



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

July 2, 2025

LICENSEE: Duke Energy Carolinas, LLC

FACILITIES: Catawba Nuclear Station, Unit No. 2

SUBJECT: SUMMARY OF JUNE 26, 2025, OBSERVATIONAL PUBLIC MEETING WITH DUKE ENERGY REGARDING PLANNED ALTERNATIVE REQUEST FOR CATAWBA, UNIT 2 NOZZLE EMBEDDED FLAW REPAIR FOR THE 5<sup>TH</sup> ISI INTERVAL (EPID L-2025-LRM-0078)

On June 26, 2025, an Observational public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Duke Energy Carolinas, LLC (Duke Energy or the licensee). The purpose of the meeting was to discuss the use of WCAP-15987-NP, Supplement 1, Revision 0, "Technical Basis for Extending the Dye Penetrant Examination Frequency for the Embedded Flaw Process for Repair of Reactor Vessel Head Penetration," Agencywide Documents Access and Management System (ADAMS) Accession No. ML25115A211, as the technical basis for a proposed Relief Request for Catawba Nuclear Station (Catawba), Unit 2, regarding the embedded flaw repair of reactor vessel closure head (RVCH) penetration Nozzle #74 for the 5<sup>th</sup> 10-year inservice (ISI) interval.

The meeting notice and agenda, dated June 10, 2025, is available at ADAMS Accession No. ML25161A141. The licensee presented slides that are available at ADAMS Accession No. ML25168A248.

A list of attendees is provided in the Enclosure.

The licensee presented the information contained in the meeting slides which are summarized below:

During the Spring 2021 outage, an embedded flaw repair (EFR) was performed on Catawba, Unit 2, RVCH penetration nozzle #74. The NRC initially authorized this repair verbally and later approved its continued use through the end of the fourth ISI interval ending June 28, 2026, in its safety evaluation dated August 31, 2022 (ML22213A253).

To support use in the fifth ISI interval (2026–2038), Duke Energy is preparing a new proposed alternative (RA-24-0285), that proposes to reference the topical report Pressurized-Water Reactor Owners Group's (PWROG's) Supplement to WCAP-15987-NP. This Supplement, submitted for NRC review and approval in April 2025, seeks to justify extending penetrant test (PT) examination frequency for EFRs to once every ISI interval (not to exceed 13 years) to reduce personnel radiation exposure.

The NRC has accepted the WCAP-15987-NP Supplement for review, with an initial draft safety evaluation expected by March 30, 2026. Duke's proposed alternative would adopt the same

nondestructive examination (NDE) requirements and frequency outlined in the Supplement and include a plant-specific technical basis demonstrating that the EFR has a minimum 47-year service life.

The NRC staff stated that it would be challenging to accept the proposed alternative for review in parallel with the topical report review. The NRC stated that the licensee can use certain analytical methods in the unapproved topical report WCAP-15987-NP as the technical basis for a proposed plant-specific relief request but noted that the NRC would not expect to discuss the topical report in any manner in its safety evaluation. The NRC also noted that the licensee could leverage its prior approval and NRC safety evaluation in its review a plant-specific request. Additional discussions considered the following options:

1. Perform plant-specific flaw calculations using a dilution zone Factor of Improvement of 10, which the NRC has approved. The plant-specific flaw calculation may support the use of Nozzle #74 for limited number of operating cycles. Once the WCAP 15987-NP is approved, the licensee can submit a follow-up relief request to adopt the full 13-year interval via the NRC-approved WCAP.
2. Submit a relief request to maintain the current inspection frequency for EFR dye penetrant examinations during the fifth ISI interval, using the previously approved relief request (from the fourth ISI interval) as the technical basis. After WCAP-15987-NP is approved, a new relief request may be submitted to adopt the extended interval.

The licensee indicated that they are also considering Option 2 and tentatively confirmed this as the preferred path, with an application expected to be submitted to the NRC within approximately two months.

The licensee further asked the NRC staff whether relief requests are limited to a single ISI interval or if there has been a change in the NRC's position, allowing the use of relief requests for multiple ISI intervals. The NRC staff responded that they would need to follow up on that question.

The NRC staff then closed the business portion of the meeting.

There were no members of the public in attendance.

The NRC staff did not make any regulatory decisions during the meeting.

Please direct any inquiries to [Shawn.Williams@nrc.gov](mailto:Shawn.Williams@nrc.gov).

*/RA/*

Shawn Williams, Senior Project Manager  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-413 and 50-414

Enclosure:  
List of Attendees

cc: Listserv

LIST OF ATTENDEES

JUNE 26, 2025, PUBLIC MEETING WITH DUKE ENERGY ON PLANNED ALTERNATIVE  
REQUEST REGARDING CATAWBA, UNIT 2, NOZZLE EMBEDDED FLAW REPAIR FOR THE  
5<sup>TH</sup> ISI INTERVAL  
CATAWBA NUCLEAR STATION, UNIT 2

<b>Name</b>	<b>Organization</b>
Shawn Williams	U.S. Nuclear Regulatory Commission (NRC)
Michael Markley	NRC
Jay Collins	NRC
John Tsao	NRC
Stephen Cumblidge	NRC
Leslie Fields	NRC
Jordan Vaughan	Duke Energy Carolinas, LLC (Duke)
Nicole Edwards	Duke
Scott Karriker	Duke
Austin Keller	Duke
Steve Marlette	Duke
Kaityln Sullivan	Duke
Anees Udyawar	Duke

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RidsNrrDexNvib Resource  
RidsNrrDexNphp Resource  
JCollins, NRR  
JTsoo, NRR  
SCumblidge, NRR

**ADAMS Accession Nos.:**

**Package: ML25168A257**

**Meeting Notice: ML25161A141**

**Meeting Summary: ML25169A201**

OFFICE	NRR/DORL/LPL2-1/PM	NRR/DORL/LPL2-1/LA	NRR/DEX/NPHP/BC
NAME	SWilliams	KZeletznock	ABuford
DATE	06/26/2025	06/27/2025	6/27/2025
OFFICE	NRR/DEX/NVIB/BC	NRR/DORL/LPL2-1/BC	NRR/DORL/LPL2-1/PM
NAME	MMitchell	MMarkley	SWilliams
DATE	6/29/2025	7/1/2025	7/2/2025

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