



FirstEnergy Nuclear Operating Company

Davis-Besse Nuclear Power Station  
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Docket Number 50-346

License Number NPF-3

Serial Number 1-1270

April 18, 2002

Mr. J. E. Dyer, Administrator  
United States Nuclear Regulatory Commission  
Region III  
801 Warrenville Road  
Lisle, IL 60532-4351

Subject: Confirmatory Action Letter Response - Root Cause Analysis Report

Ladies and Gentlemen:

On March 13, 2002, the Nuclear Regulatory Commission (NRC) issued a Confirmatory Action Letter (CAL) regarding the Reactor Pressure Vessel (RPV) head degradation at the Davis-Besse Nuclear Power Station, Unit 1 (DBNPS). The CAL requires FirstEnergy Nuclear Operating Company (FENOC) to determine the root causes of the degradation and meet with the NRC to discuss that information. The purpose of this letter is to provide the NRC with our Root Cause Analysis Report in preparation for the meeting with the NRC to discuss this topic.

The Root Cause Analysis Report for the RPV head degradation is enclosed. This Report is consistent with our preliminary Probable Cause Summary Report dated March 22, 2002 (which we previously provided to the NRC Augmented Inspection Team). However, the enclosed Report provides substantial additional detail and supercedes the preliminary report.

In summary, we have determined that the cause of the degradation was boric acid corrosion resulting from leakage through a crack in a RPV penetration nozzle attributable to primary water stress corrosion cracking. We have further determined that the corrosion had likely occurred over a period of several years, but was not recognized until its discovery by FENOC last month.

The enclosed report discusses management and programmatic issues that led to this situation. Additionally, the report contains recommendations by the root cause

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investigation team for corrective actions, preventive actions, and enhancements to address these issues. We are continuing to refine our analysis of these issues, and we are developing our plans for corrective and preventive actions. We will be finalizing these matters in the near term, and we will be providing the NRC with an integrated report that describes these matters and the other matters in the CAL. This integrated report will be submitted to NRC to support restart approval in accordance with the CAL.

If you have any questions or require additional information, please contact Mr. David H. Lockwood, Manager – Regulatory Affairs, at (419) 321-8450.

Very truly yours,

A handwritten signature in black ink, appearing to read "David H. Lockwood". The signature is written in a cursive style with a large initial "D" and "L".

Enclosure and Attachment

cc: USNRC Document Control Desk  
S.P Sands, DB-1 NRC/NRR Project Manager  
D.V. Picket, DB-1 NRC/NRR Backup Project Manager  
C.S. Thomas, DB-1 Senior Resident Inspector  
Utility Radiological Safety Board

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**COMMITMENT LIST**

The following list identifies those actions committed to by the Davis-Besse Nuclear Power Station (DBNPS) in this document. Any other actions discussed in the submittal represent intended or planned actions the DBNPS. They are described only for information and are not regulatory commitments. Please notify the Manager - Regulatory Affairs (419-321-8450) at the DBNPS of any questions regarding this document or associated regulatory commitments.

**COMMITMENTS**

**DUE DATE**

None