From: Guzman, Richard

Sent: Monday, April 20, 2015 11:42 AM

To: Guzman, Richard

Subject: FW: Millstone 3 Draft Request for Additional Information-TAC No. MF4131

From: Thadani, Mohan [mailto:Mohan.Thadani@nrc.gov]

Sent: Tuesday, March 17, 2015 1:27 PM **To:** Wanda D Craft (Generation - 6)

Cc: Venkataraman, Booma

Subject: Millstone 3 Draft Request for Additional Information-TAC No. MF4131

Wanda:

In a letter dated May 8, 2014 as supplemented by a letter dated August 14, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML14133A009 and ML14234A097 respectively), Dominion Nuclear Connecticut, Inc. (the licensee), submitted an application for a proposed amendment to the Technical Specifications (TSs) for Millstone Power Station, Unit No. 3 (MPS3). The proposed amendment would adopt changes to Technical Specifications (TS) as described in Technical Specification Task Force (TSTF)-411, Revision 1, "Surveillance Test Interval Extension for Components of the Reactor Protection System (WCAP-15376), and TSTF-418, Revision 2, "RPS and ESFAS Test Times and Completion Times (WCAP-14333).

The NRC staff is reviewing the application and has determined that additional information is needed to complete its review. The NRC staff's draft request for additional information is pasted below.

Please let me know if a clarification call is needed for this request.

Thank you for your support.

Mohan & Thadani

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DRAFT REQUEST FOR ADDITIONAL INFORMATION

FOR LICENSE AMENDMENT REQUEST

DOMINION NUCLEAR CONNECTICUT, INC.

DOCKET NOS. 50-423

MILLSTONE POWER STATION, UNIT NO. 3

In a letter dated May 8, 2014 as supplemented by a letter dated August 14, 2014 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML14133A009 and ML14234A097 respectively), Dominion Nuclear Connecticut, Inc. (DNC, the licensee), submitted an application for a proposed amendment to the Technical Specifications (TSs) for Millstone Power Station, Unit No. 3 (MPS3). The proposed amendment would permit adoption of changes described in Technical Specification Task Force (TSTF)-411, Revision 1, "Surveillance Test Interval Extension for Components of the Reactor Protection System (WCAP-15376), and TSTF-418, Revision 2, "RPS and engineered safety features actuation system (ESFAS) Test Times and Completion Times (WCAP-14333). The Nuclear Regulatory Commission staff is reviewing the submittal and has need for additional information as described below.

- 1. The license amendment request (LAR) identifies for both Westinghouse Commercial Atomic Power (WCAP)-14333 and WCAP-15376 application that Tier 2 restrictions do not apply when the bypass capability is being used:
 - Page 15: "These restrictions do not apply when a logic train is being tested under the 4-hour bypass of TS 3.3.2 Action 14, or TS 3.3.2 Action 22."
 - Pages 16 and 17: "....with the exception of [Engineered Safety Feature Actuation System] ESFAS Functional Unit 2.c, "Containment Spray, Containment Pressure High-3," and ESFAS Functional Unit 3.b.3, "Containment Isolation, Phase B Isolation, Containment Pressure High-3. TS Action 17 requires that both of these functions be placed in bypass when inoperable."
 - Page 17: "These restrictions do not apply when a RTB train is being tested under the 4-hour bypass for proposed TS 3.3.1 Action 10."

Please explain the basis for these conclusions. Is this Tier 2 conclusion regarding bypass capability a general conclusion for Tier 2 or is it applied only to those instances mentioned in the LAR?

- 2. The LAR discusses WCAP-14333 and WCAP-15376 Tier 2 conclusions. Please clarify whether the licensee has performed a Tier 2 evaluation to confirm the WCAP Tier 2 conclusions. If Tier 2 restrictions other than those are identified by the licensee's evaluation, discuss the updated Tier 2 assessment.
- 3. One important configuration identified in the NRC staff's safety evaluation for WCAP-15376 is when one logic cabinet and associated reactor trip breaker (RTB) are out-of-service simultaneously. If this configuration is allowed by the LAR, discuss whether this configuration at MPS3 is consistent with the WCAP-15376 Tier 1 and Tier 2 evaluation, or discuss any significant changes from the WCAP-15376 Tier 1 and Tier 2 conclusions.
- 4. The LAR Section 4.2.2 discusses a Tier 2 restriction which appears to be substantially different from the WCAP-15376 Tier 2 findings. WCAP-15376 Section 8.5 provides Tier 2 restrictions when an RTB is out of service. The LAR Section 4.2.2 Tier 2 as described in number 2 does not mention precluding activities when one logic train is unavailable. Please

