From: Purnell, Blake
Sent: Wednesday, February 10, 2021 3:01 PM
To: Lashley, Phil H (EH)
Cc: Nesser, Kathryn M; Salgado, Nancy
Subject: Davis-Besse Nuclear Power Station, Unit No. 1 - Request for Additional Information Regarding Steam Generator Tube Inspection Reports
Attachments: RAI - DB Steam Generator Reports.pdf

Mr. Lashley,

By letters dated October 31, 2016, and August 21, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML16306A262 and ML18233A451, respectively), FirstEnergy Nuclear Operating Company submitted the reports for the steam generator (SG) tube inspections performed at Davis-Besse Nuclear Power Station, Unit No. 1 (Davis-Besse) during the spring 2016 and spring 2018 refueling outages, respectively. By letter dated September 15, 2020 (ADAMS Accession No. ML20260H057), Energy Harbor Nuclear Corp. submitted the report for the SG tube inspection performed at Davis-Besse during the spring 2020 refueling outage. The NRC staff is currently reviewing these reports and has determined that additional information is needed to complete this review.

Please provide a response to the attached request for additional information within 90 days from the date of this email. Please contact me if you have any questions.

Sincerely,

Blake Purnell, Project Manager
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission

Docket No. 50-346

EPIDs L-2020-LRO-0055, L-2020-LRO-0082, and L-2020-LRO-0083

OFFICE	NRR/DORL/LPL3/PM	NRR/DNRL/NCSG/BC	NRR/DORL/LPL3/BC
NAME	BPurnell	SBloom	NSalgado
DATE	2/10/21	1/28/21	2/1/21

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From: Purnell, Blake

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Recipients:
"Nesser, Kathryn M" <kmnesser@energyharbor.com>
Tracking Status: None
"Salgado, Nancy" <Nancy.Salgado@nrc.gov>
Tracking Status: None
"Lashley, Phil H (EH)" <phlashley@energyharbor.com>
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REQUEST FOR ADDITIONAL INFORMATION

STEAM GENERATOR TUBE INSPECTION REPORTS

ENERGY HARBOR NUCLEAR GENERATION LLC

ENERGY HARBOR NUCLEAR CORP.

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

DOCKET NO. 50-346

By letters dated October 31, 2016, and August 21, 2018 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML16306A262 and ML18233A451, respectively), FirstEnergy Nuclear Operating Company submitted the reports for the steam generator (SG) tube inspections performed at Davis-Besse Nuclear Power Station, Unit No. 1 (Davis-Besse) during the spring 2016 refueling outage (1R19) and spring 2018 refueling outage (1R20), respectively. By letter dated September 15, 2020 (ADAMS Accession No. ML20260H057), Energy Harbor Nuclear Corp. submitted the report for the SG tube inspection performed at Davis-Besse during the spring 2020 refueling outage (1R21). The spring 2016 SG tube inspections were the first inspections following SG replacement at Davis-Besse in 2014.

Davis-Besse Technical Specification (TS) 5.5.8, "Steam Generator (SG) Program," provides specific requirements for the structural and leakage integrity, repair, and inspection of SG tubes. In addition, TS 5.6.6, "Steam Generator Tube Inspection Report," requires a report summarizing the results of each SG inspection to be submitted to the U.S. Nuclear Regulatory Commission (NRC). The NRC staff is currently reviewing the SG tube inspection reports for the spring 2016, 2018, and 2020 refueling outages at Davis-Besse and has determined that the additional information below is required to complete this review.

1. Provide the scope of the array probe and rotating-coil probe special interest inspections performed during 1R21.

2. Discuss the results of the channel head visual inspections performed on each SG in 1R21.

3. Provide the scope and results of any secondary side inspection and maintenance activities performed in each SG during 1R21.

4. Sections 2 and 4 of the spring 2018 SG tube inspection report stated that one foreign object wear indication was found in SG 2A in Row 147, Tube 12, during 1R20. No tubes were plugged during 1R20 due to foreign object wear. Discuss whether the foreign object was still present at the time of the inspection and if it was removed from the SG.

5. Section 2 of each SG tube inspection report identifies the number of broached tube support plate (TSP) wear indications found during the associated refueling outage. This information is summarized in the table below.

Steam Generator	Broached TSP Wear Indications		
	1R19	1R20	1R21
SG 2A	627	1337	1912
SG 1B	67	194	703

During an April 12, 2016, teleconference (ADAMS Accession No. ML16130A750) with the NRC staff, the licensee stated that the higher number of wear-like indications in SG 2A were believed to be due to a different length of secondary side piping that runs into SG 2A and that similar differences had been seen with the previous SGs.

Provide any additional insights (e.g., location, wear rate) regarding the higher number of broached TSP wear indications in SG 2A. In addition, provide any insights (e.g., location, wear rate) regarding to the higher number of broached TSP wear indications in SG 1B in 1R21.

6. Sections 1, 5, and 6 of each SG tube inspection report provides the number of previously installed tube plugs, the number of tubes plugged during the associated refueling outage, and the total number of tubes plugged in SG 2A. However, there appears to be discrepancies in the numbers reported. This information is summarized in the table below.

Steam Generator	Refueling Outage	Previously Installed Tube Plugs	Tubes Plugged During Refueling Outage	Total Plugged Tubes
SG 2A	1R19	2	10	11
	1R20	22	16	27
	1R21	27	78	105

Confirm the total number of previously installed tube plugs and the total number of tubes plugged in SG 2A for 1R19, 1R20, and 1R21.

7. A drilled TSP wear indication (22 percent through-wall) was reported in Row 142, Tube 1, of SG 2A for 1R20, but no tubes were plugged due to drilled TSP wear indications during 1R20. However, drilled TSP wear indications were only reported in Row 36, Tube 1, and Row 147, Tube 12, of SG 2A for 1R21. Discuss if a reportable indication was detected in Row 142, Tube 1, of SG 2A during 1R21.

8. Section 6 of the spring 2020 SG tube inspection report states that 78 tubes in SG 2A and 66 tubes in SG 1B were plugged during 1R21. The report only noted that one tube in SG 2A was plugged due to broached TSP wear. Confirm that proximity indications were the reason for plugging the additional tubes. Provide any additional insights regarding the tube proximity indications.