



NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

Office of Public Affairs Region III

2443 Warrenville Road

Lisle IL 60532

Site: www.nrc.gov

Blog: <http://public-blog.nrc-gateway.gov>

No. III-12-023

June 21, 2012

Contact: Viktoria Mitlyng (630) 829-9662

E-Mail: OPA3@nrc.gov

Prema Chandrathil (630) 829-9663

NRC CONCLUDES ITS REVIEW OF FENOC'S ROOT CAUSE ANALYSIS OF DAVIS-BESSE SHIELD BUILDING CRACKS

The Nuclear Regulatory Commission has completed its review of FirstEnergy Nuclear Operating Co.'s (FENOC) causal analysis of, and proposed corrective actions for, cracks in the shield building at the Davis-Besse Nuclear Power Station. The NRC has determined the report established a sufficient basis for its conclusions. The plant is located in Oak Harbor, Ohio, approximately 21 miles southeast of Toledo.

FENOC concluded that cracks in the shield building were caused by environmental factors that resulted from the 1978 blizzard; the lack of moisture protective coating; and certain aspects of the shield building's design. The company submitted the root cause analysis of shield building cracks, which includes the company's proposed corrective actions and long-term monitoring program of the shield building, on Feb. 28 in compliance with commitments the company made to the NRC.

"Our inspectors conducted a thorough and independent review of FENOC's root cause determination to make sure that the reasons for the internal cracks in the shield building are well understood. We evaluated the effectiveness of the company's proposed actions to ensure the continued safety of the shield building going forward," said NRC Region III Administrator Charles Casto. "We will schedule a public meeting shortly to discuss this issue and the NRC's plans to monitor the plant's corrective actions."

The NRC also conducted a detailed analysis of the company's corrective actions to ensure shield building safety going forward. These actions included additional tests and laboratory analysis of the shield building; applying a protective moisture coating on the building; and plans to restore the plant's design and licensing basis.

These reviews were performed by a team of four NRC inspectors who took a wide range of actions to make sure the company's data and analysis were thorough and rigorous. The NRC team concluded that the actions proposed by the company going forward would prevent recurrence of the laminar cracking if properly implemented.

The NRC documented the results of its independent inspection in a document that will be publically available at: <http://adams.nrc.gov/wba/>; enter ML12173A023 as a search term. The report can also be obtained from the NRC Region III Office of Public Affairs.

The NRC began looking at the issue on Oct. 10, 2011, when the NRC was informed by FENOC that its workers identified cracks in the shield building while the plant was shut down to replace the reactor vessel head. The shield building is a 2.5-foot thick reinforced concrete building that surrounds a 1.5-inch thick steel containment vessel that encloses the reactor. The two buildings are separated by a 4.5-foot space.

The NRC thoroughly reviewed the cracks after they were discovered and determined that they did not pose an imminent safety issue. The NRC issued an inspection report documenting the agency's review of the shield building's operability on May 7. Before the plant returned to service, the NRC issued a Confirmatory Action Letter to FENOC documenting its commitments to determine the cause of the shield building cracks.

The NRC's license renewal experts are evaluating the implications of this issue in the context of Davis-Besse's request to extend its operating license.

The NRC is developing a program of short-term and long-term inspections to make sure FENOC implements the corrective actions outlined in the root cause analysis in a thorough and timely manner.

Documents associated with shield building cracking can be found at:
<http://www.nrc.gov/info-finder/reactor/davi.html>.

###

News releases are available through a free *listserv* subscription at the following Web address: <http://www.nrc.gov/public-involve/listserver.html>. The NRC homepage at www.nrc.gov also offers a SUBSCRIBE link. E-mail notifications are sent to subscribers when news releases are posted to NRC's website.