.45	TEC	TEH	WAR		6	HOT	54OUL
110	65	0.24	107	P2	TWD 9	FB4	-1.66	TEC	TEH	WAR		18	HOT	54OUL
		0.37	0	P2	TWD 14	FB5	-1.21	TEC	TEH	WAR		18	HOT	54OUL
113	64	0.24	109	P2	TWD 9	FB5	-1.63	TEC	TEH	WAR		18	HOT	54OUL
114	53	0.55	84	6	ADI	02H	+30.29	TEC	TEH			24	HOT	54OUL
114	61	0.39	0	P2	TWD 15	FB4	-1.12	TEC	TEH	WAR		22	HOT	54OUL
114	69	0.23	102	P2	TWD 9	FB5	+0.71	TEC	TEH	WAR		18	HOT	54OUL
		0.21	136	P2	TWD 8	FB4	+1.47	TEC	TEH	WAR		18	HOT	54OUL

Total Tubes : 66
 Total Records: 80

3076

30 07 33

Current bobbin non retest codes

QUERY: bobbin_query.qry

ROW	COL	VOLTS	DEG	CHN	IND	WTW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE
-----	-----	-------	-----	-----	-----	-----	----------	-----	-----	------	---	------	---	-----	---	-----	-------

4 07 6

31 07 33

Query Name : array_query.qry

Query Title: Current array codes

Selected Outages/Scopes: 05/05 - EOC15 PROXIMITY TUBES
 05/05 - EOC15 TTS Array
 05/05 - EOC15 Special Interest

Input Selected : All Tubes
Output File Selected :
Selected Indications : DNT, MAI, MCI, MMI, MVI, NQI, ODI, PLP, PVN, SAI, SCI, SVI, TWD, VOL,
Selected Probes : ALL
Selected Channels : ALL
Selected Cals : ALL
Selected Extent1 : ALL
Selected Extent2 : ALL
Selected Util 1 :
Selected Util 2 :
Selected Tube Heat :
TWD Range :
Volts Range :
Degrees Range :
Radius from Center Range :
Location Range :
Inspection Leg Queried : BOTH
Include In-Service or Out-Service Tubes : Both
Advanced User Query :

Current array codes

QUERY: array_query

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
60	19	2.93	88	60	PLP		TSH +0.28	TSH	TEH	LAR				33	HOT	540XP
59	20	17.26	114	156	PLP		TSH +0.22	TSH	TEH	LAR				33	HOT	540XP
61	20	5.91	104	144	PLP		TSH +0.57	TSH	TEH	LAR				35	HOT	540XP
99	34	1.61	109	150	TWD	24	TSC +0.00 TO+0.12	TSC	01C	0.32	0.12			25	HOT	540XP
		1.98	84	150	VOL		TSC +0.11	TSC	01C					25	HOT	540XP
114	53	0.40	85	90	VOL		02H +30.33	03H	02H					23	HOT	540XP
89	62	0.66	28	Q2	VOL		FB5 -0.64	FB5	FB5	WAR				77	HOT	540XP
99	64	0.56	24	Q10	VOL		FB5 +1.51	FB5	FB5	WAR				77	HOT	540XP
77	66	0.36	87	Q10	VOL		FB5 +1.45	FB5	FB5	WAR				77	HOT	540XP
81	68	0.95	38	Q3	VOL		FB6 -1.39	FB6	FB6	WAR				77	HOT	540XP
		0.40	58	Q10	VOL		FB4 +1.14	FB4	FB4	WAR				77	HOT	540XP
8	83	3.53	191	154	DNT		CBC +10.59	CBC	CBH					115	HOT	540XP
56	83	23.68	182	Q11	DNT		09C +1.67	09C	09C					53	HOT	540XP
5	96	0.30	103	102	VOL		TSC +9.06	01C	TSC					3	COLD	540XP
4	133	2.88	175	98	DNT		09H +6.20	CBH	09H					87	HOT	540XP

Total Tubes : 13
 Total Records: 15

6 of 6

33 of 33