

From: Wang, Alan
Sent: Wednesday, December 14, 2011 9:57 AM
To: BURFORD, FRANCIS G; MILLAR, DANA; Guy Davant
Cc: Lent, Susan; Burkhardt, Janet
Subject: Grand Gulf Extended Power Uprate Reactor Systems Branch Request for Additional Information (ME4679)

Dana and Jerry,

By letter dated September 8, 2010 (Agencywide Documents Access and Management System, Accession No. ML1002660403), Entergy Operations, Inc. (Entergy, the licensee), submitted a request to amend the Facility Operating License No. NPF-29 for Grand Gulf Nuclear Station, Unit 1 (GGNS). The licensee proposed a license amendment request (LAR) for an extended power uprate (EPU) to increase the maximum reactor core power operating limit from 3898 megawatts thermal (MWt) to 4408 MWt. The staff performed an on-site audit of the implementation of stability long-term solutions and the impact of extended power uprate (EPU) on instability and ATWS in the GGNS on October 27, 2011. The review was conducted by Dr. Tai L. Huang of the Reactor Systems Branch, Office of Nuclear Reactor Regulation, and Dr. Jose March-Leuba of Oak Ridge National Laboratory, an NRC consultant. As a result of this audit, the U.S. Nuclear Regulatory Commission (NRC) staff has determined that the following additional information is needed for the NRC staff to complete our review of this amendment. This request for additional information (RAI) was discussed with Mr. Davant of your staff on December 13, 2011, and it was agreed that a response would be provided within 30 days of receipt of this E-mail. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-1445 or via e-mail at Alan.Wang@nrc.gov. The following is an additional RAI related to the implementation of stability long-term solution in GGNS and EPU implications for stability and ATWS:

1. Provide data for worst case ATWS long term scenario at EPU conditions. Include plots, sequence of events, and initial conditions
2. Provide data for worst case ATWS short term pressure peak scenario at EPU conditions. Include plots, sequence of events, and initial conditions

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