April 24, 2002

The Honorable Marcy Kaptur
United States House of Representatives
Washington, D.C. 20515

Dear Congresswoman Kaptur:

I am responding on behalf of the Nuclear Regulatory Commission (NRC) to your letter of March 28, 2002, concerning the recent discovery of a cavity in the reactor pressure vessel (RPV) head at the Davis-Besse Nuclear Power Station (DBNPS).

In your letter you question whether the DBNPS should be allowed to operate without complete replacement of the affected areas and components. On March 12, 2002, the NRC issued a confirmatory action letter (CAL) to the licensee requiring prior NRC approval of any repairs, modifications and testing of the RPV head. The NRC staff will review any proposed repairs to the reactor vessel head and ensure they meet all applicable regulatory requirements for assuring structural integrity in the environment of an operating reactor. The plant will remain shut down unless the requirements can be met.

In general, NRC requirements endorse the requirements set forth in the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code. In addition, any other modification that results from the repair of the vessel head must fully meet all NRC regulations. The NRC held a public meeting to discuss the licensee's proposed repairs and modifications to the reactor vessel head on April 10, 2002, in Rockville, Maryland.

The NRC is fully aware of the significance of the degradation and has dedicated substantial technical resources to the issue. Once the cavity was discovered, the NRC sent an augmented inspection team (AIT) to the DBNPS to identify the facts and circumstances surrounding the formation and discovery of the cavity in the RPV head. This team, comprised of senior level NRC technical staff, gathered important factual information on the degradation and the licensee's actions related to it. The AIT completed its review and presented its findings at a public meeting with the licensee on April 5, 2002. Once the findings are fully documented, they will be posted on the NRC web site (www.nrc.gov).

The March 12, 2002 CAL also requires the licensee to identify the root cause of the degradation. The licensee has completed the root cause evaluation and it is posted on the NRC web site. A public meeting to discuss the evaluation is being scheduled for the week of May 6, 2002. If following the public meeting you believe that a site visit would be beneficial, we would be glad to work with you and the licensee in arranging a meeting at the site.

The NRC is now performing an in-depth technical review of the data arising from the AIT report, the licensee's RPV visual inspections, root cause analysis, nondestructive examinations, and proposed corrective actions. The facts and circumstances surrounding the degradation will comprise a majority of the information included in the NRC's final AIT report. This information, coupled with the NRC's review of the licensee's root cause evaluation, will provide a complete accounting of the event and the licensee's response.

In order to address generic implications, the NRC held a public meeting with industry representatives on March 19, 2002, and another on March 20, 2002, with external stakeholders to provide up-to-date information on RPV head corrosion. The NRC also issued two information notices (IN-2002-11 & 13) and a bulletin (BL-2002-01) to holders of operating licenses for pressurized-water power reactors. The bulletin requires the addressees to submit information on their inspections of the integrity of the RPV boundary.

In your letter, you also question the adequacy of NRC oversight at the DBNPS and indicate that degradation of RPV head, "... is another example where a safety issue was not identified by NRC inspectors." NRC oversight did contribute to the identification of this issue. The licensee discovered the cavity in the RPV head when inspecting the nozzles associated with the mechanism that drives the control rods. The licensee performed these inspections in response to NRC Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles," which the Agency issued on August 3, 2001.

The NRC regulatory system is based on a fundamental principle that the industry is responsible for the safe use of the technology. The NRC establishes the regulatory framework, verifies through inspections and other types of reviews that the framework is being followed, and takes enforcement action to require licensees to focus on significant problems in those instances in which serious violations of the regulations occur. The NRC allots nearly 2000 hours per year for the baseline inspection at a single unit site. If the licensee performance begins to degrade, then the NRC increases the level of oversight according to the Reactor Oversight Program (ROP) Action Matrix so that the problems can be resolved before safe operation of the plant is compromised. The ROP is described in detail on the NRC web site. Consistent with the ROP, the NRC is currently evaluating what enforcement action is warranted.

We will continue to closely monitor the situation at the DBNPS and I assure you that, based on the findings of the AIT and NRC's review, the Commission will take appropriate actions to ensure that the DBNPS maintains adequate safety margins. The NRC will approve operation of the DBNPS only if there is reasonable assurance that operation will pose no undue risk to public health and safety.

If you have any additional questions in this matter, please contact me.

Sincerely,

/RA/

Richard A. Meserve