

From: Vaidya, Bhalchandra
Sent: Tuesday, March 12, 2013 1:42 PM
To: 'Dosa, John J'; 'Darling, Theresa H'; 'Vandeputte, Dennis E'; 'Kristensen, Kenneth J'
Cc: Jackson, Christopher; Miranda, Samuel; Woodyatt, Diana; Guzzetta, Ashley; Huang, Tai; Panicker, Mathew; Karipineni, Nageswara; Wen, Peter; Meighan, Sean
Subject: February 27, 2013, Pre-submittal Category 1, Public Meeting Re: License Amendment Request on MELLLA+

John, Theresa, Dennis, and Ken,

Although not specifically discussed in detail, during the Pre-submittal Category 1, Public Meeting Re: License Amendment Request (LAR) on MELLLA+ on February 27, 2013, US. Nuclear Regulatory Commission (NRC) staff has noted the following:

During the pre-application presentation on February 27, 2013, the licensee indicated that their ECCS analyses would be submitted without adequately accounting for nuclear fuel thermal conductivity degradation (Slide 9 from the presentation). Specifically, the ECCS evaluation would use the GESTR-M fuel thermal performance code. The NRC staff determined that this is a significant, obvious problem for two reasons:

1. Condition/Limitation 12 of NEDC-33173(P)(A), "Applicability of General Electric Methods to Expanded Operating Domain," July 21, 2009, states that,

In MFN 06-481, GE committed to submit plenum fission gas and fuel exposure gamma scans as part of the revision to the T-M licensing process. The conclusions of the plenum fission gas and fuel exposure gamma scans of GE 10x10 fuel designs as operated will be submitted for NRC staff review and approval. This revision will be accomplished through Amendment to GESTAR II or in a T-M licensing LTR. PRIME (a newly developed T-M code) has been submitted to the NRC staff for review (Reference 58). Once the PRIME LTR and its application are approved, future license applications for EPU and MELLLA+ referencing LTR NEDC-33173P must utilize the PRIME T-M methods.

The PRIME LTR was approved on January 22, 2010.

2. NRC Information Notice (IN) 2009-23, "Nuclear Fuel Thermal Conductivity Degradation," notified licensee that analyses performed using pre-1999 methods may be less conservative than previously understood. In addition, NRC IN 2011-21, "Realistic Emergency Core Cooling System Evaluation Model Effects Resulting from Nuclear Fuel Thermal Conductivity Degradation," notifies addressees that the impact of irradiation on fuel thermal conductivity has the potential to cause errors in ECCS evaluation models, specifically a higher peak cladding temperature.

The information provided by the licensee would contain a significant, obvious problem with the ECCS analyses and it is the staff's policy that this application would contain insufficient information and would therefore, be considered unacceptable for review.

Please address this issue while preparing the LAR.

Please let me know immediately, if the licensee would like to have another Category 1, Public Tele-Conference or Meeting to discuss this issue with the NRC staff.

This e-mail will be added to ADAMS as a "Publicly Available, Non Sensitive document."

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