

June 6, 2003

Mr. John T. Ream
58 E. Railroad Street
Spring Grove, PA 17362

Dear Mr. Ream:

I am writing in response to your letter of March 28, 2003, to President Bush regarding your recommendation that the reactor pressure vessel (RPV) heads at Three Mile Island Nuclear Station, Unit 1, and Limerick Generating Station, Units 1 and 2, be inspected for degradation like that found at the Davis-Besse Nuclear Power Station.

The NRC is considering the generic safety implications for other nuclear power reactors of the RPV head degradation found at Davis-Besse. In regard to your recommendation that other facilities be inspected for RPV head degradation, specifically Three Mile Island and Limerick, please note that the degradation of the Davis-Besse RPV head was found as a result of licensee inspections in response to U.S. Nuclear Regulatory Commission (NRC) Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles," which required all pressurized-water reactor (PWR) operators to report to the NRC on the structural integrity of the control rod drive mechanism nozzles, including their plans to ensure that future inspections would guarantee the structural integrity of the reactor vessel boundary.

Subsequent to the discovery of the degradation at Davis-Besse, the NRC issued additional guidance and requirements to PWR operators. NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity," required PWR licensees to report on the condition of their RPV heads, past incidents of borated coolant leakage, and their basis for concluding that their boric acid inspection programs were effective. Later, NRC Bulletin 2002-02, "Reactor Pressure Vessel Head and Vessel Head Penetration Nozzle Inspection Programs," advised PWR licensees that more stringent inspection techniques may be necessary to detect nozzle cracks. On February 11, 2003, the NRC ordered all PWR operators to establish interim inspection requirements for RPV heads. The order requires specific inspections of the RPV head and associated penetration nozzles, depending on the licensee's susceptibility to primary water stress corrosion cracking.

To date, there has been no evidence at other PWRs, including Three Mile Island, of extensive RPV head corrosion like that found at Davis-Besse. Boiling-water reactors (BWRs), such as those at Limerick, are designed differently than PWRs. BWRs do not use boron dissolved in the primary coolant water for normal reactivity control and so are not susceptible to the degradation mechanism seen at Davis-Besse.

The status of NRC review and oversight activities at Davis-Besse is available for public review on the NRC Website (www.nrc.gov/reactors/operating/ops-experience/vessel-head-degradation.html). The Website includes the status of NRC activities to address the generic safety implications of the Davis-Besse RPV head degradation for other plants. Correspondence from PWR licensees to the NRC in response to Bulletin 2002-01 and the NRC order may also be accessed from the NRC Website. NRC Bulletins are available for public review via the Agencywide Documents Access and Management System (ADAMS), which

provides text and image files of NRC's public documents. These documents may be accessed through the NRC's Public Electronic Reading Room on the Internet at www.nrc.gov.

In regard to the immediate concerns at Davis-Besse, the NRC is taking significant regulatory action. The NRC has established a special oversight panel to coordinate the agency's activities in assessing the performance problems associated with the corrosion damage to the RPV head. The oversight panel includes NRC management personnel and staff from the Region III office in Lisle, Illinois, the NRC headquarters office in Rockville, Maryland, and the NRC resident inspector office at the Davis-Besse site. The oversight activities are conducted under the agency's Inspection Manual Chapter 0350, "Oversight of Operating Reactor Facilities in an Extended Shutdown as a Result of Significant Performance Problems," which establishes the procedures to be followed for the oversight of utility performance for plants that are shut down as a result of significant performance problems or events. The panel is holding public meetings periodically with FirstEnergy representatives to review the status of activities associated with the corrosion damage. These meetings are normally held in the vicinity of the Davis-Besse plant. The panel will provide oversight throughout the shutdown and, if authorized, restart of the facility. The purpose of the panel is to confirm that the plant will be able to safely operate in accordance with the NRC's rules and regulations and to provide reasonable assurance of the protection of public health and safety.

Thank you for your interest in and concerns about this matter. The NRC takes its responsibility for protecting the public health and safety seriously. The staff continues to closely monitor and regulate Davis-Besse as well as all other nuclear power reactors to ensure they operate in a manner that adequately protects public health and safety and the environment.

Sincerely,

/RA/

Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

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Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

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DAVIS-BESSE - REACTOR LID WEARING OUT

DATED: June 6, 2003

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