



# NRC NEWS

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Office of Public Affairs Region III  
2443 Warrenville Road  
Lisle IL 60532

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Contacts:

Viktoria Mitlyng 630-829-9662

Prema Chandrathil 630-829-9663

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E-Mail: [opa3@nrc.gov](mailto:opa3@nrc.gov)

Web site: [www.nrc.gov](http://www.nrc.gov)

## **NRC CONFIRMS COMPLETION OF 2004 CONFIRMATORY ORDER REQUIREMENTS AT DAVIS-BESSE**

The Nuclear Regulatory Commission (NRC) staff has determined that First Energy Nuclear Operating Co. (FENOC) has met the terms of a 2004 NRC order placing conditions on the restart of the Davis-Besse Nuclear Power Station after a two-year shutdown following the discovery of severe reactor vessel head degradation. The plant is located 21 miles southeast of Toledo, Ohio.

In 2002, during NRC-required inspections, plant workers discovered a football-sized cavity atop the reactor vessel head. The cavity was caused by the accumulation of boric acid that, contrary to NRC regulations, had not been removed from the vessel head and was eating away at the metal lid. The NRC ordered the plant closed and it stayed closed for two years while undergoing increased NRC scrutiny in identifying and eliminating the cause of the vessel head degradation. The agency convened a Lessons Learned Task Force in 2002 to study the situation and the agency's processes for ensuring reactor vessel head integrity. The task force developed recommendations focusing on preventing corrosion, ensuring effective communications and properly evaluating operating experience.

"The Davis-Besse incident provided a number of valuable lessons to the NRC and our licensees for improving safety," said NRC Chairman Gregory Jaczko. "We've implemented the task force's recommendations over the past several years at Davis-Besse and plants around the country, and the recommendations have substantially strengthened and enhanced our evaluation and oversight process."

The plant was not allowed to restart until the NRC concluded FENOC had made sufficient progress to assure the NRC the plant could operate safely. It was allowed to start again in 2004 under a variety of conditions – to which FENOC agreed – outlined in an NRC confirmatory order.

The restart order required Davis-Besse to perform annual independent assessments in the areas of operations, engineering, corrective actions, and safety culture for five years. It also required a one-time inspection of key components on the reactor vessel during a mid-cycle

outage to make sure it wasn't again subject to boric acid corrosion. The order was issued to give the NRC an additional measure of confidence that the company would maintain focus on the areas that had contributed to the reactor vessel head degradation.

The NRC determination that FENOC fulfilled all the requirements of the order were based on the review of all 20 independent assessments conducted at Davis-Besse, evaluation of the organization performing independent assessments, and observation of the independent team's inspection activities. In addition, during the first three years following plant restart, the NRC conducted its own assessments of Davis-Besse's safety culture and safety conscious work environment – areas that were key contributing factors to the reactor vessel head degradation. The NRC also observed portions of the plant's examination of key components on the lower reactor vessel head and evaluated the results. The NRC will continue to monitor Davis-Besse's performance through the agency's rigorous oversight program.

In its letter to FENOC, the NRC said "Davis-Besse's performance has improved over the past five years, based on trending the results from the independent assessments, the results from our special oversight inspection activities, and the results from our Reactor Oversight Process Base Line inspections completed." FENOC paid the general fund an NRC fine of \$5.45 million, a Justice Department fine of \$28 million, and several individuals convicted of lying to the NRC were barred from the industry for a number of years.

Documents related to the reactor vessel head degradation at Davis-Besse can be located in the NRC's electronic reading room at: <http://www.nrc.gov/reading-rm/adams/web-based.html> . A fact sheet outlining improvements resulting from the Davis-Besse incident is available on the NRC Web site at: <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/> . For assistance in locating documents, contact the Region 3 Office of Public Affairs or the Public Document Room at 1-800-397-4209.

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