

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

November 13, 2012

Mr. Preston Gillespie Site Vice President Oconee Nuclear Station Duke Energy Carolinas, LLC 7800 Rochester Highway Seneca, SC 29672-0752

SUBJECT: OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3, REQUEST FOR ADDITIONAL INFORMATION REGARDING AMENDMENT APPLICATION FOR A REVISION TO THE TECHNICAL SPECIFICATION ON THE EMERGENCY POWER SYSTEM (TAC NOS. ME9021, ME9022, AND ME9023)

Dear Mr. Gillespie:

On June 27, 2012, Duke Energy Carolinas, LLC (Duke), submitted an application to the Nuclear Regulatory Commission (NRC) for a proposed amendment for the Oconee Nuclear Station, Units 1, 2, and 3, which would revise the Technical Specification on the emergency power system. The application is in the NRC's Agencywide Documents Access and Management System under Accession No. ML12181A312. The revision would permit each of the two emergency power system generating units (Keowee Hydro Units) to be out of service for up to 75 days on a one-time basis for major maintenance work.

The NRC staff is reviewing the submittal and has determined that additional information is needed to complete its review. The specific questions are found in the enclosed request for additional information (RAI). On November 1, 2012, the Duke staff indicated that a response to the RAI would be provided within 45 days of the date of this letter. Please note that if you do not respond to this letter by the agreed-upon date or provide an acceptable alternate date in writing, we may deny your application for amendment under the provisions of Title 10 of the *Code of Federal Regulations*, Section 2.108.

P. Gillespie

If you have any questions, please call me at 301-415-2901.

Sincerely,

oh G. Boska

John P. Boska, Senior Project Manager Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-269, 50-270, and 50-287

Enclosure: RAI

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION (RAI)

REGARDING PROPOSED AMENDMENT TO TECHNICAL SPECIFICATIONS

ON THE EMERGENCY POWER SYSTEM

DUKE ENERGY CAROLINAS, LLC

OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3

DOCKET NOS. 50-269, 50-270 AND 50-287

On June 27, 2012, Duke Energy Carolinas, LLC (Duke), submitted an application to the Nuclear Regulatory Commission (NRC) for a proposed amendment for the Oconee Nuclear Station, Units 1, 2, and 3, which would revise the Technical Specification on the emergency power system. The application is in the NRC's Agencywide Documents Access and Management System under Accession No. ML12181A312. The revision would permit each of the two emergency power system generating units (Keowee Hydro Units) to be out of service for up to 75 days on a one-time basis for major maintenance work. The Nuclear Regulatory Commission (NRC) staff is reviewing the submittal and has the following questions:

Question 1

The license amendment request (LAR) Section 2.2 provides a breakdown of 75 days completion time (CT) for each of the Keowee Hydro Units (KHU) generator field pole rewind work. The CT includes 15 days for contingency for removal of all 56 field poles, asbestos abatement, complete rewind, and reassembly; and includes another 10 days for contingency for balance runs and balance shots, post modification testing, and commissioning runs.

Provide justification for the above 15 plus 10 days for contingencies, and discuss whether any options were considered to reduce these contingency days.

Question 2

The licensee stated in the cover letter that they currently plan to perform the pole windings tasks starting in April 2013 and July 2013, for each KHU. In the safety evaluation of previous amendments Nos. 339, 341, and 340 for Oconee Nuclear Station (ONS) Units 1, 2, and 3 respectively, issued on August 5, 2004, the months of March, April, May, and June were identified as peak tornado months at the Oconee site.

Provide justification that the months of April, May, and June are acceptable for the proposed extended maintenance for each KHU in light of being peak tornado months.

Question 3

An ONS LAR previously submitted in 2008 proposed a new protected service water (PSW) system for mitigating a high energy line break event. Provide a discussion of any potential

impact/conflict of PSW amendment related work with the schedule of the KHU pole rewind work, which could adversely impact the availability of any safe shutdown systems.

Question 4

In an RAI response dated July 12, 2004, relating to a previous LAR pertaining to the KHUs dated August 22, 2002, the licensee provided a list of compensatory measures as regulatory commitments. Since the current LAR is similar to the previous LAR dated August 22, 2002, justify why a list of similar compensatory measures is not needed. Provide an explanation if any of those compensatory measures is not proposed for this LAR.

Question 5

Provide a discussion of the differences between the Critical Activity Plan mentioned in the current LAR and the Critical Evolution Plan discussed in the licensee's letters dated April 28, and June 17, 2004, provided during review of the previous LAR dated August 22, 2002. Provide plans for entering the dual KHU outage and for any immediate need to exit the dual KHU outage.

Question 6

Provide a discussion of any activities being made to prepare the Lee Combustion Turbines (LCTs) for the 75 days of KHU pole rewind work. When did the last LCT testing take place per TS Section 5.5.19 (LCT Testing Program)? Provide a brief summary of the test results. From the evaluation of the test history, available test results and associated maintenance records for at least last five years, confirm if any failure has resulted in the loss of a LCT. Will the LCTs be tested prior to starting the KHU generator pole rewind work?

Question 7

Provide a summary of any recent (during the past year) failure/outage and any preventative maintenance performed on the 100 kV line, and the associated Transformer CT-5 at the Oconee plant to ensure they are functioning as designed.

Question 8

Does LCT Station have commercial generation capability as well, and will it be prohibited during the KHU outage periods? Are the 100 kV Lee switchyard and the 100 kV Central switchyard connected to any other nearby power source(s)? Provide a single line diagram of the 100 kV Lee and Central switchyards.

Question 9

When one of the LCTs at Lee Station serves as an alternate emergency power source during a dual KHU unit outage, clarify whether the second LCT will be on standby or running status. Provide a discussion about the established communication protocol with the Lee Station for reenergizing the standby buses.

Question 10

In Section 4 of the LAR, the licensee stated that the justification for the TS CT extension is based on the deterministic evaluation. However, to supplement this evaluation and to gain risk insights concerning proposed plant configuration, the licensee also performed a risk assessment. The risk assessment found that the risk impact with the proposed extended CT of 75 days is insignificant. The licensee also qualitatively stated that the risk analysis shows a small risk increase using the average nominal maintenance unavailability values for the standby shutdown facility (SSF), emergency feedwater system (EFW) and alternating current (AC) power system. Provide a discussion how the plant addresses the Tier 2 and Tier 3 acceptance guidelines for TS changes provided in Section 2.4 of Regulatory Guide 1.177, Revision 1. If compensatory measures are considered in place to reduce the risk impact during the 75 days CT, provide a discussion of all such measures and include them in the list of regulatory commitments.

Question 11

Provide an expiration date for this one-time TS change. For example, Note 2 could be revised to state "Only applicable one time for each KHU due to generator field pole rewind work, and expires on January 1, 2014."

P. Gillespie

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If you have any questions, please call me at 301-415-2901.

Sincerely,

/RA/

John P. Boska, Senior Project Manager Plant Licensing Branch II-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-269, 50-270, and 50-287

Enclosure: RAI

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