NRR-PMDAPEm Resource

From: Saba, Farideh

Sent: Friday, October 26, 2012 4:39 PM

To: Westcott, Daniel Cc: Lingam, Siva

Subject: RAIs regarding Crystal River 30-day report for ECCS model changes pursuant to 10 CFR

50.46 requirements (ME8408)

Attachments: ME8408_CR3_ RAIs for 5046 report.docx

Importance: High

Dan,

Please see attached the NRC staff's RAIs regarding the subject report. Please let me know if you have any questions. Please respond within 30 days of the date of this email (November 16, 2012) or let me know if you will not be able to support this date.

Thanks,

Farideh

Farideh E. Saba, P.E. Senior Project Manager NRC/ADRO/NRR/DORL 301-415-1447 Mail Stop O-8G9A Farideh.Saba@NRC.GOV Hearing Identifier: NRR_PMDA

Email Number: 516

Mail Envelope Properties (Farideh.Saba@nrc.gov20121026163800)

Subject: RAIs regarding Crystal River 30-day report for ECCS model changes pursuant to

10 CFR 50.46 requirements (ME8408)

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From: Saba, Farideh

Created By: Farideh.Saba@nrc.gov

Recipients:

"Lingam, Siva" <Siva.Lingam@nrc.gov>

Tracking Status: None

"Westcott, Daniel" < Daniel. Westcott@pgnmail.com>

Tracking Status: None

Post Office:

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Options

Priority: High
Return Notification: No
Reply Requested: Yes
Sensitivity: Normal

Expiration Date: Recipients Received:

REQUEST FOR ADDITIONAL INFORMATION

REGARDING CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

30-DAY REPORT FOR EMERGENCY CORE COOLING SYSTEM MODEL CHANGES

PURSUANT TO THE REQUIREMENTS OF 10 CFR 50.46

DOCKET NO. 50-302

By letter dated March 19, 2012 (Agencywide Documents Access and Management System Accession No. ML12081A278), Florida Power Corporation, the licensee for Crystal River Unit 3 Nuclear Generating Plant submitted a notice reporting a change or error 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 10 CFR 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 FR Volume 53, No. 180, pp. 35996-36005).

The NRC staff has reviewed the licensee's 30-day report and requests the licensee respond to the following questions:

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.