

PRELIMINARY NOTIFICATION - REGION III

April 12, 2010

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-III-10-003A

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. Some of the information may not yet be fully verified or evaluated and is basically all that is known by the Region III staff on this date.

Facility

Davis-Besse Nuclear Power Station
First Energy Nuclear Operating Company
Oak Harbor, Ohio
Docket: 50-346
License: NPF-3

Licensee Emergency Classification

Notification of Unusual Event
 Alert
 Site Area Emergency
 General Emergency
 Not Applicable

SUBJECT: DAVIS-BESSE CONTROL ROD DRIVE MECHANISM NOZZLE INDICATIONS
(UPDATE)

DESCRIPTION:

While performing NRC required inspections on Friday, March 12, 2010, Davis-Besse Nuclear Power Station (DBNPS) workers identified potential cracks in some of the control rod drive mechanism (CRDM) nozzles inspected. At the time, DBNPS was conducting planned ultrasonic (UT) examinations on the CRDM nozzles, which penetrate the reactor pressure vessel (RPV) head. The reactor is in a safe condition and has been shut down for a scheduled refueling outage since February 28, 2010.

Additionally, during the bare metal visual (BMV) examination of the outer surface of the RPV head, dried boron deposits were found, which is indicative of possible primary water leakage. A visual examination and a UT examination were performed on the RPV head. As of April 12, 2010, the utility has completed UT and BMV examinations on all of the 69 nozzles. On April 1, 2010, the utility submitted an action plan for the nozzle repair activities to the NRC for approval. They plan to repair at least 16 of the 69 nozzles.

On March 16, 2010, the NRC dispatched a Special Inspection Team to DBNPS to review the circumstances surrounding the discovery of crack indications in multiple CRDM nozzles and to evaluate the utility's actions to properly analyze the nature of the flaws, its proposed repair methods, and conclusions regarding the mechanism causing the greater than expected indications of nozzle flaws.

The NRC will hold a public exit meeting when the Special Inspection is complete to discuss its preliminary findings. The Special Inspection report will be issued 30-45 days after the exit meeting.

To date, the Special Inspection Team has monitored and reviewed First Energy's testing methods, analysis of flaws, conclusions concerning the number of nozzles to be repaired and the repair method the company has begun to implement on some of the nozzles.

In addition, the NRC has contracted with a government national laboratory to perform an independent analysis of First Energy's ultrasonic testing (UT) data. While the Special Inspection Team is also working to verify the adequacy of the utility's analysis, this independent review will provide the NRC with additional validation of the quality of the licensee's assessment of their examination results.

NRC inspectors are observing ongoing repairs as they are happening, including coverage of these activities on weekends.

The NRC will make sure the plant can operate safely before it can restart.

Region III received initial notification of this occurrence by a telephone call from the licensee at 4:45 a.m. (EST) on March 13, 2010 (refer to Event Notification No. 45764). The information presented herein has been discussed with the licensee, and is current as of 10:30 a.m. Central Daylight Savings Time, April 12, 2010.

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