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October 30, 2013



U. S. Nuclear Regulatory Commission Attention: Document Control Desk Washington, DC 20555

13-590 Serial No. **NSSLWDC** R0 Docket No. 50-423 License No. NPF-49

DOMINION NUCLEAR CONNECTICUT, INC. **MILLSTONE POWER STATION UNIT 3**

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING RELOCATION OF SPECIFIC SURVEILLANCE FREQUENCY REQUIREMENTS TO A LICENSEE CONTROLLED PROGRAM (TAC NO. ME9733)

By letter dated October 4, 2012, Dominion Nuclear Connecticut, Inc. (DNC) submitted a license amendment request (LAR) for Millstone Power Station Unit 3 (MPS3). The proposed amendment would relocate certain technical specification (TS) surveillance frequencies to a licensee controlled program by adopting Technical Specification Task Force (TSTF)-425, Revision 3, "Relocate Surveillance Frequencies to Licensee Control RITSTF [Risk-Informed Technical Specification Task Force Initiative] 5b." proposed change would also add a new program, the Surveillance Frequency Control Program, in accordance with TSTF-425. In a letter dated December 18, 2012, the NRC transmitted a request for additional information (RAI) to DNC related to the LAR. DNC responded to the RAI in a letter dated January 4, 2013. In a letter dated March 8, 2013, the NRC transmitted a second RAI to DNC related to the LAR. DNC responded to the RAI in a letter dated April 17, 2013. Subsequently, in a letter dated October 9, 2013, the NRC transmitted a third RAI to DNC. DNC agreed to respond to the RAI by November 1, 2013. Attachment 1 provides DNC's response to the NRC's RAI.

If you have any questions regarding this submittal, please contact Wanda Craft at (804) 273-4687.

Sincerely,

Mark D. Sartain

Vice President - Nuclear Engineering and Development

Notary Public Commonwealth of Virginia 140542

VICKI L. HULL

My Commission Expires May 31, 2014

COMMONWEALTH OF VIRGINIA

COUNTY OF HENRICO

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by Mark D. Sartain, who is Vice President - Nuclear Engineering and Development of Dominion Nuclear Connecticut, Inc. He has affirmed before me that he is duly authorized to execute and file the foregoing document in behalf of that company, and that the statements in the document are true to the best of his knowledge and belief.

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Acknowledged before me this 30 and and of October, 2013.

My Commission Expires:

ADDI

Attachment:

1. Response to Request for Additional Information Regarding Relocation of Specific Surveillance Frequency Requirements to a Licensee Controlled Program

Commitments made in this letter: None

cc: U.S. Nuclear Regulatory Commission Region I 2100 Renaissance Blvd Suite 100 King of Prussia, PA 19406-2713

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Serial No. 13-590 Docket No. 50-423

ATTACHMENT 1

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING RELOCATION OF SPECIFIC SURVEILLANCE FREQUENCY REQUIREMENTS TO A LICENSEE CONTROLLED PROGRAM

DOMINION NUCLEAR CONNECTICUT, INC. MILLSTONE POWER STATION UNIT 3

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Question 1

The response to RAI 5 (April 17, 2013) indicates that Millstone Power Station Unit 3 (MPS3) plans to follow NEI 04-10 guidance from Step 10b. However, it further proposes a specific alternative bounding analysis methodology for fire initiating events which is not described in Nuclear Energy Institute (NEI) 04-10. Step 10b, and indicates that other hazard bounding analysis will use a bounding analysis not explicitly described in NEI 04-10, Step 10b. This step provides examples of alternative bounding approaches if the structure, system, or component is not explicitly in the probabilistic risk assessment (PRA). However, as the methodology is described in the response for fire-initiating events, the staff cannot find it a bounding methodology due to an apparent lack of Fire PRA attributes. Given that MPS3 does not have a Fire PRA, according to the response to the RAI, an acceptable bounding analysis method should be consistent with alternative evaluation guidance described in NEI 04-10, Step 10b. As noted in NEI 04-10, this step also applies to other hazards analyses. More generally, if an alternative bounding analysis approach is proposed other than the examples noted in this step. sufficient justification should be provided to ensure it is a bounding analysis. Therefore, please describe the bounding method to be used for internal fire or other external events, how it is consistent with NEI 04-10, Step 10b, and how the bounding analysis considers the current plant configuration and operation.

