

NRR-PMDAPEm Resource

From: Klos, John
Sent: Wednesday, March 09, 2016 3:17 PM
To: Williams, Lisa L.
Cc: Klos, John; ONeal, Daniel
Subject: Second round RAIs: Columbia MF6042 LAR TSTF-425

Ms. Williams,

By letter dated March 17, 2015, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15093A178 as supplemented by letters dated September 17, 2015, ADAMS Accession No. ML15260A570, October 29, 2015, ADAMS Accession No. ML15302A492, November 17, 2015, ADAMS Accession No. ML15321A426, and December 28, 2015, ADAMS Accession No. ML15363A239. Energy Northwest (the licensee) submitted a license amendment request (LAR) to adopt Technical Specification Task Force (TSTF) – 425, revision 3 to relocated specific technical specification surveillance frequencies to a licensee controlled program.

The Nuclear Regulatory Commission (NRC) staff has been reviewing the submittals and has determined that requests for additional information (RAIs) are needed to complete its technical review and make a regulatory finding regarding this LAR. The draft questions were sent via electronic transmission on March 4, 2016 to Ms. Lisa Williams and no clarification teleconference was necessary. Additionally, it was agreed that a response would be submitted within 30 calendar days from the date of this email, April 9, 2016.

If you have any questions, please contact John Klos per the contact information below.

The RAIs are as follows:

SECOND REQUEST FOR ADDITIONAL INFORMATION RELATED TO AN AMENDMENT TO ADOPT
TECHNICAL SPECIFICATIONS TASK FORCE TRAVELER (TSTF)-425, REVISION 3
TO RELOCATE SPECIFIC SURVEILLANCE FREQUENCIES TO
A LICENSEE CONTROLLED PROGRAM
COLUMBIA GENERATING STATION
DOCKET NO. 50-397

Background

By letter dated March 17, 2015, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15093A178 as supplemented by letters dated September 17, 2015, ADAMS Accession No. ML15260A570, October 29, 2015, ADAMS Accession No. ML15302A492, November 17, 2015, ADAMS Accession No. ML15321A426, and December 28, 2015, ADAMS Accession No. ML15363A239. Energy Northwest (the licensee) submitted a license amendment request (LAR) to adopt Technical Specification Task Force (TSTF) – 425, revision 3 to relocated specific technical specification surveillance frequencies to a licensee controlled program. The U.S. Nuclear Regulatory Commission (NRC) staff issued requests for additional information (RAIs) for the Probability Risk Assessment (PRA) Licensing branch by e-mail dated August 12, 2015 ADAMS Accession No. ML15224B646. The licensee provided responses to these RAIs by letters dated September 17, 2015 and October 29, 2015.

Regulatory Basis:

The primary regulatory basis for evaluation of this LAR are 10 CFR 50.36 and 50.36(c)(3)

In 10 CFR 50.36, the NRC established its regulatory requirements related to the content of Technical Specifications (TS). Pursuant to 10 CFR 50.36, TS are required to include items in the following five specific categories related to station operation: (1) Safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls.

10 CFR 50.36(c)(3) further states that "Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met."

RAIs

Based on the review of the RAI responses, the NRC staff has the following follow-up RAIs:

PRA RAI 1.1 (Follow up to PRA RAI 1)

In response to PRA RAI 1 the licensee provided, by letter dated September 17, 2015, the internal events PRA 2009 peer review facts and observations (F&Os), self-assessment findings, and their dispositions. Please address the following regarding F&O 1-3.

- a. The peer review F&O 1-3 states "In almost all of the post-initiator Human Error Probabilities (HEPs) where optimal stress is assumed, time is a factor with core damage occurring between 30 minutes and an hours."

Clarify if these post-initiator HEPs were assumed to be optimal stress in all cases involving this time frame or if such HEPs were determined on a case-by-case basis to represent optimal stress or high stress as appropriate. Please describe your process to make this determination.

- b. The peer review F&O 1-3 also stated, "A second set of justification was provided, with discussion that basically justified moderate or low stress would be appropriate, given enough training for the operators." The peer review F&O 1-3 recommendation stated: "Apply high stress factors per Table 17-1 of NUREG/CR-1278 ["Handbook of Human Reliability Analysis with Emphasis on Nuclear Power Plant Applications"] to HEPs where time pressure is present during an accident situation."

Please clarify if high stress factors were used on a case-by-case basis from this table, and, if not provide justification. Please discuss whether time pressure was used to determine whether an execution operator action justified the application of a high stress factor.

PRA RAI 4.1 (Follow up to PRA RAI 4)

The NRC staff reviewed the response to PRA RAI 4 and found the response did not address the issue.

The peer review observation in the LAR, dated March 17, 2015, concerning F&O 2-2, 2009 Supporting Requirements (SR) DA-C6, page 9 of 11, Attachment 2 states:

"Estimates based on the surveillance tests and maintenance acts as described in DA-C6 and DA-C7 should be performed for significant components whose data are not tracked in the MSPI [Mitigating Systems Performance Index] data."

The peer review recommendations in the LAR, dated March 17, 2015, concerning F&O 2-2, 2009 SR DA-C6, page 9 of 11, Attachment 2 states:

"Update the estimates for significant events based on surveillance test and maintenance records."

The licensee's response, dated September 17, 2015, to PRA RAI 4 states:

“A sensitivity study was performed by replacing the base data for these failure modes with generic data from NUREG/CR-6928 [Industry-Average Performance for Components and Initiating Events at U.S. Commercial Nuclear Power Plants]. It was determined that the finding is unlikely to change the conclusions of risk-informed decisions.”

SRs DA-C6 and DA-C7 are not limited to the Mitigating Systems Performance Index (MSPI) systems. SR DA-C6 and SR DA-C7 include consideration of plant-specific data, and it is not clear how generic data has been demonstrated to be bounding for the non-MSPI components. That is, if the peer review recommendation were to be performed it is not clear that the generic data would necessarily be bounding.

Please provide justification why the use of generic data for performing sensitivity analyses is bounding without updating applicable component estimates with plant-specific data consistent with SR DA-C6 and SR DA-C7, or complete the work to meet SR DA-C6 and SR DA-C7 for applicable components and provide the disposition of the F&O.

John Klos

DORL Callaway, Columbia Project Manager

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