- justify why the WCAP-15376 Tier 2 restriction in Section 8.5 of the topical report regarding one logic cabinet being removed from service (second bullet) does not apply to MPS3 when an RTB is out of service, or propose a Tier 2 restriction consistent with WCAP-15376.
- 5. The LAR states that there are no Tier 2 limitations when a slave relay, master relay, or analog channel is inoperable. This conclusion appears to be based on information provided in Tables Q11.1 and Q18.1 from a letter dated December 20, 1996, transmitting a response to a request for additional information regarding WCAP-14333 (Reference 7 in the LAR). The LAR provides justification for no Tier 2 restrictions for the quench spray system (QSS). However, Table Q18.1 shows that some systems, when assessed for maintenance of master or slave relays, have a relative increase in system importance with respect to the "no test or maintenance" column. Please explain why the relative importance of systems other than the QSS do not result in Tier 2 limitations when a slave relay, master relay, or analog channel is inoperable.
- 6. The LAR Section 4.5.5 identified some fire area vulnerabilities. Describe the process the licensee follows to determine if Tier 2 or Tier 3 compensatory measures are needed for the LAR proposed changes with respect to fire-related risk.
- 7. The LAR notes that the licensee has developed and implemented the guidance in configuration risk management program (CRMP) at MPS3; however, the LAR does not conclude that the CRMP meets the guidance in Regulatory Guide (RG) 1.177, "An Approach for Plant-Specific, Risk-Informed Decision making: Technical Specifications," August 1998 (ADAMS Accession Number ML003740176). Please determine if the CRMP meets RG 1.177.
- 8. In Page 18, the LAR states the following for planned maintenance activities in part: "Work is not scheduled that is highly likely to exceed a [Technical Specification] TS or Technical Requirements Manual (TRM) [Completion Time] CT requiring a plant shutdown. For activities that are expected to exceed 50% of a TS CT, compensatory measures and contingency plans are considered to minimize [Structure, System, and Component] SSC unavailability and maximize SSC reliability." However, regarding the SSCs in WCAP-14333 and WCAP-15376, the expected maintenance is corrective rather than preventive. According to RG 1.177 CRMP key component 1, the CRMP is invoked in a time frame defined by the plant's Corrective Action Program (Criteria XVI of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50). It is not clear if the proposed timing of compensatory measures and contingency plans are consistent with the RG 1.177 guidance for CRMPs. Please explain.
- 9. In Page 19, for Tier 3 the LAR notes that "For Maintenance Rule high risk significant SSCs, the impact of the planned activity on the unavailability performance criteria is evaluated." The Technical Specification Task Force (TSTF)-411 and 418 programs were based on versions of Maintenance Rule guidance in Nuclear Management and Resources Council (NUMARC) 93-01 and RG 1.182 which have been superseded by NRC-endorsed NUMARC 93-01, Revision 4, guidance and RG 1.160. Please confirm the MPS3 Maintenance Rule evaluations follow the current NRC-endorsed NUMARC 93-01, Revision 4, guidance and RG 1.160.
- 10. As noted in the LAR, Table 1, the WCAP-14333 used a transient frequency of 3.6, and the plant-specific frequency is 0.641. Please provide justification for the large difference.

- 11. WCAP-14333 and WCAP-15376 assumed that maintenance on master and slave relays, logic cabinets, and analog channels while at power occurs only after a component failure, and that preventive maintenance does not occur. The topical reports do not preclude the practice of at-power preventive maintenance but limits the total time a component is unavailable due to corrective or preventive maintenance to the values used in the analysis. Confirm the unavailability for components evaluated in WCAP-14333 and WCAP-15376 are consistent with the plant specific estimates at MPS3, and do not exceed those assumed in the analysis.
- 12. The LAR Table 1 provides a comparison between WCAP-14333 analysis assumptions and plant specific parameters. The comparison shows significant differences for slave relays (component test intervals) and reactor trip breakers (typical at-power maintenance intervals). Explain whether the WCAP-14333 Tier 1 analysis remain bounding for these plant-specific values.
- 13. The LAR provides an assessment of seismic, high winds, floods and other external events from the IPEEE study. Please discuss your evaluation (qualitative or quantitative) for TSTF-411 and 418 based on the current plant design and operation with respect to seismic, high winds, floods and other external events, and discuss whether the WCAP-14333 and WCAP-15376 results remain bounding for the LAR proposed changes.
- 14. WCAP-15376 and WCAP-14333 analyses are based on assumptions, some of which may be key assumptions. Discuss any significant plant-specific differences with respect to these key assumptions, and their significance to the proposed changes in the LAR.
- 15. Explain whether the CRMP model at MPS3 provides modeling of the reactor trip and ESFAS systems and components addressed by WCAP-15376 and WCAP-14333 when performing Tier 3 evaluations. If the CRMP model does not model relevant signals and components, please describe how the CRMP evaluation is performed (e.g., the use of surrogates).

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