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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
Response to Request for Additional Information Re: The 2008 Steam Generator Tube Inspections (TAC NO. MD9347)

By letters dated April 10, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML081070433), April 29, 2008 (ADAMS Accession No. ML081290415), and July 25, 2008 (ADAMS Accession No. ML082110266), FirstEnergy Nuclear Operating Company (FENOC) submitted information summarizing the results of the 2008 steam generator (SG) tube inspections at Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS) during refueling outage (RFO) 15. In addition to this report, the Nuclear Regulatory Commission (NRC) staff summarized a conference call about the 2008 SG tube inspections at DBNPS in a letter dated March 5, 2008 (ADAMS Accession No. ML080430629).

By letter dated April 24, 2009 (ADAMS Accession No. ML091130050) the NRC staff requested additional information to complete its review of the 2008 steam generator tube inspections at DBNPS. The FENOC response to this request is attached.

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NRR

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Thomas A. Lentz, Manager – Fleet Licensing, at 330-761-6071.

Sincerely,

Barry Allen

Attachment:
Response to the Request for Additional Information, 2008 Steam Generator Tube Inspections, Davis-Besse Nuclear Power Station, Unit No. 1

cc: NRC Region III Administrator
NRC Resident Inspector
NRR Project Manager
Utility Radiological Safety Board

Response to the Request for Additional Information
2008 Steam Generator Tube Inspections
Davis-Besse Nuclear Power Station, Unit No. 1

To complete their review, the NRC staff has requested the following additional information in a letter dated April 24, 2009 (ADAMS Accession No. ML091130050). The staff request is provided below in bold type followed by the FENOC response for DBNPS.

1. **In FENOC's April 29, 2008 letter, it was indicated that two tubes (117-108 and 134-2) were plugged due to an increase in the circumferential extent of the indication even though the indications were outside the pressure boundary. However, on page 13 of 44 of your July 25, 2008, letter, these indications do not appear to have increased in the circumferential extent. In fact, others appeared to have grown more. Please clarify.**

Three tubes in Once-Through Steam Generator (OTSG) 2-A had indications that could have potentially contributed to leakage during a large break loss of coolant accident (LBLOCA) due to a radius location of greater than 55 inches and a depth of greater than 60% through wall. The affected tubes were A-63-1, A-117-108 and A-134-2. The indications in tube 117-108 and 134-2 did not increase in the circumferential extent. Other tubes that had outside pressure boundary circumferential oriented indication flaws had some positive indicated circumferential growth; however, they did not meet the depth or radial position criteria for leakage and therefore were not removed from service. Tube A-63-1 required repair since it also had a groove intergranular attack (IGA) indication. The other two tubes were preventatively plugged due to the increase in the measured depths of the indications and the subsequent effect on leakage evaluations for the LBLOCA conditions. Davis-Besse is licensed for repair roll joint slippage during accidents, but plugging these tubes makes the evaluation for LBLOCA leakage more easily managed in future outages.

2. **Please discuss the results of your auxiliary feedwater header to tube gap analysis.**

In OTSG 2-A, a total of 382 tubes were analyzed under the auxiliary feedwater header (AFH) examination scope. There were 16 AFH indication calls, all of which were diagnosed with greater than 0.250 inch gap measurements. The remaining tubes were no defect detected (NDD). In OTSG 1-B, a total of 411 tubes were analyzed under this examination scope. There were 8 AFH calls, all of which were diagnosed with greater than 0.250 inch gap measurements. The remaining tubes were NDD. There were a total of 26 weld splatter (WSP) calls (1 in OTSG 2-A and 25 in OTSG 1-B) all of which were repeat indications from previous examinations. The WSP indications are tracked to ensure they are not changing. The analysis of the AFH scope clearly showed that there was no evidence of auxiliary feedwater header movement.

3. One new gross mean distortion was reported during the 2008 outage. Please discuss whether this condition was present in prior outages. If it was not present, please discuss the nature of this indication (since the staff was under the impression that these indications were caused by the sleeving process.)

There were two sleeve gross mean distortion (GMD) indications that were not previously called by the Eddy Current Process. Both of these indications were located in the sleeve in OTSG 1-B, tube 78-29. This tube had a sleeve installed during the 1993 refueling outage. The GMD indications were formed during the sleeve installation process. During the 2002 refueling outage, two GMD indications were reported by both the primary and secondary analysts in this sleeve, but were not confirmed by the resolution analyst. No GMD indications were reported at that location during the 2005 mid-cycle outage or the 2006 refueling outage. During the 2008 inspection, these GMD indications were reported again. This time, the GMD indications were kept by the resolution analyst. A lead analyst review was performed of the GMD indications in this tube confirming that these indications were similar to the GMD indications in other sleeves. This review was confirmed to be documented by the lead analyst review. The lead analyst review serves to document that a historical review was performed and there has been no change from the historical data reviewed. These GMD indications will be tracked in the future.