

**Burkhardt, Janet**

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**From:** Kalyanam, Kaly  
**Sent:** Tuesday, August 20, 2013 3:31 PM  
**To:** BICE, DAVID B (ANO) (DBICE@entergy.com)  
**Cc:** Burkhardt, Janet  
**Subject:** RAI No. 3 regarding ANO-1 30-day report for ECCS model changes pursuant to the requirements of 10 CFR 50.46(a)(1)(i)

Date: August 20, 2013

Subject: RAI No. 3 regarding ANO-1 30-day report for ECCS model changes pursuant to the requirements of 10 CFR 50.46(a)(1)(i)

Dave:

By letter dated March 20, and supplemented by letters dated December 17, 2012, and April 10, 2013, 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 requirements of paragraph 50.46 of Title 10 of the *Code of Federal Regulations* (10 CFR), 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).

On reviewing your submittals, the Nuclear Regulatory Commission staff finds it needs additional information to continue the review.

Please provide your response to this request within 30 days from the receipt of the request. If unable to meet this, please let the staff know in advance when the response can be expected 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(a)(1)(i)**  
**DOCKET NO. 50-313**

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 (ANO-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 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 October 15, 2012, the staff issued a Request for Additional Information (RAI) to the licensee (ADAMS Accession Number ML12279A036) regarding the 30-day report which stated the following:

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.

The licensee responded to the RAI on December 17, 2012 (ADAMS Accession Number ML12353A489).

The RAI response does not include a proposed schedule for providing a reanalysis. In the response, the licensee states that the PCT error evaluations are supported by explicit analyses using the B&W plant ECCS evaluation model. Since a schedule for reanalysis was not provided, justify how generic analysis for the B&W plant ECCS evaluation model constitutes "taking other action" to show compliance with Section 50.46. In particular, while the submitted RAI response addresses the acceptance criteria contained in 10 CFR 50.46(b), the response does not address the requirement, at 10 CFR 50.46(a)(1)(i), to calculate "ECCS cooling performance..." "in accordance with an acceptable evaluation model." In light of the presently reported, significant, estimated effects of errors and changes, explain how the present ECCS cooling performance has been calculated in accordance with an acceptable evaluation model, such that any other action, as provided in 10 CFR 50.46(a)(3), has been taken to show compliance with 10 CFR 50.46 requirements, including those contained in 10 CFR 50.46(a)(1).

Alternatively, submit a schedule for providing a reanalysis or taking other action as may be necessary to show compliance with 10 CFR 50.46 requirements.

SUNSI Information:

Docket No.: 50-313

TAC No.: ME9719

Plant: Arkansas Nuclear One, Unit 1

Licensee: Entergy Operations Inc.

Subject: RAI No. 3 regarding ANO-1 30-day report for ECCS model changes pursuant to the requirements of 10 CFR 50.46(a)(1)(i)

SUNSI Review: Publicly Available; Normal Release, Non-Sensitive