

NRR-DMPSPeM Resource

From: Kuntz, Robert
Sent: Thursday, August 23, 2018 5:19 AM
To: 'Scott, Sara'
Subject: Request for Additional Information RE: Prairie Island TSTF-425 license amendment request

Ms. Scott,

By application dated March 15, 2018 (Agencywide Documents Access and Management System Accession No. ML18074A308), Northern States Power Company, requested changes to the Technical Specification (TS) for Prairie Island Nuclear Generating Plant, Units 1 and 2. The requested change is the adoption of Nuclear Regulatory Commission-approved TSTF-425, Revision 3, "Relocate Surveillance Frequencies to Licensee Control—RITSTF Initiative 5b."

The NRC staff has determined that additional information is required to complete its review. The following is a request for additional information (RAI). During a call with the NRC staff for the staff to provide clarification on the RAI, it was agreed a response would be provided within 30 days of this email. If a response cannot be provided by September 24, 2019 contact me.

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REQUEST FOR ADDITIONAL INFORMATION RELATED TO AN AMENDMENT TO
IMPLEMENT TSTF-425 REVISION 3
NORTHERN STATES POWER COMPANY
PRAIRIE ISLAND NUCLEAR GENERATING PLANTS, UNITS 1 AND 2
DOCKET NO. 50-282 & 50-306

1. Attachment 2 to the license amendment request, Section 2.3, "Applicability of Peer Review Findings and Observations (F&Os)," states that a findings closure review was conducted in October 2017 in accordance with Appendix X (ADAMS Accession No. ML17086A451) to NEI 05-04. The Nuclear Regulatory Commission (NRC) has not officially endorsed the guidance in Appendix X; however, is permitting licensees to use the guidance on an interim basis subject to conditions of acceptance outlined in NRC's letter to Nuclear Energy Institute dated May 3, 2017 (ADAMS Accession No. ML17079A427). Provide the following information to confirm that the October 2017 closure review was performed consistent with the NRC accepted process, as discussed in the May 3, 2017 letter:
 - a. Clarify whether a focused-scope peer review was performed concurrently with the F&O closure process. If so, provide the following:
 - i. Summary of the scope of the peer review.
 - ii. Detailed descriptions of any new F&Os generated from the peer review and the associated dispositions for the application.

- b. Confirm that the closure review team was provided with a written assessment and justification of whether the resolution of each F&O, within the scope of the independent assessment, constitutes a probabilistic risk assessment (PRA) upgrade or maintenance update, as defined in American Society of Mechanical Engineers/American Nuclear Society (ASME/ANS) RA-Sa-2009, "Addenda to ASME/ANS RA-S-2008, Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Plant Applications," as qualified by Regulatory Guide (RG) 1.200, Revision 2, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities," (ADAMS Accession No. ML090410014). If the written assessment and justification for the determination of each F&O was not performed and reviewed by the F&O closure review team, provide all the finding-level F&Os and the dispositions of these F&Os as it pertains to the impact on the TSTF-425 application. Alternatively, perform an Independent Assessment F&O closure review consistent with Appendix X, as accepted, with conditions, by the NRC letter dated May 3, 2017, and provide any additional open F&Os and associated dispositions as a result of this review.
 - c. Appendix X, Section X.1.3 includes five criteria for selecting members of the closure review team. Describe how the selection of members for the October 2017 independent assessment met the five criteria.
 - d. Explain how closure of the F&Os was assessed to ensure that the capabilities of the PRA elements, or portions of the PRA within the elements, associated with the closed F&Os now meet capability category II (CC-II) for supporting requirements (SRs) from ASME/ANS RA-Sa-2009, as endorsed, with clarifications and qualifications, by RG 1.200, Revision 2.
 - e. Discuss whether the F&O closure review scope included all finding-level F&Os, including those finding-level F&Os that are associated with "Met" SRs. If not, identify and provide detailed descriptions for any F&Os that were excluded from the F&O closure review scope, and their associated disposition for the application.
 - f. For any SRs that were found to be only met at CC I by previous peer review team(s), summarize the disposition of these SRs and how it was concluded they now meet CC II. Include discussion of whether all associated F&Os described what was needed to achieve CC II and how the F&O reviewed and closed by the F&O closure team.
2. Section 2.3.3 of the LAR states "PINGP fire PRA will be utilized in a supplementary role (as discussed further in Section 3.0) since the fire PRA model is based on the PINGP plant configuration assuming completion of all NFPA-805 design improvements." Table S-2 of NFPA 805 LAR Attachment S "Modifications and Implementation Items" outlines those design improvements that are scheduled for completion by second refueling outage per issuance of NFPA 805 license amendment (August 8, 2017). Responses to the following will provide additional clarification with regard to use of the Fire PRA:
 - a. Provide those plant modifications listed in Table S-2 that are currently scheduled for completion beyond the second refueling outage.
 - b. NEI 04-10 Step 10 "Initial Assessment for Fire Events" states that "if the plant has a Fire PRA, then the next step of the screening process is to determine whether the SSC is evaluated in the fire PRA...."
 - i. Provide detailed justification that explains the basis for why PINGP opts to not follow the guidance outlined in NEI 04-10 Step 10 with regard to determining the use of Fire PRA on case by case basis.
 - ii. In the case that minimal number or low risk significant design improvements remain after the second refueling outage, provide an updated process for how the fire PRA will be used for TSTF-425 surveillance changes.

3. Provide the following information with regard to remaining open F&Os described in the Table 2-1:
- a. Finding CS-A10-01 states that cables routed through 16 fire compartments have not been identified nor has the methodology been specified. The resolution indicates that this supporting requirement is met at CC-1 using a conservative approach. Describe the conservative approach used in lieu of developing cable routing information for 16 fire compartments.
 - b. Finding FSS-D7-01 indicates that the F&O closure review team determined to keep this finding open since the unreliability of the detection system for the deluge system is not incorporated in the PRA. In a letter dated May 24, 2016 (ADAMS Accession No. ML16152A046) to the NRC, Xcel Energy notes in Table 1, PRA RAI 01.g the following: "The non-suppression probability has been calculated as sum of the unreliability and the unavailability values corresponding to each credited automatic detection and suppression system. This approach has been implemented in all the scenarios analyzed with detailed fire modeling crediting automatic suppression in the Fire PRA." This statement is inconsistent with the finding observed by the closure review team. Provide the following information regarding characterization of suppression systems:
 - i. Provide results of extent of condition analysis to determine additional detection systems that did not factor unreliability into the PRA calculation. If other detection systems, beside deluge system, are discovered to not factor unreliability, provide sensitivity analysis that shows risk impact for each system.
 - ii. With regard to deluge system, describe how the risk impacts of omitting unreliability in the calculation would be conservatively assessed for STI change evaluations; and provide a complete list of STI cases for which this assessment would have to be performed.
 - iii. Provide an approximate timeline for closure of this F&O.
 - c. Finding SY-A17-01 indicates that the closure review team determined that the F&O related to Flowserve N-9000 reactor coolant pump (RCP) seals should remain open. Provide clarification that describes the current basis for modeling N-9000 RCP seals and technical justification for any PRA credit if abeyance seal modifications are employed or provide sensitivity that removes PRA credit.

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Mail Envelope Properties (Robert.Kuntz@nrc.gov20180823051800)

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"Scott, Sara" <Sara.Scott@xenuclear.com>
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