

NRR-DMPSPeM Resource

From: Poole, Justin
Sent: Tuesday, August 7, 2018 4:38 PM
To: Fitzwater, Michael D:(GenCo-Nuc); Mascitelli, Francis J:(GenCo-Nuc); Helker, David P:(GenCo-Nuc)
Cc: Danna, James
Subject: Request for Additional Information Related to TMI Fall 2017 Steam Generator Tube Inspection Report
Attachments: L-2018-LRO-0014 RAIS.pdf

Frank/Dave/Mike,

By letter dated March 19, 2018 (Agencywide Documents Access and Management Systems Accession No. ML18085A168), Exelon Generation Company, LLC (the licensee), submitted information summarizing the results of the fall 2017 steam generator (SG) tube inspections performed at Three Mile Island Nuclear Station, Unit 1, during refueling outage 22. Technical Specification (TS) 6.9.6 requires that a report be submitted within 180 days after the average reactor coolant temperature exceeds 200 degrees Fahrenheit following completion of an inspection performed in accordance with TS 6.19, which requires that an SG Program be established and implemented to ensure SG tube integrity is maintained. In reviewing the submitted information, the U. S. Nuclear Regulatory Commission (NRC) staff had developed a DRAFT requests for additional information (RAIs).

On August 6, 2018, the NRC staff sent Exelon the DRAFT RAIs to ensure that the questions are understandable, the regulatory basis is clear, there is no proprietary information contained in the RAI, and to determine if the information was previously docketed. On August 7, 2018, you called to say that the questions were understandable and that Exelon did not have a need for a clarification call with the NRC staff. During the call, Exelon requested 45 days from the date of this email to respond. The NRC staff informed Exelon that the timeframe was acceptable. The attached contains the final version of the RAIs. These RAIs will be put in ADAMS as a publicly available document.

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U.S. Nuclear Regulatory Commission
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Hearing Identifier: NRR_DMPS
Email Number: 510

Mail Envelope Properties (Justin.Poole@nrc.gov20180807163800)

Subject: Request for Additional Information Related to TMI Fall 2017 Steam Generator
Tube Inspection Report
Sent Date: 8/7/2018 4:38:06 PM
Received Date: 8/7/2018 4:38:00 PM
From: Poole, Justin

Created By: Justin.Poole@nrc.gov

Recipients:

"Danna, James" <James.Danna@nrc.gov>
Tracking Status: None
"Fitzwater, Michael D:(GenCo-Nuc)" <Michael.Fitzwater@exeloncorp.com>
Tracking Status: None
"Mascitelli, Francis J:(GenCo-Nuc)" <Francis.Mascitelli@exeloncorp.com>
Tracking Status: None
"Helker, David P:(GenCo-Nuc)" <david.helker@exeloncorp.com>
Tracking Status: None

Post Office:

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MESSAGE	1668	8/7/2018 4:38:00 PM
L-2018-LRO-0014 RAIS.pdf		90595

Options

Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

REQUEST FOR ADDITIONAL INFORMATION

FALL 2017 STEAM GENERATOR TUBE INSERVICE INSPECTIONS

EXELON GENERATION COMPANY, LLC

THREE MILE ISLAND NUCLEAR STATION, UNIT 1

DOCKET NO. 50-289

By letter dated March 19, 2018 (Agencywide Documents Access and Management Systems Accession No. ML18085A168), Exelon Generation Company, LLC (the licensee) submitted information summarizing the results of the fall 2017 steam generator (SG) tube inspections performed at Three Mile Island Nuclear Station, Unit 1, during refueling outage (RFO) 22. Technical Specification (TS) 6.9.6 requires that a report be submitted within 180 days after the average reactor coolant temperature exceeds 200 degrees Fahrenheit following completion of an inspection performed in accordance with TS 6.19, which requires that an SG Program be established and implemented to ensure SG tube integrity is maintained. In order to complete its review, the U. S. Nuclear Regulatory Commission (NRC) staff requests the following additional information:

RAI-1

On page 4 of 16, it is stated that “During T1R22 visual and eddy current inspections were performed in the ‘B’ steam generator only.” On the same page, it is later stated that “[d]uring T1R22, all in-service tubes in each steam generator were examined over their entire length using the bobbin coil probe.” The NRC staff notes that inspections results were provided only for SG B. Please confirm that inspections were performed in only SG B.

RAI-2

High growth rate flaws have been identified during each of the past several SG inspections. One indication in the tube in Row 49, Column 119 in SG B grew from undetectable in RFO 19 to approximately 63 percent through-wall (TW) by RFO 20. An indication in the tube in Row 2, Column 4 in SG B grew from 28 percent TW in RFO 20 to approximately 73 percent TW by RFO 21.

The NRC staff notes that each of these high growth rate flaws have been identified in SG B and that the root cause for these flaws has been attributed to tube support plate partial locking to the shroud at the wedges and alignment keys. Although SG A has not experienced the same phenomenon with high growth rate flaws, it is unclear to the staff if the same mechanism could become active in SG A at some point during future operation. Please discuss the results of condition monitoring and operational assessment that provide assurance that tube integrity will be maintained for SG A until the next scheduled inspection.