

**From:** Chawla, Mahesh  
**Sent:** Thursday, April 07, 2011 5:24 PM  
**To:** ERICKSON, JEFFREY S  
**Cc:** KUEMIN, JAMES L; Lingam, Siva; Boyle, Patrick; Pascarelli, Robert; Ellegood, John; Giessner, John; Lerch, Robert; Mitchell, Matthew; Sheng, Simon  
**Subject:** Palisades - PTS Evaluation - ME5263 - Request for Additional Information

By letter dated December 20, 2010, Entergy Nuclear Operations, Inc. submitted an updated pressurized thermal shock evaluation for NRC review. This application is in accordance with the requirement in Title 10 of *Code of Federal Regulations* (10 CFR) 50.61, "Fracture Toughness Requirements for Protection against Pressurized Thermal Shock Events." The NRC staff has completed a preliminary review of the submittal and needs additional information to complete the review. **Please arrange a teleconference to discuss the following information:**

**Attachment 1: Report 0901132.401, "Evaluation of Surveillance Data for Weld Heat No. W5214 for Application to Palisades PTS Analysis."**

RAI-1

It is stated in Section 4.0 under Data Evaluation Results that, "[t]he new data survey was performed to gather all the unirradiated and irradiated capsule test results for the Palisades limiting weld material." Briefly describe this new data survey to demonstrate that no relevant data could have been missed during the survey.

RAI-2

It is stated in Section 4.0 that, "there are two capsules from the Palisades supplemental surveillance program that were previously unreported."

- A review of the BAW-2398 report, "Test Results of Capsule SA-240-1," indicated that the upper shelf energy values were determined in accordance with American Society for Testing and Materials (ASTM) Standard E 185-82, "Standard Practice for Conducting Surveillance Tests for Light-Water Cooled Nuclear Power Reactor Vessels." However, it did not mention whether the two supplemental capsules also comply with other aspects of the ASTM E 185-82. Discuss whether the supplemental capsule weld test data were obtained in accordance with the ASTM E 185-82 regarding test specimens, irradiation requirements, measurement of mechanical properties, and determination of irradiation effects.

- Provide information about the reconstituted full size Charpy V-notch specimens using weld metal inserts. Cite studies and demonstrate that the Charpy data obtained this way is equivalent to those from conventional weld metal specimens.
- Discuss whether the Palisades surveillance program augmented with two supplemental capsules was reviewed by the NRC.