

**From:** Stone, Zackary  
**Sent:** Wednesday, December 1, 2021 11:38 AM  
**To:** Grzeck, Lee  
**Cc:** Edwards, Nicole D  
**Subject:** Catawba Nuclear Station, Unit 2 - Request for Additional Information RE: Spring 2021 Steam Generator Tube Inspection Report (L-2021-LRO-0043)  
**Attachments:** Catawba Unit 2 SG Inspection Report RAIs.docx

Dear Mr. Grzeck,

By letter dated August 2, 2021, Duke Energy Carolinas, LLC, submitted information summarizing the results of the spring 2021 steam generator inspections performed at Catawba Nuclear Station, Unit 2 for the end-of-cycle 24.

The U.S. Nuclear Regulatory Commission staff has determined that additional information is needed as provided in the attached.

Please respond within 30 days of the date of this e-mail.

If you have any questions, please contact me at 301-415-0615 or via e-mail at [Zackary.Stone@nrc.gov](mailto:Zackary.Stone@nrc.gov).

Sincerely,

Zackary Stone, Project Manager  
Plant Licensing Branch, II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No: 50-414

cc w/encl: Listserv

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**Subject:** Catawba Nuclear Station, Unit 2 - Request for Additional Information RE: Spring 2021 Steam Generator Tube Inspection Report (L-2021-LRO-0043)  
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**Received Date:** 12/1/2021 11:37:00 AM  
**From:** Stone, Zackary

**Created By:** Zackary.Stone@nrc.gov

**Recipients:**  
"Edwards, Nicole D" <Nicole.Edwards@duke-energy.com>  
Tracking Status: None  
"Grzeck, Lee" <Lee.Grzeck@duke-energy.com>  
Tracking Status: None

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REQUEST FOR ADDITIONAL INFORMATION  
SPRING 2021 STEAM GENERATOR TUBE INSPECTION REPORT  
DUKE ENERGY CAROLINAS  
CATAWBA NUCLEAR STATION, UNIT 2  
DOCKET NUMBER 50-414  
EPID: L-2021-LRO-0043

By letter dated August 2, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21214A160), Duke Energy Carolinas, LLC (the licensee), submitted information summarizing the results of the spring 2021 steam generator (SG) inspections performed at Catawba Nuclear Station, Unit 2 (Catawba Unit 2) for the end-of-cycle (EOC) 24. In addition, the U.S. Nuclear Regulatory Commission (NRC) staff held a conference call with the licensee on April 12, 2021, regarding the ongoing SG inspection activities at Catawba Unit 2. A summary of the conference call, regarding the spring 2021 SG inspections, is available at ADAMS Accession No. ML21133A004.

Title 10 of the *Code of Federal Regulations* Part 50.36 establishes the requirements for pressurized water reactors to have technical specifications (TS) which include a SG program with specific criteria for the structural and leakage integrity, repair, and inspection of SG tubes. Catawba Unit 2 TS Section 5.6.8 requires that a report be submitted within 180 days after the initial entry into hot shutdown (MODE 4) following completion of an inspection of the SGs performed in accordance with TS Section 5.5.9, which requires that a SG Program be established and implemented to ensure SG tube integrity is maintained.

To complete its review of the inspection report, the NRC staff requests the following additional information:

RAI No. 1

The tube in Row 36, Column 100 (R36C100) was plugged in SG 2D at the EOC-24 due to "FO [foreign object] wear at AVB [Anti-Vibration Bar] 3 at 43 %TW [percent through-wall]." The April 12, 2021, conference call summary stated that "FO wear was identified at an AVB wear indication, which is not typical, although there was no loose part detected during the outage." However, the NRC staff notes that the fall 2019 inspection report, dated December 19, 2019 (ADAMS Accession No. ML19353A416), reported a 38 %TW wear indication in tube R36C100 at AVB 3. It appears that the 38 %TW AVB wear indication reported at EOC-23 was reclassified as a FO wear indication at EOC-24. Please discuss the differences between inspections performed at EOC-23 and EOC-24 and the basis for reclassifying the AVB wear indication as a FO wear indication.

RAI No. 2

There appears to be errors in the reported number of tubes plugged in SG 2B prior to the EOC-24 and the total number of tubes plugged in SG 2B after the EOC-24. The spring 2021 inspection report states that 133 tubes were plugged in SG 2B prior to EOC-24 and 7 tubes were plugged during EOC-24, resulting in a total of 140 ( $133 + 7 = 140$ ) tubes plugged in SG 2B. However, the spring 2021 inspection report also states that a total of 141 tubes have been plugged in SG 2B. The NRC staff notes that the fall 2019 inspection report stated that 131 tubes were plugged in SG 2B prior to EOC-23 and 3 tubes were plugged during EOC-23, resulting in a total of 134 ( $131 + 3 = 134$ ) tubes plugged in SG 2B. However, the fall 2019

inspection report states that a total of 133 tubes were plugged in SG 2B. Please confirm the total number of tubes plugged in SG 2B.