



Mandy Hare
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August 20, 2020
Serial: RA-19-0392

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Catawba Nuclear Station, Unit No. 1
Docket No. 50-413 / Renewed License No. NPF-35

Subject: Catawba Unit 1, Refuel 25 (C1R25) Inservice Inspection (ISI) Report

Ladies and Gentlemen:

In accordance with Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Duke Energy is providing its Inservice Inspection (ISI) Summary Report for Catawba Nuclear Station, Unit No. 1, Refuel 25 (C1R25).

The enclosure contains the C1R25 Owner's Activity Summary Report.

This submittal contains no regulatory commitments. Should you have any questions concerning this letter, or require additional information, please contact Art Zarembo, Manager – Nuclear Fleet Licensing, at 980-373-2062.

Sincerely,

A handwritten signature in black ink that reads "Mandy B. Hare". The signature is fluid and cursive, with the first letters of each word being capitalized.

Mandy Hare
Nuclear Support Services Manager, Catawba Nuclear Station

Enclosure:
Owner's Activity Summary Report
For Refueling Outage 25

NDE

cc: (w/ enclosure)

K. Cotton, NRC Project Manager, NRR

L. Dudes, NRC Regional Administrator, Region II

J.D. Austin, NRC Senior Resident Inspector, Catawba Nuclear Station

Enclosure
RA-19-0392

Enclosure

Owner's Activity Summary Report for Refueling Outage 25

DUKE ENERGY

**INSERVICE INSPECTION SUMMARY REPORT UNIT 1 CATAWBA 2020
REFUELING OUTAGE
C1R25 (Outage 4)**

Location: 4800 Concord Road, York, SC, 29745

NRC Docket No. 50-413

Commercial Service Date: June 29, 1985

***Owner: Duke Energy
526 South Church St.
Charlotte, NC 28201-1006***

Revision 0

Originated By:

Jim Myers

Digitally signed by TDM8384 (130489)
Date: 2020.07.14 08:48:52 -04'00'

Checked By:

Austin C. Keller

Digitally signed by ACKell1
(365600)
Date: 2020.07.14 09:55:46 -04'00'

Approved By:

**MAP9681
(102140)**

Digitally signed by MAP9681
(102140)
Date: 2020.07.23 14:42:58 -04'00'

Attachment

Catawba Unit 1 Refuel Outage 25, Inservice Inspection Report

The Catawba Nuclear Station Unit 1 Fourth Ten Year Inservice Inspection (ISI) Plan complies with 10CFR50.55a(g), (79 FR 73462, Dec. 11, 2014), which implements, by reference, the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, 2007 Edition with 2008 Addenda.

This summary report is being submitted pursuant to the reporting requirements of ASME Section XI as amended by ASME Code Case N-532-5, "Repair/Replacement Activity Documentation Requirements and Inservice Inspection Summary Report Preparation and Submission Section XI, Division 1".

Contained within this summary report are the form OAR-1 (Owner's Activity Report) and Tables 1 and 2 of Code Case N-532-5 for Catawba Nuclear Station during cycle 25 and Refueling Outage 25 (C1R25). C1R25 is the second outage of the second ISI period in the fourth inspection interval. C1R25 is the second outage of the second Containment period in the third inspection interval. This report reviewed all Repair/Replacement activities from December 13, 2018 through June 1, 2020, cycle 25.

Date and Revision of Inservice Inspection Plans:

I. Fourth Interval Inservice Inspection Plans

1. The following documents comprise the Catawba Nuclear Station 4th Interval Inservice Inspection Plan for Unit 1 (Class 1, 2, and 3 Components):
 - a. Catawba Nuclear Station Unit 1 and Unit 2 – Fourth Interval Inservice Inspection Plan, Document #CISI-1462.10-0040-ISI PLAN, Rev. 5, dated 02/10/2020.
 - b. Fourth Interval Inservice Inspection Outage Schedule Catawba Nuclear Station Unit 1, Document #CISI-1462.10-0040-UNIT 1, Rev. 2, dated 02/10/2020.
2. The following documents comprise the Catawba Nuclear Station 4th Interval Inservice Inspection Pressure Test Plan for Unit 1:
 - a. Catawba Nuclear Station Units 1 and 2 Fourth Inspection Interval Inservice Inspection Pressure Test Plan, Document #CISI-1462.20.0040-PTPlan, Rev. 1, dated 07/13/2017, including the following addenda:
 - i. CISI-1462.20-0040-C1-PT-003

II. Third Interval Containment Inservice Inspection Plan

1. The following document comprises the Catawba Nuclear Station 3rd Interval Containment Inservice Inspection Plan for Unit 1 (Class MC):
 - a. Catawba Nuclear Station Units 1 and 2 - Third Interval Containment Inservice Inspection Plan, Document #CN-ISIC3-1042-0001, Rev. 9, dated 10/21/2019.

TABLE 1
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED EVALUATION FOR
CONTINUED SERVICE

Examination Category and Item Number	Item Description	Evaluation Description
B-P / B15.10	Boric acid residue found on NC Pump 1C Seal Housing during ISI Pressure Test, Zone 1NC-001L-A	Area identified in NCR# 02332713 was evaluated by Engineering and found to be acceptable.
B-P / B15.10	Boric acid residue found valve 1NC-36B (Class A Bolted Connection - IWA-5241(f))	Area identified in NCR# 02328601 was evaluated by Engineering and found to be acceptable.
C-H / C7.10	Boric acid residue found on 1-NDFE-5010 Flow Element bolted connection (Class B Bolted Connection - IWA-5241(f))	Area identified in NCR# 02329657 was evaluated by Engineering and found to be acceptable.
C-H / C7.10	Boric acid residue found on valve 1KF-21 (Class B Bolted Connection - IWA-5241(f))	Area identified in NCR# 02328331, was evaluated by Engineering and found to be acceptable.
C-H / C7.10	Boric acid residue found on valve 1NI-143 during ISI Pressure Test, Zone 1NI-005L-B	Area identified in NCR# 02326766 was evaluated by Engineering and found to be acceptable.
D-B / D2.10	Boric acid residue found on valves 1KF-020 and 1KF-021 during ISI Pressure Test, Zone 1KF-002L-C	Areas identified in NCR# 02319294 were evaluated by Engineering and found to be acceptable.
D-B / D2.10	Boric acid residue found on valves 1NV-994, 1NV-440, 1NV-441, 1NV-419, and 1NV-435 during ISI Pressure Test, Zone 1NV-001L-C	Areas identified in NCR# 02285363 were evaluated by Engineering and found to be acceptable.

TABLE 2
ABSTRACT OF REPAIR/REPLACEMENT ACTIVITIES REQUIRED FOR CONTINUED SERVICE

Code Class	Item Description	Description of Work	Date Completed	Repair / Replacement Plan Number
1	Reactor Vessel Head CRDM 18	Indication was removed and polished	5/17/2020	20135464-09