

Kim, James

From: Kim, James
Sent: Monday, January 30, 2012 11:14 AM
To: 'Devincentis, James M'
Cc: 'Couture III, Philip'
Subject: Acceptance Review--Vermont Yankee steam dryer Inspections---TAC#ME7733
Attachments: Vermont Yankee steam dryer.docx

Importance: High

Jim D.

Attached is the supplemental info. requested by the tech. staff to make the amendment request acceptable for review. Please let me know if you would like to set up a phone call to discuss it.

Thanks
Jim Kim

Request for Supplemental Information
Vermont Yankee License Amendment Request
License Condition Change Regarding Steam Dryer Monitoring and Inspection
TAC No. ME7733

By letter dated December 22, 2011, Entergy Nuclear Operations Inc. (Entergy or the licensee) submitted a license condition change requesting the usage of the inspection requirements allowed by the BWRVIP-139-A topical report (TR), "BWR Vessel and Internals Project Steam Dryer Inspections and Flaw Evaluation Guidelines," at Vermont Yankee (VY) nuclear power plant. In the technical evaluation section of its submittal, the licensee stated that the steam dryer was inspected during previous refueling outages and these inspections did not identify any unacceptable fatigue induced structural flaws. Consistent with the requirements addressed in Section 5.3.4 of the BWRVIP-139-A, the licensee's proposed change includes adoption of the re-inspection frequency of the steam dryer at every seven refueling outages based on 18 month cycle.

In accordance with the criteria of Section 3.1.2 of Appendix B in NRR Office Instruction, LIC-109, "Guide for Performing Acceptance Reviews - Technical Staff Criteria," the NRC staff is unable to determine whether the guidance of BWRVIP-139-A cited in the requested licensing action (RLA) is being used in accordance with the limitations and conditions imposed by the NRC staff in the Safety Evaluation (SE) accompanying the aforementioned TR. This determination is based on insufficiencies identified in the December 22, 2011, submittal, which are detailed below. However, based on the previous inspection results cited by the licensee in the RLA, the supplemental information necessary for the NRC staff to review the RLA appears readily available to the licensee. Therefore, the NRC staff considers the RLA "unacceptable for review with opportunity to supplement," in accordance with LIC-109.

As indicated in Section 5.3.4 of the BWRVIP-139-A, "Re-inspection Recommendations," licensees must justify any adjustments to steam dryer inspection programs when commitments exist to implement the re-inspection provisions of GE Services Information Letter (SIL) No. 44, "BWR steam dryer integrity." Accordingly, the NRC staff requests that the licensee submit a robust technical justification that demonstrates that the existing flaws would not cause any detrimental effect on the functionality and the structural integrity of the steam dryer. This justification shall encapsulate the following information which is to be derived from the consecutive inspections conducted during the 2007, 2008 and 2010 refueling outages:

- (1) Length of the indications—average length of the flaws/relevant indications;
- (2) Distribution of indication per unit area—random, concentrated at high stress locations, at the heat affected zone (HAZ);
- (3) Characterization of the relevant indications/flaws,
- (4) Engineering disposition of the relevant indications (> 1/16") based on the loading conditions,

- (5) Locations of cracks i.e., fatigue cracks and/or IGSCC and maximum length of the cracks.

The expectations are that the licensee should demonstrate that compliance with the requirements (i.e., the re-inspection frequency at every seven refueling outages based on 18 month cycle) addressed in the BWRVIP-139-A report is adequate to maintain the functionality and structural integrity of the steam dryer. The staff requires that this justification be submitted as part of the proposed change in the licensing condition, and if the licensee cannot fulfill this requirement, the staff may deny the proposed change.