



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

November 5, 2009

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 - ONCE-THROUGH STEAM GENERATOR TUBE LOADS UNDER CONDITIONS RESULTING FROM POSTULATED BREAKS IN REACTOR COOLANT SYSTEM UPPER HOT-LEG LARGE-BORE PIPING (TAC NO. ME1816)

Dear Mr. Baxter:

On June 25, 2009, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of the Pressurized Water Reactor Owners Group (PWROG) at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland, regarding once-through steam generator tube loads under conditions resulting from postulated breaks in reactor coolant system upper hot-leg large-bore piping.

In the meeting, the NRC requested that each Babcock and Wilcox licensee submit a letter summarizing the information discussed at the meeting. The NRC staff followed up this verbal request with a letter dated August 6, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML092180396).

In response, Duke Energy Carolinas, LLC (the licensee) provided the response in its letter dated September 16, 2009 (ADAMS Accession No. ML092660116), for Oconee Nuclear Station, Units 1, 2, and 3. The NRC staff has reviewed the response and provides the following comments:

- The staff has noted your response on the reporting requirements of Section 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors," of Title 10 of the *Code of Federal Regulations*. We will contact you if we wish to have further discussions regarding your response.
- Based on its review of this letter, the staff understands that your current steam generators have been designed for large break loss-of-coolant accident (LBLOCA) loading conditions and that steam generator tube integrity is being maintained for all LBLOCAs (including those in the candy-cane region) as required by Technical Specification (TS) 3.4.16, "Steam Generator (SG) Tube Integrity," and TS 5.5.10, "Steam Generator (SG) Program."
- The staff expects that any design/licensing basis documents, including the Updated Final Safety Analyses Report, will be updated, or already has been

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updated, to reflect your steam generator design and your management of steam generator tube integrity for LBLOCA loads. This includes removing any reference to the approach discussed in the previously withdrawn PWROG topical report BAW-2374, Revision 2, "Risk-Informed Assessment of Once-Through Steam Generator Tube Thermal Loads Due to Breaks in Reactor Coolant System Upper Hot Leg Large-Bore Piping," or similar approach.

This closes TAC No. ME1816. If you have any questions, please contact me at 301-415-1345 or by e-mail at john.stang@nrc.gov.

Sincerely,

A handwritten signature in black ink that reads "Jon Thompson" with "for" written below it.

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

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Sincerely,

/RA by JThompson for/

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

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