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RA-22-0023
January 21, 2022

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10 CFR 50.4
10 CFR Part 54

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Duke Energy Carolinas, LLC (Duke Energy)
Oconee Nuclear Station (ONS), Units 1, 2, and 3
Docket Numbers 50-269, 50-270, 50-287
Renewed License Numbers DPR-38, DPR-47, DPR-55
Subsequent License Renewal Application
Response to NRC Requests for Confirmation of Information – Set 3

References:

1. Duke Energy Letter (RA-21-0132) dated June 7, 2021, Application for Subsequent Renewed Operating Licenses, (ADAMS Accession Number ML21158A193)
2. NRC Letter dated July 22, 2021, Oconee Nuclear Station, Units 1, 2, and 3 - Determination of Acceptability and Sufficiency for Docketing, Proposed Review Schedule, and Opportunity for a Hearing Regarding Duke Energy Carolinas' Application for Subsequent License Renewal (ADAMS Accession Number ML21194A245)
3. NRC E-mail dated November 4, 2021, Oconee SLRA - Requests for Confirmation of Information – Set 1 (ADAMS Accession Number ML21313A232)
4. Duke Energy Letter dated December 2, 2021, Oconee Nuclear Station, Units 1, 2, and 3 – Response to NRC Requests for Confirmation of Information – Set 1 (ADAMS Accession Number ML21336A001)
5. NRC E-mail dated November 23, 2021, Oconee SLRA – Requests for Confirmation of Information – Set 2 (ADAMS Accession Number ML21330A018)
6. Duke Energy Letter dated December 17, 2021, Oconee Nuclear Station, Units 1, 2, and 3 – Response to NRC Requests for Confirmation of Information – Set 2 (ADAMS Accession Number ML21351A000)
7. NRC E-mail dated January 5, 2022, Oconee SLRA – Requests for Confirmation of Information – Set 3 (ADAMS Accession Number ML22010A112 and ML22010A113)

Ladies and Gentlemen:

By letter dated June 7, 2021 (Reference 1), Duke Energy Carolinas, LLC (Duke Energy) submitted an application for the subsequent license renewal of Renewed Facility Operating License Numbers DPR-38, DPR-47, and DPR-55 for the Oconee Nuclear Station (ONS), Units 1, 2, and 3 to the U.S. Nuclear Regulatory Commission (NRC). On July 22, 2021 (Reference 2), the NRC determined that ONS subsequent license renewal application (SLRA) was acceptable and sufficient for docketing. In emails

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from Angela X. Wu (NRC) to Steve Snider (Duke Energy) (References 3 and 5), the NRC transmitted Set 1 and Set 2, respectively, of specific requests for confirmation of information (RCI) to support completion of the Safety Review. Duke Energy responded to the RCIs in letters dated December 2, 2021 and December 17, 2021 (References 4 and 6), respectively.

In an email from Angela X. Wu (NRC) to Steve Snider (Duke Energy) dated January 5, 2022 (Reference 7), the NRC transmitted set 3 of specific RCIs to support completion of the Safety Review. The responses to RCI Set 3 are provided in Enclosure 1.

Should you have any questions regarding this submittal, please contact Paul Guill at (704) 382-4753 or by email at paul.guill@duke-energy.com.

I declare under penalty of perjury that the foregoing is true and correct. Executed on January 21, 2022.

Sincerely,



Steven M. Snider
Site Vice President
Oconee Nuclear Station

Enclosures:

Enclosure 1: Responses to Requests for Confirmation of Information – Set 3

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ENCLOSURE 1

OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3
SUBSEQUENT LICENSE RENEWAL APPLICATION
RESPONSES TO REQUESTS FOR CONFIRMATION OF
INFORMATION – SET 3

Enclosure 1
Subsequent License Renewal Application
Responses to Requests for Confirmation of Information – Set 3

Regulatory Basis:

Part 54 of Title 10 of the *Code of Federal Regulations* (10 CFR), “Requirements for Renewal of Operating Licenses for Nuclear Power Plants,” is designed to elicit application information that will enable the U.S. Nuclear Regulatory Commission (NRC) staff to perform an adequate safety review and the Commission to make the necessary findings. Reliability of application information is important and advanced by requirements that license applications be submitted in writing under oath or affirmation and that information provided to the NRC by a license renewal applicant or required to be maintained by NRC regulations be complete and accurate in all material respects. Information that must be submitted in writing under oath or affirmation includes the technical information required under 10 CFR 54.21(a) related to assessment of the aging effects on structures, systems, and components subject to an aging management review. Thus, both the general submission requirements for license renewal applications and the specific technical application information requirements require that submission of information material to NRC’s safety findings (see 10 CFR 54.29 standards for issuance of a renewed license) be submitted by an applicant as part of the application.

