



# NRC NEWS

U.S. NUCLEAR REGULATORY COMMISSION

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

---

No. III-10-022.C

Contacts:

Viktoria Mitlyng 630-829-9662

Prema Chandrathil 630-829-9663

May 26, 2010

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

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

**\*\*\*CORRECTION\*\*\***

## **NRC ASKS FENOC TO DISCUSS BASIS FOR DAVIS-BESSE PLANT RESTART AT PUBLIC MEETING JUNE 3**

The Nuclear Regulatory Commission (NRC) staff will meet with representatives of FirstEnergy Nuclear Operating Company (FENOC) on Thursday, June 3, to obtain information about the suitability of tests and repairs of Control Rod Drive Mechanism (CRDM) nozzles and the technical basis for the company's decision to start up the Davis-Besse nuclear station. The plant is located in Oak Harbor, Ohio, roughly 40 miles southeast of Toledo.

"The NRC and the public need to have confidence that Davis-Besse will operate safely after it returns to service," said Mark Satorius, regional administrator of NRC Region III office in Lisle, Ill. "That's why we called on FirstEnergy to tell us in a public forum if they understand what happened, if they are confident in their repairs; and how they will ensure the integrity of the reactor vessel head moving forward."

On March 12, 2010, while performing NRC-required inspections of CRDM nozzles at the Davis-Besse Nuclear Power Plant, workers discovered indications of cracks in multiple nozzles that penetrate the reactor vessel head and are designed to guide the control rods into the reactor core to shut down the reactor. Additionally, a small amount of boric acid was found during examinations of the outer surface of the reactor vessel head.

There was no danger to the public from these cracks. The plant has been in a refueling outage since the problem was identified.

On March 16, 2010, the NRC dispatched a Special Inspection Team to Davis-Besse to review the circumstances surrounding the discovery of crack indications in multiple CRDM nozzles. The team has monitored and reviewed First Energy's testing methods, analysis of flaws, conclusions concerning the number of nozzles to be repaired, the proposed repair method and the repair process. NRC inspectors have monitored the utility's testing and repair activities real-time - including coverage of these activities on weekends - asking questions and addressing issues the utility had to immediately address.

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.

The inspection team will remain onsite to monitor repair activities and subsequent testing; observe the utility's activities to return the plant to service; and complete gathering data. Following analysis of the observations and review of the collected data, the special inspection team will draw its conclusions about the company's adherence to NRC reactor vessel head requirements, the company's current activities associated with the discovery of nozzle cracks and actions to address it.

The meeting, which will be open to the public, is scheduled to begin at 6 p.m. EDT at Camp Perry Lodging & Conference Center, 1000 Lawrence Road, Building 600 (Clubhouse), in Port Clinton. The NRC will be available to respond to questions or comments from the public before the close of the meeting. Toll-free teleconference phone lines will be available to those members of the public who are not able to attend the meeting. Call Viktoria Mitlyng at 630/829-9662 for further information.

The NRC will schedule another public meeting to present to the public and the company the special inspection team's preliminary conclusions on the current nozzle cracking event.

The NRC is concerned about this issue because a crack in CRDM nozzles, which penetrate the reactor vessel head, can if not repaired, lead to structural damage of the reactor head - one of the barriers that prevent radioactive material in the reactor from escaping into the plant containment building.

In 2002, plant workers at Davis-Besse discovered a football-size cavity in the reactor vessel head caused by leakage of borated reactor water from severe cracks in CRDM nozzles. The leaks resulted in the accumulation of large quantities of boric acid residue on the reactor vessel head that was not cleaned for a long period of time and caused a cavity to form in the carbon steel portion of the vessel head, leaving only the stainless steel liner between the nuclear material in the reactor vessel head and the plant containment building. The damaged reactor head was replaced in 2002; the replacement head is the one in service today.

The current situation is not comparable to what occurred at Davis-Besse in 2002. Neither the small amount of boric acid (one tablespoon) present on the head nor the identified flaws in the nozzles challenge the structural integrity of the reactor vessel head.

The NRC special inspection report will be available within 45 days of the inspection's completion through the NRC RIII Office of Public Affairs and at the NRC web site: <http://www.nrc.gov/reading-rm/adams/web-based.html>.

###

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