

**Lent, Susan**

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**From:** Kalyanam, Kaly  
**Sent:** Friday, October 26, 2012 3:00 PM  
**To:** BICE, DAVID B  
**Subject:** RAI on the Review of 10 CFR 50.46 30-day Report

Dave:

By letter dated March 20, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML12080A120), Entergy Operations, Inc, the licensee for Arkansas Nuclear One, Unit 1 sent 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). On reviewing your submittal, the Nuclear Regulatory Commission staff finds it needs additional information to continue the review.

Please provide your response to this RAI within 30 days from the receipt of this RAI. If for any reason you are unable to meet this requirement, please let us know in advance so that our resources can be effectively used.

Thanks

Kaly N. Kalyanam

REQUEST FOR ADDITIONAL INFORMATION  
REGARDING ARKANSAS NUCLEAR ONE, UNIT 1  
30-DAY REPORT FOR EMERGENCY CORE COOLING SYSTEM MODEL CHANGES  
PURSUANT TO THE REQUIREMENTS OF 10 CFR 50.46  
DOCKET NO. 50-313  
TAC No. ME9719

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 Arkansas Nuclear One, Unit 1, 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.