DNC Response

DNC is committed to evaluating changes to surveillance frequencies in accordance with the guidance provided in NEI 04-10, Rev. 1. NEI 04-10 methodology allows a qualitative screening or bounding analysis to provide justification for acceptability of proposed surveillance frequency changes. Since the MPS3 PRA internal events model

does not currently include external events (e.g., internal fires, seismic, external floods). the NEI 04-10 guidance will be used to evaluate the potential risk impact of external events associated with surveillance frequency changes. The Millstone Individual Plant Examination of External Events (IPEEE) report represents the MPS3 plant configuration and operation at the time of the IPEEE submittal. External event information from the IPEEE report, supplemented with relevant operating experience and additional risk insights garnered since the IPEEE, will be evaluated in accordance with NEI 04-10, Rev. 1, Step 10. That is, the information will be reviewed and qualitatively assessed in accordance with NEI 04-10, Rev. 1, Step 10a to determine the impact of the external events on surveillance frequency changes. If the qualitative information is deemed to be insufficient, then a bounding (i.e., quantitative) analysis will be performed. DNC will perform the bounding analysis in accordance with NEI 04-10, Rev. 1 Step 10b. The bounding analysis will be based on risk insights and analysis documented in the MPS3 IPEEE report with consideration of the IPEEE accident sequences, as well as relevant operating experience and additional risk insights garnered since the IPEEE, in the context of the current plant configuration and operation.

NEI 04-10, Rev. 1, Step 10b, provides three (3) examples for acceptable bounding approaches if a structure, system, or component (SSC) is not explicitly included in the probabilistic risk assessment (PRA).

The first example states:

"...bounding analysis is performed for those SSCs that are not explicitly modeled in the PRA model, but rather are implicitly included..."

The **second example** states:

"...if the \triangle CDF and \triangle LERF values have been demonstrated to be very small from an internal events perspective ... and if it is known that the CDF or LERF impact from external events (or shutdown events as applicable) is not specifically sensitive to the SSC being evaluated (by qualitative reasoning) then the detailed internal events evaluations...can be used to bound the potential impact from external events and shutdown PRA model contributors."

The third example states:

".....if the \triangle CDF and \triangle LERF values have been demonstrated to be very small from an internal events perspective ... and if it is known that the plant CDF and LERF results of the external event or shutdown PRA are much smaller than the corresponding values for the internal event full power PRA, (that is, less than 10%), then the results of the internal events analysis alone would suffice for the STI consideration. This example is likely to be applicable for a situation where the SSC associated with the STI change is modeled in the internal event full power PRA, but not in the external event or shutdown PRA."

If it is deemed that the assessment of the risk performed in accordance with NEI 04-10, Rev. 1, Step 10 inadequately represents the current plant configuration and operation, then a more detailed PRA assessment will be performed in accordance with NEI 04-10, Rev. 1, Step 11. Step 11 is entered through NEI 04-10, Rev. 1, Step 10 page 10 item 4, which states:

"Depending on the outcome from the bounding analysis in Steps 10b and 10c, there is also potential that more detailed modeling could be desirable to perform an appropriate evaluation of the STI change. In that case, the process would refer back to Step 11 to revise the PRA as needed to perform the detailed assessment."

Question 2

The LAR notes that a self-assessment of the MPS3 internal events PRA was performed in 2007 using an ASME/ANS Standard. Please indicate which version of the ASME/ANS Standard was used.

DNC Response

The self-assessment/independent review of the MPS3 PRA was assessed to the American Society of Mechanical Engineers (ASME) PRA Standard, ASME RA-Sb-2005 addenda to ASME-S-2002, "Standard for Probabilistic Risk Assessment for Nuclear Power Plant Applications."