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10 CFR 50.54(f)

CNS-14-038  
March 31, 2014

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

Duke Energy Carolina, LLC (Duke Energy)  
Catawba Nuclear Station, Units 1 and 2  
Docket Numbers 50-413 and 50-414  
Renewed License Numbers NPF-35 and NPF-52

**Subject:** Seismic Hazard and Screening Report (CEUS Sites), Response to NRC 10 CFR 50.54(f) Request for Additional 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

**References:**

1. NRC Letter, *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 12, 2012, ADAMS Accession No. ML12053A340
2. EPRI Report 1025287, *Seismic Evaluation Guidance, Screening, Prioritization and Implementation Details (SPID) for the Resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic*, ADAMS Accession No. ML12333A170
3. NRC Letter, *Endorsement of EPRI Final Draft Report 1025287, "Seismic Evaluation Guidance,"* dated February 15, 2013, ADAMS Accession No. ML12319A074
4. NEI Letter, *Proposed Path Forward for NTTF Recommendation 2.1: Seismic Reevaluations*, dated April 9, 2013, ADAMS Accession No. ML13101A379
5. NRC Letter, *Electric Power Research Institute Final Draft Report XXXXXX, "Seismic Evaluation Guidance: Augmented Approach for the Resolution of Near-Term Task Force Recommendation 2.1: Seismic," as an Acceptable Alternative to the March 12, 2012, Information Request for Seismic Reevaluations*, dated May 7, 2013, ADAMS Accession No. ML13106A331

A010  
NRC

Ladies and Gentlemen:

On March 12, 2012, the Nuclear Regulatory Commission (NRC) issued Reference 1 to all power reactor licensees and holders of construction permits in active or deferred status. Enclosure 1 of Reference 1 requested each addressee located in the Central and Eastern United States (CEUS) to submit a Seismic Hazard Evaluation and Screening Report within 1.5 years from the date of Reference 1.

Industry guidance and detailed information to be included in the Seismic Hazard Evaluation and Screening Report submittals is provided by Reference 2. The industry guidance was endorsed by the NRC in a letter dated February 15, 2013, (Reference 3).

Attachment 1 provides the Seismic Hazard Evaluation and Screening Report for Catawba Nuclear Station as directed by Section 4 of Reference 2 and in accordance with the schedule provided in Reference 4.

The Nuclear Energy Institute (NEI) submitted Reference 4 requesting NRC agreement to delay submittal of the CEUS Seismic Hazard Evaluation and Screening Report so that an update to the Electric Power Research Institute (EPRI) ground motion attenuation model could be completed and used to develop that information. NEI proposed that descriptions of subsurface materials and properties and base case velocity profiles be submitted to the NRC by September 12, 2013, with the remaining seismic hazard and screening information submitted by March 31, 2014.

In addition, an expedited seismic evaluation will be performed. By Reference 5, NRC endorsed Electrical Power Research Institute (EPRI) Report, "Seismic Evaluation Guidance: Augmented Approach for the Resolution of Fukushima Near-term Task Force Recommendation 2.1- Seismic". The EPRI Guidance provides additional guidance on the performance of an expedited seismic evaluation. The expedited seismic evaluation process is a screening, evaluation and equipment modification process to provide additional seismic margin and plant safety enhancements for certain core and containment cooling components while a more detailed and comprehensive plant seismic risk evaluations are being performed. The expedited seismic evaluation will be submitted no later than December 31, 2014 and complete non-outage related equipment modifications by December 31, 2016.

There are no regulatory commitments associated with this letter.

Should you have any questions concerning this letter or require additional information, please contact Phil Barrett at (803) 701-4138.

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I declare under penalty of perjury that the foregoing is true and correct. Executed on March 31, 2014.

Sincerely,

A handwritten signature in black ink, appearing to read "Kelvin Henderson", with a long horizontal flourish extending to the right.

Kelvin Henderson  
Vice President, Catawba Nuclear Station

Attachment 1- Seismic Hazard Evaluation and Screening Report

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