

From: [Wang, Alan](#)
To: [Ward, Steven](#); [SEITER, JEFFERY ALAN](#)
Cc: [Lent, Susan](#); [Burkhardt, Janet](#)
Subject: Grand Gulf Nuclear Station Request for Additional Information Regarding Standby Service Water System License Amendment Request (TAC ME9568)
Date: Monday, March 18, 2013 1:29:03 PM

Jeff and Steve,

By letters dated September 14, 2012 and December 17, 2012 (Agencywide Documents Access management System (ADAMS) Accession numbers ML12258A386 and ML12353A602, respectively), Entergy Operations, Inc. (the licensee), requested an amendment to Facility Operating License Number NPF-29 for Grand Gulf Nuclear Station, Unit 1 (GGNS). The proposed amendment would revise the Updated Final Safety Analysis Report (UFSAR) to revising the Standby Service Water (SSW) Passive Failure methodology.

The NRC staff has determined that additional information is needed to complete our review of this request. The following request for additional information (RAIs) are related to your license amendment request dated September 14, 2012:

QUESTION 1

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The proposed LAR states that the GGNS UFASR was modified under the Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Section 50.59 process to remove the requirements for passive failures of pipes, heat exchangers tubing, and pipe fittings. Describe the design basis for the SSW system prior to this UFSAR modification, with respect to postulated passive failures following a loss-of-coolant accident (LOCA) as well as postulated passive failures as initiating events. Describe the impact these postulated passive failures have on the performance of the SSW system.

QUESTION 2

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Section II.3 of the LAR states:

In summary, to postulate passive breaks in the Standby Water System during the recirculation phase of plant cooldown, the following methodology should be employed: for seismically designed portions of the service water leakage cracks (1/2 pipe diameter x 1/2 pipe wall thickness) should be postulated to occur at any point on the pipe. This crack size is taken to envelope and bound other passive failures to be taken into consideration.

Section II.5 of the LAR states that "Grand Gulf would consider a single passive failure of the SSW system would be a pump seal or valve leakage after 24 hours during a LOP/LOCA." This statement appears to conflict with the previous statement from Section II.3.

Clarify the intent of this LAR with respect to passive failures postulated following a LOCA.

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QUESTION 3

- Does the LAR make any changes to the postulated breaks used to evaluate the protection of the plant from piping failures outside of containment, in accordance with the guidance of Standard Review Plan (SRP) 3.6.1 and 3.6.2?

QUESTION 4

- Provide additional information on the response to a postulated break in the SSW system, including a discussion of the "ONEP" referenced in Section I of the LAR. What actions can be taken to replenish the SSW basin or align an alternate source of water in the event of a break in the SSW system?

QUESTION 5

What is the maximum leakage rate resulting from pump seal or valve leakage in the SSW system following a LOCA? Evaluate the impact of this leakage on the SSW system performance and any potential impact the leakage might have on nearby components important to safety.

This RAI was discussed with Mr. Steven Ward on March 18, 2013, and it was agreed that a response would be provided within 30 days of receipt of this email. 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.

Alan Wang
Project Manager (Grand Gulf Nuclear Station)
Nuclear Regulatory Commission
Division of Operating Reactor Licensing
Alan.Wang@NRC.gov
Tel: (301) 415-1445
Fax: (301) 415-1222