

**From:** Boska, John  
**Sent:** Friday, October 26, 2012 10:38 AM  
**To:** Alter, Kent R  
**Cc:** 'Guill, Paul F'  
**Subject:** Oconee Units 1, 2, and 3, NRC Request for Additional Information on Errors Reported per 10 CFR 50.46, ME9119

**Importance:** High

By letter dated March 9, 2012 (Agencywide Documents Access and Management System Accession No. ML12073A354), Duke Energy Carolinas, LLC, the licensee for Oconee Nuclear Station, Units 1, 2, and 3, submitted a 30-day report of changes to or errors discovered in an evaluation model or in the application of such a model that affects the peak cladding temperature (PCT) calculation. This report was submitted pursuant to the requirements of Title 10 of the Code of Federal Regulations (10 CFR), Part 50, Section 50.46, which requires, in part, that licensees report a change in the evaluation model used resulting in a significant change in PCT (greater than 50°F). The intent of this requirement is to enable the staff to establish the safety significance of this change (See Federal Register (FR) Volume 53, No. 180, pp. 35996-36005). As described in the Nuclear Reactor Regulation staff's action plan for determining, restoring, and ensuring compliance with 10 CFR 50.46 requirements, this 50.46 report review is being coordinated with reviews of similar reports submitted by other licensees using the same emergency core cooling system evaluation model.

The Nuclear Regulatory Commission staff is reviewing the submittal and has determined that additional information is needed to complete its review. The specific questions are found below. On October 25, 2012, the Duke staff indicated that a response to the RAI would be provided within 45 days of the date of this email.

#### REQUEST FOR ADDITIONAL INFORMATION:

1. There are two changes to peak cladding temperature (PCT) for Large Break Loss of Coolant Accident (LBLOCA) analysis discussed in the report submitted by the licensee. The first change is an Evaluation Model (EM) application error in the determination of the end of Emergency Core Cooling System (ECCS) bypass which resulted in an 80°F decrease in PCT. The second change is an EM modeling change to include the effects of the upper plenum column weldments which resulted in an 80°F increase in PCT.

Provide the analysis that lead to each change having an 80 degree change in PCT.

2. 10 CFR 50.46(a)(3)(ii) states: " ... If the change or error is significant, the applicant or licensee shall provide this report within 30 days and include with the report a proposed schedule for providing a reanalysis or taking other action as may be needed to show compliance with 50.46 requirements ... "

The PCT for LBLOCA for Oconee Units 1, 2, and 3 has changed by an absolute value of 160°F since the analysis was performed. Simply reporting the changes and errors in the methodology does not satisfy the intent of the regulation. Justify not providing a schedule for reanalysis or taking other action to show compliance with Section 50.46.

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