July 25, 2002

Mr. Jack J. Norris
3802 Kessler Blvd., East Drive
Indianapolis, IN 46220-5106

Dear Mr. Norris:

I am writing in response to your letter of May 16, 2002, to Mr. David Vito, Sr. Allegations Coordinator for Region I of the U.S. Nuclear Regulatory Commission (NRC). In your letter, you requested the staff address three systemic questions prompted by the recent discovery of the degraded reactor pressure vessel (RPV) head at FirstEnergy's Davis-Besse Nuclear Power Station (Davis-Besse).

First, "Does the existing paper trail indicate that all is OK in the primary containment areas?"

The NRC staff does not have any current safety concerns with the primary containment areas at operating nuclear power plants. Requirements for documentation (the "paper trail") of the work and quality of safety-related structures, systems, and components, including the primary containment, are included in a number of NRC regulations, many of which derive from 10 CFR Part 50. For example, the NRC requires each licensee to maintain and update the Final Safety Analysis Report (FSAR) as required by 10 CFR 50.71. A licensee may make changes in the facility, make changes in the procedures, and conduct tests or experiments not described in the updated FSAR, if the criteria described in 10 CFR 50.59 are satisfied; otherwise, prior NRC permission is required. NRC permission is typically in the form of a license amendment, which is accompanied by a safety evaluation prepared by the NRC staff following review of the licensee's request. These requirements help ensure that the facility is maintained to at least the design basis at which it was approved and licensed by the NRC. Requirements regarding notification by licensees to the NRC of events or more urgent problems at operating reactors are prescribed by 10 CFR 50.72 and 50.73. These regulations would include any changes or events related to the primary containment areas.

The NRC draws conclusions about licensee performance and facility condition from an information base of direct inspection supplemented by information that is provided by licensees and others. When the NRC staff becomes aware of potential safety problems at a plant, the issue is evaluated not only for its impact on the particular plant, but for its potential generic impact on other plants. Part of the evaluation may include direct inspection by resident or region-based inspectors, or requests for additional information from licensees, such as NRC generic letters or bulletins. An example is NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity," issued after discovery of the problem at Davis-Besse. Following evaluation, NRC develops an appropriate response to the issue to ensure protection of the public health and safety. A similar evaluation and response process would be followed if the staff became aware of safety concerns with the primary containment at a facility.

Second, “Has the paper been audited and found to be in good bureaucratic order?”

The NRC periodically audits licensees to ensure the accuracy of their documentation. Records that are required by the regulations, whether a condition of the license or part of the technical specifications, must be maintained and updated periodically as required by 10 CFR 50.71. The NRC inspects through a sampling program, however, not an audit program. As noted above, the NRC draws conclusions about licensee performance and facility condition from a limited information base of direct inspection supplemented by information that is provided by licensees and others. NRC has limited resources; it is, therefore, impossible for NRC to verify all information provided to us by licensees and others. If the staff, based on licensing and inspection experience (broadly and specific to particular licensees) or specific information obtained from outside the NRC or licensee (e.g., from an alleger), becomes aware of facts that refute information which the staff has received, additional follow-up would be done as required, such as a complete audit.

Third, “Is there extensive corrosion such as that found at Davis-Besse and Oconee in critical areas in other plants including the boiling water reactors?”

Based on the information the staff has received, other plants have not experienced the extensive corrosion such as that found at Davis-Besse and Oconee. More specific information from the plants may be found at the Davis-Besse/Reactor Vessel Head Degradation section of the NRC website (www.nrc.gov).

