

NRR-PMDAPEm Resource

From: Regner, Lisa
Sent: Friday, March 18, 2016 4:43 PM
To: Wayne Harrison
Subject: DRAFT RAI: STP CLB BAP RAI
Attachments: STP BAP RAI.docx

Wayne,

In order to continue our review of your risk-informed resolution to GSI-191, the NRC staff needs additional information concerning the HLSO timing currently used in the STP Emergency Operating Procedures as it impacts the thermal-hydraulic analysis with the addition of debris.

Attached is a draft RAI question that, given an acceptable response, should close out the previous questions issued on this topic in 2009 and 2015. If you would like clarifications, we will be available to discuss at the March 31 and/or April 14 public conference calls. Alternately, we can set up a soon clarification call.

Thank you,
Lisa

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Created By: Lisa.Regner@nrc.gov

Recipients:
"Wayne Harrison" <awharrison@STPEGS.COM>
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South Texas Project
Risk-Informed GSI-191 Resolution
RAI Regarding Boric Acid Precipitation Analysis

In response to SNPB RAI 10 and SSIB RAI 66 (issued in ML14357A171), STPNOC stated (ML15246A128) that the current risk-over-deterministic (RoverD) analysis relies on the hot leg switchover (HLSO) timing of 5.5 hours as stated in STP UFSAR Section 15.6.5.2. As such, the NRC staff believes that changes to the HLSO timing would impact the RoverD analysis and thus the risk-informed resolution to GSI-191. In order to better understand the basis for the current HLSO timing, NRC staff have audited STPNOC's current boric acid precipitation (BAP) control analysis on two occasions, in March 2015 and February 2016.

During the February 2016 audit, NRC staff were presented with testing data supporting STPNOC's contention that the barrel-baffle region mixes with the core under certain conditions. This region has not been previously credited in a BAP analysis. Given this, the NRC staff is not satisfied that a sufficient level of quantitative support has been provided for inclusion of any portion of the barrel-baffle region in the mixing volume. The NRC staff requests that STPNOC either:

- a. Provide additional quantitative justification for the use of the barrel-baffle region in the mixing volume, including discussion of the applicability of test data to the STP plants (e.g., scaling of the tests used and the design of the test facilities relative to the design of STP). Or,
- b. Perform a sensitivity analysis of the impact of omitting the barrel-baffle region from the mixing volume, to demonstrate that the current STP HLSO timing of 5.5 hours would be supported.