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RA-18-0252

10 CFR 50.4

December 21, 2018

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

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

Subject: Oconee Nuclear Station Units 1, 2, and 3 - Seismic Probabilistic Risk Assessment (SPRA),
Response to March 12, 2012 Request for Information Regarding Recommendation 2.1 "Seismic"
of the Near-Term Task Force Related to the Fukushima Dai-ichi Nuclear Power Plant Accident

References:

1. NRC Letter, *Request for Information Pursuant to 10 CFR 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3 of the Near-Term Task Force review of Insights from the Fukushima Dai-ichi Accident*, dated March 12, 2012 (ML12053A340)
2. EPRI 1025287, *Seismic Evaluation Guidance: Screening, Prioritization and Implementation Details (SPID) for the Resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic*, dated February, 2013 (ML12333A170)
3. Duke Energy Letter, *Seismic Hazard and Screening Report (CEUS Sites), Response to NRC 10 CFR 50.54(f) Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) regarding Recommendations 2.1, 2.3, and 9.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident*, dated March 31, 2014 (ML14092A024)
4. NRC Letter, *Oconee Nuclear Station, Units 1, 2, and 3 - Staff Assessment of Information provided Pursuant to Title 10 of the Code of Federal Regulations Part 50, Section 50.54(f), Seismic Hazard Reevaluations for Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident*, dated July 22, 2015 (ML15201A008)
5. NRC Letter, *Final Determination of Licensee Seismic Probabilistic Risk Assessments*, dated October 27, 2015. ML 15194A015

ABID
NRR

Ladies and Gentlemen,

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued a request for information pursuant to 10 CFR 50.54(f) associated with the recommendations of the Fukushima Near-Term Task Force (NTTF) (Reference 1). Enclosure 1 of Reference 1 requested each licensee to reevaluate the seismic hazards at their sites using present-day NRC requirements and guidance, and to identify actions taken or planned to address plant-specific vulnerabilities associated with the updated seismic hazards.

Reference 2 contains industry guidance developed by EPRI that provide the screening, prioritization and implementation details for the resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic. The SPID (Reference 2) was used to compare the reevaluated seismic hazard to the design basis hazard. The Oconee Nuclear Station (ONS) Units 1, 2, and 3 reevaluated seismic hazard (Reference 3) concluded that the ground motion response spectrum (GMRs) exceeded the design basis seismic response spectrum in the 1 to 10 Hz range, and therefore a seismic probabilistic risk assessment was required.

Reference 4 contains the NRC Staff Assessment of the ONS Units 1, 2, and 3 seismic hazard submittal that concluded the reevaluated seismic hazard prepared for ONS is suitable for other activities associated with the NRC Near-Term Task Force Recommendation 2.1: Seismic.

Reference 5 contains the NRC letter "Final Determination of Licensee Seismic Probabilistic Risk Assessments." In that letter (Table 1 a - Recommendation 2.1 Seismic - Information Requests) the NRC instructed ONS Units 1, 2, and 3 to submit an SPRA by December 31, 2018.

Enclosure 1 of this letter contains the ONS Units 1, 2, and 3 Seismic Probabilistic Risk Assessment (SPRA) Summary Report which provides the information requested in Enclosure 1, Item (8) B. of Reference 1.

This letter contains no new Regulatory Commitments and no revision to existing Regulatory Commitments; however, it does contain a new planned action to provide an alternate letdown isolation method which will achieve a seismic Large Early Release Frequency value below 1×10^{-6} /reactor-year based on sensitivity analysis.

Should you have any questions regarding this submittal, please contact Laura Todd with Oconee Regulatory Affairs at (864) 873-6774.

I declare under penalty of perjury that the foregoing is true and correct. Executed on December 21st, 2018.

Sincerely,



J. Ed Burchfield, Jr.
Vice President
Oconee Nuclear Station

Enclosure: Oconee Nuclear Station Units 1, 2, and 3 Seismic Probabilistic Risk Assessment in Response to 50.54(f) Letter Regarding NTTF 2.1 Seismic Summary Report

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cc w/enclosure:

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