PRELIMINARY NOTIFICATION – REGION III

September 20, 2013

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-III-13-007

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

Licensee Emergency Classification
___ Notification of Unusual Event
___ Alert
___ Site Area Emergency
___ General Emergency
_X_ Not Applicable

SUBJECT: DAVIS-BESSE SHIELD BUILDING LAMINAR CRACKS

On August 26, 2013, the licensee was performing examinations of core bores in the shield building in accordance with the commitments First Energy Nuclear Operating Company (FENOC) made to the NRC. The commitment is for long term monitoring of the shield building which was documented in the NRC's Confirmatory Action Letter dated December 2, 2011 (ADAMS ML11336A355). The examinations performed in 2011 and 2012 showed no additional cracks. This year, using new instrumentation with enhanced capabilities, plant workers identified a crack that had not been seen before. To date, the core bore examinations revealed seven previously unidentified cracks. FENOC has taken steps to reevaluate 43 core bores and will be looking at the remaining 39 going forward.

It's important to emphasize that the shield building at Davis-Besse is not the reactor containment vessel. That vessel is made of one-inch thick welded steel and sits inside of the shield building separated by about four and a half feet of hollow space. The shield building's primary function is to protect the containment building against external hazards. The steel vessel is designed to keep the radiation inside the reactor from reaching the environment.

Based on the current information, this issue does not compromise the safety of the plant or the public. The NRC continues to conclude that the additional cracks identified during the current inspection remain bounded by the licensee's previous quantitative operability evaluation and the shield building is structurally sound and can continue to fulfill its safety function.

The NRC has been closely following this issue and independently reviewing the licensee's actions. After the current cracks were identified, the NRC sent a structural inspector to the plant to observe and evaluate the licensee's examination results, the current impact on the shield building, and the licensee's extent of condition and evaluation plan.

The NRC will continue to monitor and independently verify FENOC's ongoing reviews and conclusions about the nature of these cracks and document the agency's assessment in a publicly available inspection report.

Background information regarding the Davis-Besse shield building cracking issue can be found in NRC Inspection Reports 05000346/2012007 and 05000346/2012009 (ADAMS ML12128A443 and ML12173A023).

The State of Ohio has been informed.

This preliminary notification is issued for information only.

The information presented herein has been discussed with the licensee, and is current as of 3:00 p.m. Central Daylight Savings Time, September 20, 2013.

ADAMS Accession Number: ML13263A410

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