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ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT:
Davis-Besse Nuclear Power Station, Unit No. 1
Docket No. 50-346, License No. NPF-3
Deviation from MRP-227-A, "Materials Reliability Program: Pressurized Water Reactor Internals Inspection and Evaluation Guidelines"

FirstEnergy Nuclear Operating Company (FENOC) on behalf of the Davis-Besse Nuclear Power Station (DBNPS) is providing notification of a deviation from a Nuclear Energy Institute (NEI) 03-08, "Guideline for the Management of Material Issues," Revision 3, "needed" work project in EPRI MRP-227-A, "Pressurized Water Reactor Internals Inspection and Evaluation Guidelines," with appropriate justification and documentation. This notification is provided to the NRC staff for information only and no approval or action is expected.

NEI 03-08 allows deviation from needed elements with the appropriate justification and documentation. The deviation was approved by FENOC management and documented in the FENOC Corrective Action Program.

The requirements of MRP-227-A state that the needed examinations shall be completed "no later than two refueling outages from the beginning of the license renewal period with subsequent examination after 10 additional years." The DBNPS refueling outage in the spring of 2020 is the second refueling outage after entry into the period of extended operation.

Specifically, the four components that are the subject of this deviation are (1) baffle-to-former bolts, which require ultrasonic testing examination, (2) in-core monitoring instrumentation (IMI) guide tube spiders, which require visual (VT-3) testing examination, (3) IMI guide tube spider-to-lower grid rib section welds, which require visual (VT-3) testing examination, and (4) alloy X-750 dowel-to-lower grid fuel assembly support pad welds, which require visual (VT-3) testing examination.

Utilizing a proposed refueling outage in the spring of 2022 and assuming a 100 percent capacity factor, DBNPS will have an Effective Full Power Years (EFPY) of 32.00 at the proposed time of examination. FENOC concluded that an EFPY of 32.00 is less than other Babcock & Wilcox (B&W) units at the time of MRP-227-A exams. The operating experience of these units has shown that there are no concerns with extending the frequency of examination one cycle. In addition, VT-3 examinations were performed in 2011 on all four of the subject components. These examinations did not reveal cracked or failed components. The proposed date of future examinations will align with the next planned 10-year ISI examinations.

This deviation is necessary because FirstEnergy Solutions (FES) announced plans on April 25, 2018 to retire the DBNPS, permanently ceasing power operations by May 31, 2020 and subsequently withdrew its cessation of power operations letter on July 26, 2019. The timing of these announcements did not allow adequate time for budgeting, planning, and coordinating the NEI 03-08 needed examinations.

The duration of this deviation is from spring 2020 to spring of 2022.

By letter dated September 30, 2019 the Materials Reliability Program Research Integration Committee Project program manager has been notified of the aforementioned needed deviation for the DBNPS.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Phil H. Lashley, Acting Manager – Fleet Licensing at (330) 315-6808.

Sincerely,

Mark B. Bezilla

cc: NRC Region III Administrator
NRC Resident Inspector
NRC Project Manager
NRC Chief, Reactor Vessel and Internals
Utility Radiological Safety Board