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Subject: Memo E-mail to File - Summary of May 9, 2019, Meeting with Dominion to Discuss Proposed LAR for Revised TS Limits for Coolant Activity
Date: Friday, June 7, 2019 10:03:12 AM

Jim,

For your information, shown below is a summary of the May 9, 2019, Category 1 public meeting with Dominion Energy Nuclear Connecticut, Inc. to discuss the licensee's subject proposed license amendment request for Millstone Power Station, Unit No. 2. This e-mail will be added to ADAMS as an official agency record and Listserv'd. Please contact me if you have any questions regarding this meeting.

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CATEGORY 1 PUBLIC MEETING WITH
DOMINION ENERGY NUCLEAR CONNECTICUT, INC. (DENC),
TO DISCUSS PROPOSED LICENSE AMENDMENT REQUEST TO REVISE
TECHNICAL SPECIFICATION LIMITS FOR PRIMARY AND SECONDARY COOLANT
ACTIVITY
MILLSTONE POWER STATION, UNIT NO. 2
PRE-APPLICATION MEETING
MEETING SUMMARY
MAY 9, 2019
DOCKET NO. 50-336

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Dominion Energy Nuclear Connecticut, Inc. (DENC, the licensee) held a public meeting on May 9, 2019, to discuss the licensee's planned license amendment request to reduce the Millstone Power Station, Unit No. 2 (MPS2) Technical Specification (TS) limits for reactor coolant system (RCS) and secondary system specific activity. The licensee's meeting slides are available in Agencywide Documents Access and Management System (ADAMS) at Accession No. ML19128A407. The licensee's presentation is summarized as follows:

Overview and Purpose of Proposed LAR

The licensee provided an overview of their proposed LAR. Specifically, the proposed TS limit changes would be based on the re-analyses of the Final Safety Analysis Report (FSAR) Chapter 14 radiological consequences following the postulated design basis main steam line break (MSLB) and steam generator tube rupture (SGTR) accidents per

Regulatory Guide (RG) 1.183. The licensee's re-analysis addresses non-conservatism identified in the current MSLB and SGTR analyses that are being managed in the MPS2 corrective action program, including an operability determination that is limiting the RCS specific activity to 85% of the TS limit. In particular, the licensee is proposing to reduce the RCS and secondary side specific activity Technical Specification (TS) 3.4.8 and TS 3.7.1.4, respectively, to 50% of the current limits.

Current Licensing Basis (CLB)

The CLB for the MPS2 dose analyses is the Alternative Source Term (AST), in accordance with RG 1.183, which was approved in License Amendment No. 298 in May 2007 (ADAMS Accession No. ML071450053). The CLB for the MPS2 RCS specific activity was approved by License Amendment No. 307 in October 2008 (ADAMS Accession No. ML082820615). This amendment, however, did not have any impact on the FSAR Chapter 14 analyses.

Issue

In April 2018, the licensee identified an incorrect iodine partition coefficient (PC) in the SGTR analyses which was only applicable for the ruptured SG cases. In August 2018, it was identified that the SG moisture carryover (MCO) was outside of the correlation ranges for the MSLB which had impacted the intact SG cases during the first 20 seconds. As a result, an operability determination for the control room envelope (CRE) was developed to address both FSAR analysis issues, determining the CRE was operable but not fully qualified.

Proposed Changes Related to the SGTR Analysis

The licensee determined that the RADTRAD computer code input incorrectly utilized an iodine PC of 250 instead of 100 (the 100 value was cited in the SGTR analysis of record (AOR) and the AST LAR) which affects the cases of a ruptured SG iodine spike cases where the primary to secondary leak does not flash to steam. The intact SG was modeled correctly based on an iodine PC of 100. The licensee stated that it corrected the iodine PC to 100 and produced dose consequences that are within the regulatory limits; however, this was more than a minimal increase in consequences. In order to restore CRE to operable (but not fully qualified per the TS 3.7.6 Basis), the licensee needed to show that the dose consequences would remain below the AOR and applied an administrative limit of 85% on the TS RCS specific activity. Using the ruptured SG iodine PC of 100 produces more than a minimal increase in consequences; therefore, the licensee is submitting an LAR to restore qualification of the CRE. The AOR would correct to an iodine PC value of 100 and reduce the TS specific activity by 50%. This would allow the licensee additional operational flexibility to increase unfiltered in-leakage to 250 cubic feet per minute (cfm). The specific proposed changes to update the SGTR AOR and restore qualification of the CRE are listed on page 9 of the licensee's presentation slides.