Background:

By letter dated June 7, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21158A193), as supplemented by letters dated October 22, 2021 (ADAMS Accession No. ML21295A035), October 28, 2021 (ADAMS Accession No. ML21302A208), November 11, 2021 (ADAMS Accession No. ML21315A012), December 2, 2021 (ADAMS Accession No. ML21336A001), December 15, 2021 (ADAMS Accession No. ML21349A005), and December 17, 2021 (ADAMS Accession No. ML21351A000), Duke Energy Carolinas, LLC (Duke Energy) submitted to the U.S. Nuclear Regulatory Commission (NRC or staff) an application to renew the Renewed Facility Operating License Nos. DPR-38, DPR-47, and DPR-55 for Oconee Nuclear Station (ONS), Units 1, 2, and 3. Duke Energy submitted the application pursuant to 10 CFR Parts 54, “Requirements for Renewal of Operating Licenses for Nuclear Power Plants,” for subsequent license renewal.

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Subsequent License Renewal Application
Responses to Requests for Confirmation of Information – Set 3

Between July 26 and October 8, 2021, the NRC staff conducted audits of Duke Energy's records to confirm information submitted in the ONS subsequent license renewal application.

Request:

During the audit, the staff reviewed several documents that contain information which will likely be used in conclusions documented in the Safety Evaluation Report (SER). To the best of the staff's knowledge, this information is not on the docket. Any information used to reach a conclusion in the SER must be included on the docket by the applicant. We request that you submit confirmation that the information gathered from the documents and listed below is correct or provide the associated corrected information.

Request for Confirmation of Information (RCI) B2.1.21-A:

Based on its review of the applicant's response to a breakout question on the ePortal, the staff noted all buried fire header piping is installed with a high build epoxy primer and a high build coal tar epoxy finish coat external coating.

Confirm that in-scope buried fire protection system piping is specified to be externally coated with a high build epoxy primer and a high build coal tar epoxy finish coat.

Response to RCI B2.1.21-A:

This information has been confirmed to be correct as stated.

Request for Confirmation of Information (RCI) B2.1.21-B:

Based on its review of the applicant's response to a breakout question on the ePortal, the staff noted (a) between 2008 and 2012, 54 samples for soil resistivity were taken during soil corrosivity testing; and (b) all 54 samples had soil resistivity greater than 3,000 ohm-cm.

Confirm that the above information is accurate.

Response to RCI B2.1.21-B:

This information has been confirmed to be correct as stated with the following clarification that there were 56 soil samples taken and tested for resistivity between 2008 and 2012. Each of the 56 samples had a resistivity of greater than 3,000 ohm-cm.

Request for Confirmation of Information (RCI) B2.1.21-C:

Based on its review of the applicant's response to a breakout question on the ePortal, the staff noted (a) between 2008 and 2009, 24 samples for pH were taken during soil corrosivity testing; and (b) samples had a pH ranging from 5.2 to 8.0.

Confirm that the above information is accurate.

Response to RCI B2.1.21-C:

This information has been confirmed to be correct as stated with the following clarification that 24 soil samples were taken during soil corrosivity testing and the samples had a pH ranging from 5.2 to 7.8. An additional two samples were taken from sand piles which were to be used as backfill for buried piping. The pH of these two additional samples were 7.9 and 8.0. Since these samples were obtained from clean quality backfill, soil testing results for these samples are not considered.

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Request for Confirmation of Information (RCI) B2.1.21-D:

Based on its review of the applicant's response to a breakout question on the ePortal, the staff noted (a) between 2008 and 2009, 14 samples for redox potential were taken during soil corrosivity testing; and (b) all 14 samples had redox potential greater than positive 100 millivolts.

Confirm that the above information is accurate.

Response to RCI B2.1.21-D:

This information has been confirmed to be correct as stated.

Request for Confirmation of Information (RCI) B2.1.21-E:

Based on its review of the applicant's response to a breakout question on the ePortal, the staff noted (a) between 2008 and 2009, 17 samples for sulfides were taken during soil corrosivity testing; and (b) 14 of the 17 samples were negative for sulfides.

Confirm that the above information is accurate.

Response to RCI B2.1.21-E:

This information has been confirmed to be correct as stated with the following clarification that 13 of the 17 samples taken were negative for sulfides. Three (3) of the 4 samples in which sulfides were detected were obtained from different depths at the same location near buried standby shutdown facility auxiliary service water system steel piping in which active leakage had been detected. The fourth sample in which sulfides were detected was also obtained near buried standby shutdown facility auxiliary service water system piping, but not in the vicinity of any known prior leakage.

Request for Confirmation of Information (RCI) B2.1.21-F:

Based on its review of the applicant's response to a breakout question on the ePortal, the staff noted (a) between 2008 and 2009, 23 samples for soil moisture were taken during soil corrosivity testing; and (b) samples had a moisture content ranging from 7.44 to 40.6 percent.

Confirm that the above information is accurate.

Response to RCI B2.1.21-F:

This information has been confirmed to be correct as stated with the following clarification that it was determined that there were 24 soil samples taken and tested for soil moisture content during soil testing activities performed between 2008 and 2009. Each of the 24 samples had a moisture content within the range of 7.44 to 40.6 percent.

Request for Confirmation of Information (RCI) B2.1.21-G:

Based on its review of the applicant's response to a breakout question on the ePortal, the staff noted (a) between 2008 and 2009, 24 samples for chlorides were taken during soil corrosivity testing; and (b) all 24 samples had chlorides less than 100 parts per million.

Confirm that the above information is accurate.

Response to RCI B2.1.21-G:

This information has been confirmed to be correct as stated.