From:	Tobin, Jennifer
To:	<u>"bolognar@firstenergycorp.com"</u>
Cc:	"Lashley, Phil H."; Venkataraman, Booma
Subject:	Beaver Valley Unit 2 - UPCOMING STEAM GENERATOR TUBE INSERVICE INSPECTION
Date:	Thursday, September 13, 2018 4:46:00 PM
Attachments:	STEAM GENERATOR TUBE INSPECTION DISCUSSION POINTS.docx

Dear Mr. Bologna:

Inservice inspections of steam generator (SG) tubes play a vital role in assuring SG tube integrity. A telephone conference call has been arranged with members of your staff for November 1, 2018 2:00-3:00 to discuss the ongoing results of the SG tube inspections to be conducted during the upcoming Beaver Valley Unit 2 refueling outage. This call will occur after the majority of the tubes have been inspected, but before the SG inspection activities have been completed.

Enclosed (and below) is a list of discussion points to facilitate this call.

The NRC staff will document a publicly available summary of the conference call, including any material that you provide to the NRC staff in support of the call.

Should you have any questions you can contact me at 301-415-2328.

Sincerely, Jenny Tobin, Project Manager Plant Licensing Branch LPL-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 412

Enclosure: Steam Generator Tube Inspection Discussion Points

STEAM GENERATOR TUBE INSPECTION DISCUSSION POINTS

The following discussion points have been prepared to facilitate the conference call arranged with the licensee to discuss the results of the steam generator tube inspections to be conducted during the upcoming fall 2018, Unit 2 refueling outage. This conference call is scheduled to occur towards the end of the planned SG tube inspections, but before the unit completes the inspections and repairs.

The NRC staff plans to document a publicly available summary of the conference call, as well as any material that is provided in support of the call.

- 1. Discuss any trends in the amount of primary-to-secondary leakage observed during the recently completed cycle.
- 2. Discuss whether any secondary side pressure tests were performed during the outage and the associated results.
- 3. Discuss any exceptions taken to the industry guidelines.

- 4. For each steam generator, provide a description of the inspections performed including the areas examined and the probes used (e.g., dents/dings, sleeves, expansion-transition, U-bends with a rotating probe), the scope of the inspection (e.g., 100% of dents/dings greater than 5 volts and a 20% sample between 2 and 5 volts), and the expansion criteria.
- 5. For each area examined (e.g., tube supports, dent/dings, sleeves, etc), provide a summary of the number of indications identified to-date for each degradation mode (e.g., number of circumferential primary water stress corrosion cracking indications at the expansion transition). For the most significant indications in each area, provide an estimate of the severity of the indication (e.g., provide the voltage, depth, and length of the indication). In particular, address whether tube integrity (structural and accident induced leakage integrity) was maintained during the previous operating cycle. In addition, discuss whether any location exhibited a degradation mode that had not previously been observed at this location at this unit (e.g., observed circumferential primary water stress corrosion cracking at the expansion transition for the first time at this unit).
- 6. Describe repair/plugging plans.
- 7. Describe in-situ pressure test and tube pull plans and results (as applicable and if available).
- 8. Discuss the following regarding loose parts:
 - what inspections are performed to detect loose parts
 - a description of any loose parts detected and their location within the SG (including the source or nature of the loose part, if known)
 - if the loose parts were removed from the SG
 - indications of tube damage associated with the loose parts
- 9. Discuss the scope and results of any secondary side inspection and maintenance activities (e.g., in-bundle visual inspections, feedring inspections, sludge lancing, assessing deposit loading, etc).
- 10. Discuss any unexpected or unusual results.
- 11. Provide the schedule for steam generator-related activities during the remainder of the current outage.