Proposed Changes Related to the MSLB Analysis

The licensee stated that it determined prior to MSIV closure (first 20 seconds), the intact SG steam velocities are greater than 100% power steam velocities and beyond the available correlations. As a result, the intact SG should be feeding into the break until isolation occurs, but instead was modeled as an atmospheric dump valve release (in lieu of

a break release); this challenge, however, does not affect the faulted SG modeling. As actions taken for current operability, the licensee stated that correcting to 100% MCO and no iodine partitioning for the first 20 seconds yields dose consequences which are above regulatory limits; therefore, in order to reduce the dose consequences below the AOR, the licensee (1) applied an administrative limit of 85% on TS RCS specific activity and (2) reduced the intact SG nuclide inventory to TS concentrations. This results in meeting the AOR to restore the CRE (to operable, but not fully qualified per the TS 3.7.6 Basis). The licensee is submitting an LAR to restore qualification of the CRE, which would correct to an MCO of 100% and iodine PC of 1 before 20 seconds and reduce the TS activity by 50%. As in the SGTR analysis case, this would allow the licensee additional operational flexibility to increase unfiltered in-leakage to 250 cfm. The specific proposed changes to update the MSLB AOR and restore qualification of the CRE are listed on page 12 of the licensee's presentation slides.

Comments from NRC staff

In reference to the licensee's statement regarding the cases of dose consequences above the regulatory criteria for the CRE, the NRC staff inquired whether the same issue was determined with respect to offsite dose regulatory criteria. The licensee provided clarification by stating that the offsite doses were less than minimal and did not require a license amendment request.

Additionally, the NRC staff indicated that a different version of RADTRAD is used in its confirmatory reviews, and inquired whether it would be possible for the licensee to provide its input files in an older file format (i.e., RADTRAD-NAI 3.0 format which can be more readily loaded in the NRC's computer code program). The staff stated that while the older file format is not required for submission, it would assist in the efficiency of the staff's confirmatory review. The licensee stated that it does not have a copy of older versions of the RADTRAD-NAI 3.0 format, but will consider other possibilities in light of the staff's request as they finalize the LAR application.

The staff also inquired whether the licensee would include any other results of the MPS2 CR infiltration leakage testing which would be helpful for comparison with the AOR. The licensee stated that they could provide the requested information based on the last 1-2 CR infiltration leakage tests in their application.

The licensee also clarified that there are no new X/Q values or methodology being proposed in the LAR. The licensee will be providing an LAR with a MSLB and SGTR analyses that meet the applicable regulatory criteria and will provide a summary report that documents all the inputs and assumptions for NRC confirmatory analysis. The format will be consistent with previous Dominion Energy AST submittals.

Questions from Connecticut State Official

Jeff Semancik from the state of Connecticut (CT), Department of Energy and Environmental Protection asked the NRC staff if it had approved the use of iodine PC of 250 in a prior evaluation against the associated standard review plan (SRP). The NRC staff member stated that he did not review the stated value and that based on the licensee's presentation, the staff understands that the licensee's analysis which was previously submitted to the NRC reflected the value of iodine PC of 100 which would have

corresponded to the SRP value. Additionally, the CT state official, asked the NRC staff whether they anticipate any surveillance requirement changes or additions on the MCO considering it was different from the past results. The staff indicated that it can address the subject after the actual LAR is submitted by the licensee. The state official acknowledged the staff's point and was agreeable to inquiring after the staff's has an opportunity to review the application.

Schedule

The licensee stated their planned submittal is on track and projected for submission by the end of July 2019. DENC intends to request an approval date of August 2020 with a 60-day implementation period.

No decisions were made regarding the acceptability of the licensee's proposed submittal. Two representatives from the state of Connecticut Department of Energy and Environmental Protection attended by teleconference. There were no members of the public in attendance. To date, no public meeting feedback forms have been submitted through the NRC public meeting feedback system.

LIST OF ATTENDEES
MAY 9, 2019, CATEGORY 1 PUBLIC MEETING WITH
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TECHNICAL SPECIFICATION LIMITS FOR PRIMARY AND SECONDARY COOLANT
ACTIVITY
MILLSTONE POWER STATION, UNIT NO. 2
DOCKET NO. 50-336

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ATTENDEE	ORGANIZATION
Jennifer Whitman	U.S. Nuclear Regulatory Commission (NRC)
Richard Guzman	NRC
Ahsan Sallman	NRC
John Parillo	NRC
Josh Wilson	NRC
Jeff Langan	DENC
Dana Knee	DENC
Bill Kohlroser	DENC
Cailyn Ludwig	DENC
Craig Sly	DENC
Shayan Sinha	DENC
Tim Olsowy	DENC
Marylou Calderone	DENC
Jeffrey Semancik	State of Connecticut Department of Energy and Environmental Protection (CT DEEP)
Denny Galloway	(CT DEEP)