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

August 25, 2010

Mr. Dave Baxter
Vice President, Oconee Site
Duke Energy Carolinas, LLC
7800 Rochester Highway
Seneca, SC 29672

SUBJECT: OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3 (ONS) - REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING LICENSE AMENDMENT REQUEST, TRANSITION TO TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* (10 CFR), PART 50, SECTION 50.48(c), *NATIONAL FIRE PROTECTION ASSOCIATION STANDARD NFPA 805* (TAC NOS. ME3844, ME3845, AND ME3846)

Dear Mr. Baxter:

By letter dated May 30, 2008, as supplemented by letters dated October 31, 2008, January 30, February 9, February 23, May 31, August 3, September 29, and November 30, 2009, and April 14, 2010, Duke Energy Carolinas, LLC (the licensee),submitted a license amendment request (LAR) to transition the fire protection licensing basis at ONS from 10 CFR 50.48(b) to 10 CFR 50.48(c), *National Fire Protection Association Standard (NFPA) 805.* The letter dated April 14, 2010, the licensee resubmitted the LAR and superseded the content of the LAR submitted by letters dated May 30, 2008, and October 31, 2008. This resubmitted LAR, however, does not supersede previous responses to RAI questions submitted by letters dated October 31, 2008, January 30, February 9, February 23, May 31, August 3, September 29, and November 30, 2009.

To complete our review of the LAR, the U.S. Nuclear Regulatory Commission (NRC) staff needs additional information. The NRC staff's RAI is enclosed. Unless otherwise agreed to, please submit all responses to these RAI questions within 33 days.

If you have any questions, please call me at 301-415-1345.

Sincerely,

John Stang, 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)

OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3 (ONS)

TRANSITION TO

TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* (10 CFR), PART 50, SECTION 50.48(c)

NATIONAL FIRE PROTECTION ASOCIATION STANDARD (NFPA) 805

By letter dated May 30, 2008 (Agencywide Documents Access and Management System (ADAMS), Accession No. ML081650475), as supplemented by letters dated October 31, 2008 (ADAMS Accession No. ML083120362), January 30, 2009 (ADAMS Accession No. ML091040205), February 9, 2009 (ADAMS Accession No. ML090480143), February 23, 2009 (ADAMS Accession No. ML090700134), May 31, 2009 (ADAMS Accession No. ML091590045), August 3, 2009 (ADAMS Accession No. ML092190212), September 29, 2009 (ADAMS Accession No. ML092740624), November 30, 2009 (ADAMS Accession No. ML093410007), and April 14, 2010 (ADAMS Accession No. ML101121032), Duke Energy Carolinas, LLC (the licensee), submitted a license amendment request (LAR) for the U.S. Nuclear Regulatory Commission (NRC) staff's review and approval. The proposed LAR would approve the transition of the fire protection licensing basis at ONS from 10 CFR 50.48(b) to 10 CFR 50.48(c), *National Fire Protection Association Standard (NFPA) 805.*

The NRC staff has determined that the following information is needed in order to complete its review of the LAR:

RAI 3-16.1

The response to RAI 3-16, regarding additional information on the multiple spurious operation (MSO) expert panel, referred to Section 7.4, Attachment D, and Attachment E of the ONS site document "ONS FPRA Component Selection" (OSC-8978), which was submitted to the NRC docket (ADAMS Accession No. ML072180334 dated July 25, 2007). The document submitted to the NRC was "Draft A," while Revision 2 of this document was used in the revised LAR. Given the revisions to this document since the original submission provide the following:

- A general description of the composition of the expert panel, including number of plant/Duke staff participating, disciplines and experience represented by the participants, and use of contractors/independent experts.

- An expanded description of the expert panel process that includes a description of the process used to reach a consensus on the MSOs kept for further assessment and a description of the criteria used in the selection process.

- A list of MSOs that were reviewed and the source of each MSO reviewed (plant unique issue identified by the expert panel, generic industry MSO lists, operating experience, industry guidance documents, etc.).

