

NRR-DMPSPEm Resource

From: Valentin-Olmeda, Milton
Sent: Monday, April 15, 2019 10:47 AM
To: KIRKLAND, WILLIAM HANK ; STEWART, TRACEY (SCE&G - 8)
Cc: Sebrosky, Joseph
Subject: VC Summer SPRA Review - Clarification Questions on credit for the Abeyance RCP seals

Hank,

As part of the ongoing audit review of the VC Summer Seismic Probabilistic Risk Assessment (SPRA) submittal (ADAMS Accession No. ML18271A109), the NRC staff is working on a technical checklist similar to that in Enclosure 1 of our letter dated July 10, 2018 (ADAMS Accession No. ML18115A138). The checklist is divided in topics and our questions below indicate the topic that will benefit from the clarification responses being requested:

Question on Topic #15: Documentation of the Seismic PRA (SPID Section 6.8)

Section 5.1 of the licensee's 10 CFR 50.54(f) SPRA submittal states that the VC Summer seismic logic model was developed from the internal events at-power PRA model of record as of July 20, 2017. Therefore, the internal events at-power PRA model provides the foundation for the SPRA model and the technical acceptability of the internal events PRA can potentially impact the SPRA model and results.

The licensee submitted a license amendment request (LAR) to revise its approved National Fire Protection Association (NFPA) Standard 805 program via letter dated August 29, 2018 (ADAMS Accession No. ML18242A658). The staff utilized information provided by the licensee as part of LAR to inform its review of the SPRA submitted in response to 10 CFR 50.54(f) request. Enclosure 1 Attachment 1 to the LAR stated that PRA refinements were made to the reactor coolant pump (RCP) seal loss of coolant accident (LOCA) model based on the RCP seal upgrades. Based on information from the licensee on that topic for the LAR review, the staff's understanding was that the Flowserve Abeyance RCP seals were not credited in the licensee's internal events PRA model. However, recent information communicated by the licensee to the NRC as part of the LAR review indicated that Abeyance RCP seals were credited in the licensee's internal fire PRA. The staff notes that since the internal fire PRA also uses the internal events PRA model as the foundation, it appears that the staff's previous understanding of the use of the Abeyance RCP seals in the internal events model is negated.

The staff is unclear whether credit for the Abeyance RCP seals was included in the SPRA submitted in response to 10 CFR 50.54(f) request and its impact on the results as well as the staff's decision on the submittal. The staff notes that (i) Abeyance RCP seal modeling in PRAs has not been previously reviewed by the staff for approval and/or acceptability, and (ii) the review of the SPRA in response to the 10 CFR 50.54(f) request does not provide the appropriate regulatory framework for such a review. To continue the review of the SPRA submittal, the NRC staff is requesting the licensee to address the following items;

1. Clarify if credit for the Abeyance RCP seals was included (or not) in the SPRA submitted in response to 10 CFR 50.54(f) request.
2. If credit was included, perform a sensitivity to remove the credit. The sensitivity should either be performed simultaneously with any other sensitivities performed in response to Question 1(e) or justification should be provided for performing the RCP seal sensitivity individually. In either case, include discussion of any changes to the importance measures for the SSCs in Tables 5.4-2, 5.4-3, 5.4-4, 5.5-2, 5.5-3, and 5.6-1 of the SPRA submittal and consider the results in the response to the Question on Topic #16 – Review of Plant Modifications and Licensee Actions (sent on 3/4/19 at 4:23pm (ET)).

Your prompt response will be greatly appreciated.
Please contact me if there are any questions related to this email.

Respectfully,

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