

DRAFT

REQUEST FOR ADDITIONAL INFORMATION

OFFICE OF NUCLEAR REACTOR REGULATION

LICENSE AMENDMENT REQUEST TO ADOPT TSTF-425 TO RELOCATE SPECIFIC

SURVEILLANCE FREQUENCIES TO A LICENSEE-CONTROLLED PROGRAM

SUSQUEHANNA NUCLEAR, LLC

SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2

DOCKET NOS. 50-387 AND 50-388

By letter dated October 27, 2014,¹ as supplemented by letters dated July 2, 2015,² and September 21, 2015,³ Susquehanna Nuclear, LLC (the licensee), submitted a license amendment request for the Susquehanna Steam Electric Station, Units 1 and 2 (SSES). The proposed amendment would modify the SSES technical specifications by relocating specific surveillance frequencies to a licensee-controlled program with the implementation of Nuclear Energy Institute (NEI) 04-10, "Risk-Informed Technical Specifications Initiative 5b, Risk-Informed Method for Control of Surveillance Frequencies."⁴ To complete its review, the U.S. Nuclear Regulatory Commission (NRC) staff requests responses to the following questions.

Background

Regulatory Guide 1.200, Revision 2, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities,"⁵ Regulatory Position 4.2, "Licensee Submittal Documentation," discusses the staff's expectations of the licensee's documentation in order to demonstrate technical adequacy of its PRA. One such expectation is the discussion of the resolution to the Facts and Observations from the peer review team and justification that the disposition does not adversely impact the application.

In Request for Additional Information (RAI) 3, issued by letter dated May 22, 2015,⁶ the NRC staff requested clarification on the licensee's response to Fact and Observation (F&O) 7-4, related to Supporting Requirement (SR) HR-B2. In response to RAI 3, the licensee explained that the resolution of the F&O was related to SR HR-A3 and that the pre-initiator identification process would preclude the development of common mode misalignment events for like components in separate divisions.

¹ Agencywide Documents Access and Management System (ADAMS) Package Accession No. ML14317A052.

² ADAMS Accession No. ML15183A248.

³ ADAMS Accession No. ML15265A347.

⁴ ADAMS Accession No. ML071360456.

⁵ ADAMS Accession No. ML090410014.

⁶ ADAMS Accession No. ML15103A396.

In RAI 8, issued by letter dated August 24, 2015,⁷ the NRC staff requested that the licensee discuss the justification and conclusion on screening pre-initiator mode errors. The RAI also requested that the licensee discuss considerations and the bases for the inclusion or exclusion of modeling of common-mode errors in the probabilistic risk assessment (PRA).

The licensee's response to RAI 8, submitted by supplement dated September 21, 2015, states, in part, that:

Common mode events impacting redundant system trains or diverse systems were specifically treated in accordance with HR-A3. This SR requires the identification of work practices that *"involve a mechanism that simultaneously affects equipment in either different trains of a redundant system or diverse systems (e.g., use of common calibration equipment by the same crew on the same shift, a maintenance or test activity that requires realignment of an entire system (e.g., SLCS)."* The intent of the SR was viewed to focus on capturing single activities that impact redundant trains of a system or diverse systems, not multiple, separate activities that impact redundant or diverse systems, even if they are performed in an outage.

Issue

SR HR-A3 describes a mechanism or process and clarifies it by the examples. The examples are not exhaustive. Common cause failure events may occur due to either single or multiple activities. An example of pre-initiator multiple actions which could result in a common failure is the use of an incorrect procedure, which may be used at different times. Therefore, pre-initiator multiple activity human failure events which could be a common mode failure, whether or not the activities occur in an outage, cannot be screened out considering SR HR-A3. This may be relevant to equipment which follows staggered testing.

Additional Information Needed

10. Based on the above, address how you will consider the potential for multiple actions which could be a common mode failure (such as the use of a procedure) consistent with SR HR-A3, for the PRA model.

⁷ ADAMS Accession No. ML15209A974.