RAI 5-80

During the evaluation of recent inspection findings (ADAMS Accession No. ML102240588), the NRC notified ONS that it did not agree with ONS's evaluation concluding that the frequency and severity of high energy arcing faults on 4160/6900V bus ducts in the turbine building are substantially less than values developed consistent with NUREG/CR 6850 and the NRC endorsed NFPA FAQ-07-0035. Please correct the frequency and severity of these faults in your fire PRA and provide revised results for the affected areas.

RAI 6-2

Section 4.6 of the LAR provides a description of the process that will be used to develop a monitoring program for ONS that is compliant with NFPA 805, Section 2.6. Providing a description of a "process" however does not meet the requirement of NFPA 805, and the guidance in NEI 04-02, to "establish" a monitoring program. Specifically, sufficient details of the monitoring program need to be provided to support an NRC staff conclusion of reasonable assurance that the ONS monitoring program will meet the requirements of NFPA 805, Sections 2.6.1, 2.6.2, and 2.6.3. In this regard, provide the following:

- Describe the ONS fire protection program system and features, and the attributes of those systems and features, which are included in the monitoring program.

- Describe the process used to identify the systems and features to be included in the program. For those systems chosen, describe how the system boundaries are defined. Also, identify the types of support systems (such as power, control, and instrumentation) that will be included in the monitoring program.

- If systems are already monitored in the Maintenance Rule, describe the attributes of those systems that will be added to the current program to meet the requirements of NFPA 805.

- If an expert panel was used or will be used, describe the composition of the expert panel (disciplines and experience) and the process the expert panel did or will use to identify fire protection systems and features to be included in the monitoring program. Describe the criteria, including both non-risk and risk criteria, that was used or will be used to identify the systems and features included in the program and how the criteria were derived.

- Describe the criteria and methods used to establish acceptable and target levels of availability, reliability, and performance for each of the fire protection systems and features included in the monitoring program. Describe how the criteria were derived and the basis for why the established levels are acceptable. Describe how the monitoring methods consider ONS and industry operating experience. If the criteria were established for "classes" of systems and features, or performance monitoring groups (PMGs), describe the PMGs established for ONS and which fire protection systems and features are included in each of these groups.

- Describe the criteria used to determine when a system or feature has failed to perform its required function. Describe how the criteria were derived. How is failure to be

documented and tracked? Will additional monitoring be required for a specific time period after the system or feature has been repaired, retested and returned to service?

- Describe how monitoring data is collected and maintained for use in performance monitoring. How often is the monitoring data updated, reviewed, and documented?

- Describe how the monitoring program ensures that the assumptions in associated engineering analyses remain valid.

- Describe how the ONS corrective action process will be used to maintain acceptable performance and, when necessary, to bring the performance of fire protection systems and features back into acceptable levels of performance.

RAI 7-5

Section 4.7.2 of the LAR describes the configuration control process used at ONS and how plant changes are assessed for impact on the fire protection program. It is unclear from the information provided how plant and program changes that have been/will be made prior to and during the NFPA 805 transition period are assessed for impact on the NFPA 805 fire protection program prior to its actual implementation at ONS. Specifically, the NFPA 805 pilot plant program was started over 2 years ago, and the NFPA 805 transition period for ONS is expected to be 18 months. Plant configurations that change during the assembly of the NFPA 805 fire protection program may impact the assumptions and limitations of the ongoing analysis. Explain how plant changes made since the start of the NFPA pilot program and plant changes that may be made during the NFPA 805 transition period are assessed for impact on the NFPA 805 fire protection program. Explain how these assumptions and limitations are maintained current or revisited prior to implementation of the NFPA 805 program. While performing engineering and licensing (10 CFR 50.59) reviews for plant changes, explain how the NFPA 805 transition project is kept in concert with the changing plant and programs. Explain how the NFPA 805 fire protection program and/or project personnel are involved in the reviews of design changes and program alterations.

August 25, 2010

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Vice President, Oconee Site
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Sincerely,

/RA/

John Stang, 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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ADAMS Accession No. ML102310174

*via memo dated 08/20/10 ML102080132

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NAME	JStang	MO'Brien	AKlein*	GKulesa	JStang
DATE	08/24/10	08/23/10 (w/ changes)	08/20/10	08/25/10	08/24/10

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