On August 3, 2001, the NRC issued Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles." This bulletin requested all licensees of pressurized water nuclear power reactors to provide information related to the structural integrity of the RPV head penetration nozzles for their respective facilities, including the extent of RPV nozzle leakage and cracking that had been found to date. The bulletin also requested information on inspections and repairs that were undertaken to satisfy regulatory requirements, and the basis for concluding that their plans for future inspections would ensure compliance with the regulatory requirements. After the discovery of the RPV head degradation at Davis-Besse, the NRC issued Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity." This bulletin required pressurized-water reactor (PWR) licensees to submit information related to the integrity of the reactor coolant pressure boundary including the RPV head and the extent to which inspections had been undertaken to satisfy regulatory requirements. The bulletin required a written response within 15 days including a summary of the RPV head inspections and maintenance programs that had been implemented at each plant, an evaluation of the ability of these programs to identify degradation of the RPV head, including thinning, pitting, or other forms of degradation such as that found at Davis-Besse, as well as schedules, plans and bases for future inspections. Since boron addition is not used in boiling-water reactors for reactivity control, and the design of the control rod drive mechanisms is completely different from PWRs, the NRC required responses only from holders of operating licenses for PWRs.

The NRC is taking significant regulatory action prompted by the discovery of RPV head degradation at Davis-Besse. 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, 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 will hold public meetings periodically with FirstEnergy representatives to review the status of activities associated with the corrosion damage. These meetings will normally be held in the vicinity of Davis-Besse and ensure that appropriate regulatory and licensee actions are established and the technical issues are resolved before the plant would be allowed to restart and operate safely in accordance with the NRC rules and requirements, and that there is reasonable assurance for the protection of public health and safety.

The NRC has also created a Davis-Besse RPV Head Degradation Lessons Learned Task Force (LLTF) to conduct an independent evaluation of the NRC staff's regulatory processes related to assuring reactor vessel head integrity. This team consists of NRC managers and staff who are not routinely associated with the Davis-Besse plant. The team officially commenced its review activities on June 2, 2002, and expects to issue a report detailing its observations, conclusions, and recommendations by September 3, 2002. Additional information about both the 0350 Panel and LLTF efforts is publicly available on the NRC's Web site, http://www.nrc.gov/reading-rm/adams.html, via the NRC's Agencywide Documents Access and Management System (ADAMS) Public Electronic Reading Room under Accession Numbers ML021230683 and ML021370684, respectively. Additionally, the licensee is taking action to provide for independent oversight of actions related to the RPV head degradation.

All of these efforts are intended by the staff to provide information that adequately resolves the outstanding Davis-Besse safety issues and associated concerns. The licensee has also decided to replace the damaged RPV head rather than repair it. In our continuing review of the RPV head degradation at Davis-Besse, we have found nothing to date that indicates that the safety of the public was compromised.

The NRC takes its responsibility for protecting the public health and safety seriously. We continue to vigilantly 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. The Davis-Besse plant will not restart until the NRC is satisfied that all current safety concerns have been resolved.

Thank you for bringing your concerns to the attention of the NRC.

Sincerely,

/RA/

Anthony J. Mendiola, Chief, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

The NRC takes its responsibility for protecting the public health and safety seriously. We continue to vigilantly 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. The Davis-Besse plant will not restart until the NRC is satisfied that all current safety concerns have been resolved.

Thank you for bringing your concerns to the attention of the NRC.

Sincerely,

/RA/

Anthony J. Mendiola, Chief, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

DISTRIBUTION:
PUBLIC
PD3-2 Reading
S. Collins/J. Johnson (RidsNrrOd)
J. Zwolinski/L. Marsh (RidsNrrDlpm)
B. Sheron/K. Johnson (RidsNrrAdpt)
S. Bajwa (RidsNrrDlpmLpdiii)
A. Mendiola (RidsNrrDlpmLpdiii2)
S. Sands (RidsNrrPMSSands)
D. Pickett (RidsNrrPMDPickett)
T. Harris (RidsNrrLATHarris)
G. Grant, RII (RidsRgn3MailCenter)
NRR Mailroom (Y020020164)(RidsNrrWpc)
L. Cox
W. Borchardt

ADAMS Accession No: ML021990174 (Response) ML022070377 (Incoming)
ML021990260 (Package)

OFFICE	PM:LPD3-2	LA:LPD3-2	SC:LPD3-2
NAME	SSands	CRosenberg for THarris	AMendiola
DATE	7/24/02	7/24/02	7/25/02

OFFICIAL RECORD COPY