



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 4, 1997

Mr. John K. Wood
Vice-President - Nuclear, Davis-Besse
Centerior Service Company
c/o Toledo Edison Company
Davis-Besse Nuclear Power Station
5501 North State Route 2
Oak Harbor, Ohio 43449-9760

SUBJECT: DAVIS-BESSE DESIGN INSPECTION
(NRC INSPECTION REPORT NO. 50-346/97-201)

Dear Mr. Wood:

A design inspection at Davis-Besse was performed by the Special Inspection Branch of the Office of Nuclear Reactor Regulation (NRR) during the period April 14, 1997 through June 20, 1997, including on-site inspections during May 5-9, May 19-23, and June 9-20, 1997. The team selected for inspection the high pressure injection (HPI) system and the low pressure injection (LPI) functions of the decay heat removal system (DHRS). The purpose of the inspection was to evaluate the capability of the systems to perform safety functions required by their design bases, the adherence to the design and licensing bases, and the consistency of the as-built configuration with the updated safety analysis report (USAR).

The results of this inspection are presented in the enclosed report. The inspection team noted that the mechanical, electrical, and instrumentation and control designs of the HPI and LPI systems were adequate to provide the required emergency core cooling flow to mitigate design basis accidents, and concluded that the systems were capable of performing their safety functions.

The team identified some weaknesses in the design process and installation of the systems. For example: reverse flow testing of check valves DH81 and DH82 on the two LPI pump suction lines from the borated water storage tank (BWST) and seat leakage testing of stop check valves HP31 and HP32 on the HPI pump recirculation lines were not done; and although your staff had identified the deterioration of the BWST level transmitter support hardware in 1994, no action was taken to remove, examine, and replace the hardware until the inspection team expressed its concern on the condition of the supports. The team referred to NRR staff for evaluation the issue of the acceptability of the use of normally open safety-related valves as safety class interface between the HPI system and local pressure gages that were not seismically qualified.

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Mr. John K. Wood

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Other issues identified by the team included USAR discrepancies, weaknesses in periodic testing of battery chargers, lack of testing of inverters, not including certain electrical components in the environmental qualification program, and not revising an installation detail drawing after modifying the actuators for DHR cooler outlet and bypass valves.

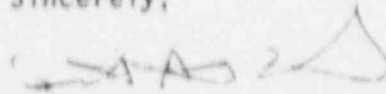
You have initiated measures to address the team's concerns. In order for the NRC to coordinate follow-up inspections, please provide within 60 days of this letter a schedule for completion of your corrective actions for the open items listed in Appendix A of the enclosed report.

Any enforcement action resulting from this inspection will be handled by the NRC Region III office via separate correspondence.

As with all NRC inspections, we expect that you will evaluate the applicability of the results of this inspection and the specific findings to other systems and components.

In accordance with 10 CFR 2.790(a), a copy of this letter and the enclosure will be placed in the NRC Public Document Room. Should you have any questions concerning the attached inspection report, please contact the project manager, Mr. A.G. Hansen at (301) 415-1390, or the inspection team leader, Mr. S.K. Malur at (301) 415-2963.

Sincerely,



Stuart A. Richards, Chief
Special Inspection Branch
Division of Inspection and Support Programs
Office of Nuclear Reactor Regulation

Docket No.: 50-346

Enclosure : NRC Inspection Report No.: 50-346/97-201

cc: see next page

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