



FirstEnergy Nuclear Operating Company

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June 12, 2017

L-17-191

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

SUBJECT:

Davis-Besse Nuclear Power Station, Unit 1
Docket Number 50-346, License Number NPF-3
Reply to a Notice of Violation; VIO 05000346/2017001-01

The FirstEnergy Nuclear Operating Company (FENOC) Davis-Besse Nuclear Power Station (DBNPS) received NRC Inspection Report 05000346/2017001, dated May 12, 2017, which included the results of the Triennial Heat Sink Performance Inspection. The NRC identified one (1) Cited Violation of very low safety significance during this inspection.

This letter provides the FENOC's written response to Violation 2017001-01.

There are no regulatory commitments contained in this letter. If there are any questions or if additional information is required, please contact Mr. Patrick J. McCloskey, Manager, Site Regulatory Compliance, at (419) 321-7274.

Sincerely,

Brian D. Boles

JCS

Attachment: Response to Notice of Violation 2017001-01

cc: NRC Regional Administrator, Region III
DB-1 NRC/NRR Project Manager
DB-1 Senior Resident Inspector
Utility Radiological Safety Board

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NRR*

Attachment
L-17-191

Response to Notice of Violation 2017001-01
Page 1 of 3

STATEMENT OF VIOLATION (2017001-01):

Title 10 of the *Code of Federal Regulations* (CFR), Part 50, Appendix B, Criterion XI, "Test Control," requires, in part, that a test program be established to assure that all testing required to demonstrate that structures, systems, and components (SSCs) will perform satisfactorily in service is identified and performed in accordance with written test procedures which incorporate the requirements and acceptance limits contained in applicable design documents. It also stated that test results shall be documented and evaluated to assure that test requirements have been satisfied.

Contrary to the above, as of June 26, 2014, the licensee failed to assure that testing, required to demonstrate that the Emergency Core Cooling System room coolers would perform satisfactorily in service, was identified and performed in accordance with written test procedures which incorporated the requirements and acceptance limits contained in applicable design documents. In addition, the licensee failed to document and evaluate the associated test results to assure that test requirements have been satisfied. Specifically, Preventive Maintenance (PM) 4801, PM 4802, PM 4803, and PM 4804 did not have acceptance tube blockage and biofouling/silt deposit limits, and the associated inspection results were not documented and evaluated to demonstrate the acceptability of the Emergency Core Cooling System room coolers' thermal performance.

REASON FOR THE VIOLATION:

During the 2014 Triennial Review of Heat Sink Performance, the NRC identified a finding of very low safety significance and an associated non-cited violation (NCV 2014003-04) of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the licensee's failure to follow the Generic Letter (GL) 89-13 program implementing procedure (NOP-ER-2006) to develop the Emergency Core Cooling System (ECCS) room cooler inspection procedure. Specifically, FENOC failed to have quantifiable acceptance criteria in the inspection procedure/Preventive Maintenance (PM) activities for the ECCS room cooler. This issue was entered into the Corrective Action Program as Condition Report (CR) 2014-10995.

During the 2017 Triennial Review of Heat Sink Performance Inspection, the NRC identified this previous issue had not been adequately resolved. The evaluation performed under CR 2014-10995 inappropriately determined that Davis-Besse did not need to perform inspections required by NOP-ER-2006, Service Water Reliability Management Program, due to the perception that flow rate and differential pressure testing was sufficient to verify the heat exchangers were capable of performing their required function. Corrective actions were taken to modify the associated PM activities; however, the changes did not add the requirement for acceptance criteria. The original

issue of the PMs not complying with NOP-ER-2006 still existed after all corrective actions from CR 2014-10995 were completed.

The primary cause of this event was that the evaluation performed for CR 2014-10995 did not address the identified issue, likely because of a misunderstanding of program or procedure requirements by the CR evaluator, CR evaluation peer reviewer, and CR evaluation approving manager. Because of this, the corrective actions developed under CR 2014-10995 did not align the GL 89-13 PM tasks with the requirements listed in procedure NOP-ER-2006 by either adding specific inspection criteria to the PMs or by changing NOP-ER-2006 to eliminate the requirement to have specific inspection criteria.

Additionally, the reviews of CR 2014-10995 response following receipt of the NRC NCV by Regulatory Compliance as documented in CR 2014-13918 and the Corrective Action Review Board failed to ensure the corrective actions of CR 2014-10995 addressed the identified NRC concern.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

A past operability review of ECCS Room Coolers 4 and 5 was performed to ensure the room coolers would have been able to perform their safety function during a design basis Loss of Coolant Accident with the tube blockage identified during the most recent inspections in late 2016. The review provided reasonable assurance that the ECCS room coolers would have been able to perform their safety function.

As part of the extent of condition review for this issue, it was determined that ECCS Room Coolers 1 and 2 should be inspected. ECCS Room Coolers 1 and 2 have been inspected, and tubes were found blocked in each room cooler. The inspection results were bounded by an operability evaluation. Therefore, ECCS Room Cooler 1 and 2 remained capable of performing their safety function given its as-found inspected condition. The ECCS Room Coolers 1 and 2 tubes were cleaned ("as-left" condition).

Discussions with site Engineering personnel who currently implement the GL 89-13 program indicate that personnel understand the necessity of complying with the requirements listed in NOP-ER-2006.

Regulatory Compliance inspection personnel have reviewed the shortfalls in basic work practices involved in this event. This review included the expectation to utilize site guidance documents for the conduct of NRC Inspections and to review/evaluate Non-Cited Violation corrective action(s) closures to determine that they meet the intent of the cause for the violation.

CORRECTIVE STEPS THAT WILL BE TAKEN:

The applicable acceptance criteria for the GL 89-13 inspection PMs will be determined and the PMs updated as necessary to include acceptance criteria. Additionally, the performance frequency/periodicity is being reviewed for the ECCS room coolers and the PMs updated as necessary.

The PMs which perform a clean and inspection of Heat Exchangers within the scope of GL 89-13 will be reviewed to verify they satisfy the intent of NOP-ER-2006.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

The GL 89-13 PM reviews and changes, as necessary, are scheduled to be completed by September 12, 2017.