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Serial: RA-22-0021
January 26, 2022

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 26 (C1R26) 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 26 (C1R26).

The enclosure contains the C1R26 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 Lee Grzeck, Manager (acting) – Nuclear Fleet Licensing, at 980-373-1530.

Sincerely,

A handwritten signature in black ink that reads 'Mandy B. Hare'. The signature is written in a cursive style with a large, prominent 'M' and 'H'.

Mandy Hare
Nuclear Support Services Manager, Catawba Nuclear Station

Enclosure:
Owner's Activity Summary Report
For Refueling Outage 26

NDE

cc: (w/ enclosure)

Z. Stone, NRC Project Manager, NRR

L. Dudes, NRC Regional Administrator, Region II

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

Enclosure
Serial: RA-22-0021

Enclosure

Owner's Activity Summary Report for Refueling Outage 26

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number _____ Owner's Activity Report for Refueling Outage C1R26

Plant _____ Catawba Nuclear Station, 4800 Concord Road, York, SC 29745

Unit No. 1 Commercial service date June 29, 1985 Refueling outage no. C1R26
(if applicable)

Current inspection interval Fourth Inspection Interval (ISI), Third Inspection Interval (Containment ISI)
(1st, 2nd, 3rd, 4th, other)

Current inspection period Second Inspection Period (ISI and Containment ISI)
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans 2007 Edition with 2008 Addenda
2017 Edition (See Attachment A)

Date and revision of inspection plans See Attachment A

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans Same as above

Code Cases used for inspection and evaluation: The following Code Cases are permitted by the Augmented ISI, ISI, and Pressure Test Plans, 4th Interval: N-513-3, N-532-5, N-586-1, N-600, N-613-1, N-639, N-643-2, N-648-2, N-651, N-705, N-712, N-716-1, N-722-1, N-729-6, N-731, N-735, N-747, N-751, N-765, N-770-5, N-771, N-775, N-776, N-786-1, N-798, N-800, N-805, N-823, N-825, N-843, N-845, & N-854
(if applicable)

CERTIFICATE OF CONFORMANCE

I 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) the repair/replacement activities and evaluations supporting the completion of C1R26 conform to the requirements of Section XI.
(refueling outage number)

Signed Austin C. Keller Digitally signed by ACKell1 (365600) Date: 2022.01.11 11:27:57 -05'00' Austin C. Keller, ISI Program Owner Date 1/11/2022

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 South Carolina and employed by OneCIS Insurance Company Lynn, MA have inspected the items described in this Owner's Activity Report, and state that, to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this 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.

DMMalle (457903) DMMalle (457903) dc=com, dc=duke-energy, dc=ent, dc=nam, ou=Accounts, ou=Personal, ou=PNTranstional, cn=DMMalle (457903) I have reviewed this document. 2022.01.13 08:57:11 -05'00' Commissions NB#15196 AI,IS,I,N,R; SC# 363

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

Date 01/13/2022

Attachment A

Catawba Unit 1 Refueling Outage 26, Inservice Inspection Report

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

- Per RIS 2004-12, Letter RA-20-0262, NRC Accession Number ML20260H325 and approval NRC Accession Number ML20300A206, the NRC staff concluded that the use of subparagraph IWA-4540(b) of the 2017 Edition of the ASME B&PV Code, Section XI, is acceptable for Catawba Unit 1.
- Per RIS 2004-16, Letter RA-20-0263, NRC Accession Number ML20260H326 and approval NRC Accession Number ML21113A013, the NRC staff concluded that the use of subparagraph IWA-4340 of the 2017 Edition of the ASME B&PV Code, Section XI, is acceptable for Catawba Unit 1.
- Per RIS 2004-12, Letter RA-20-0191, NRC Accession Number ML20265A028 and approval NRC Accession Number ML21029A335, the NRC staff concluded that the use of paragraphs IWA-5120, IWA-5213, IWA-5241, IWA-5242, and IWA-5250 of the 2017 Edition of the ASME B&PV Code, Section XI, is acceptable for Catawba Unit 1.

This summary report is being submitted pursuant to the reporting requirements of ASME Section XI, IWA-6000 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 26 and Refueling Outage 26 (C1R26). C1R26 is the last outage of the second ISI period in the fourth inspection interval. C1R26 is the last outage of the second Containment period in the third inspection interval. This report includes all Repair/Replacement activities from June 2, 2020 through November 3, 2021 cycle 26.

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 CNS Unit 1 (Class 1, 2, and 3 Components):
 - a. Catawba Nuclear Station Units 1 and 2 Fourth Interval Inservice Inspection Plan, Document #CISI-1462.10-0040-ISI PLAN, Rev. 7, dated 08/10/2021.
 - b. Fourth Interval Inservice Inspection Outage Schedule Catawba Nuclear Station Unit 1, Document #CISI-1462.10-0040-UNIT 1, Rev. 3, dated 01/11/2021.
2. The following document comprises the Catawba Nuclear Station 4th Interval Inservice Inspection Pressure Test Plan for CNS 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. 4, dated 11/29/2021.

II. Fourth Interval Augmented Inservice Inspection Plan

1. The following document comprises the Catawba Nuclear Station 4th Interval Augmented Inservice Inspection Plan and Schedule for Unit 1:

- a. Catawba Nuclear Station Units 1 and 2 - Augmented Inservice Inspection Plan and Schedule, Document #CISI-1462.10-0030-AUGISI-U1&U2, Rev. 8, dated 12/16/2021.

III. 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. 11, dated 7/9/2021.

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	Small amount of boric acid residue was found at valve 1NC-36B Bolted Connection (Class A Bolted Connection – IWA-5241(f)).	Area identified in NCR #02402003 was evaluated by Engineering and found to be acceptable.
B-P / B15.10	Boric acid residue was found during ISI Pressure Test Zone, 1NC-001L-A	Area identified in NCR #02404040 was evaluated by Engineering and found to be acceptable.
C-H / C7.10	Boric acid residue was found during ISI Pressure Test Zone, 1NV-002L-B	Area identified in NCR #02335931 was evaluated by Engineering and found to be acceptable.
C-H / C7.10	Boric acid residue was found during ISI Pressure Test Zone, 1NS-002L-B	Area identified in NCR #02358006 was evaluated by Engineering and found to be acceptable.
D-B / D2.10	Boric acid residue was found during ISI Pressure Test Zone, 1KF-001L-C	Area identified in NCR #02333935 was 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
2	1NV-FC-0849	Replace valve body and spindle	10/19/2021	20426926-01
3	1RN-0024	Repair thru-wall leak upstream (Reference NCRs #02351550 & #02350950)	10/27/2020	20426186-01
3	1RN-210	Replace piping/valve as required to repair thru-wall leak	6/01/2021	20469606-01