

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

August 6, 1975

Note to: J. G. Davis, Deputy Director for Field Operations
Office of Inspection and Enforcement, Headquarters

PROPOSED RESPONSE TO JCAE CONCERNING DAVIS-BESSE ELECTRICAL PROBLEMS

Enclosed for your consideration and review is a proposed response to
Mr. Murphy concerning the electrical problems at the Davis-Besse
plant.

James G. Kappler
Regional Director

Enclosure:
As stated

cc w/encl:
IE Files
~~Central Files~~
R. F. Warnick, IE:HQ



8002040775

Dear Mr. Murphy:

This is in reply to your letter of July 25, 1975, to the Chairman relative to the remarks entered in the July 15, 1975 Congressional Record by Congressman Mottl of Ohio concerning recent problems found by the Nuclear Regulatory Commission at the Davis-Besse Nuclear Power Plant near Port Clinton, Ohio.

On May 19-22, 1975, the Nuclear Regulatory Commission's Office of Inspection and Enforcement conducted an inspection of installed safety-related electrical work at the Toledo Edison Company's Davis-Besse Nuclear Power Plant construction site. This inspection identified substantive deficiencies in the quality assurance programs pertaining to this work and problems with the electrical work itself. As a result of this inspection, the Director of our Region III (Chicago) Office of Inspection and Enforcement met with top licensee management, who agreed to make a complete reinspection of all safety-related electrical work which had been already installed and to correct any deficiencies found. In response to your request for a full report on these matters, I have attached a summary of the inspection findings (Enclosure 1), the detailed report of the inspection (Enclosure 2), and a copy of the letter sent to Toledo Edison Company concerning their reinspection commitments (Enclosure 3).

In view of the problems found, the NRC has intensified its inspection effort at the Davis-Besse site. A recent in-depth inspection checked safety-related piping at the plant and no significant problems were found. The inspection report is still in preparation.

The scheduled completion date for the plant is late 1976, leaving ample time to correct any problems discovered during the reinspection of electrical work. The NRC will intensify its inspection efforts as the plant nears completion and will satisfy itself that the facility meets applicable specifications and standards prior to issuance of the Operating License.

We believe the problems identified at the Davis-Besse facility have been dealt with effectively and we have no reason to believe that the construction effort will not result in a nuclear facility which can be operated as designed without without risk to plant personnel and the general public.

Sincerely yours,

L. B. Gossick

Enclosures:

As stated

SUMMARY OF INSPECTION FINDINGS

Toledo Edison Company, which is building the Davis-Besse Nuclear Power Station near Port Clinton, Ohio, is reinspecting all safety-related electrical work at the construction site as a result of problems found by Nuclear Regulatory Commission inspectors.

The problems were identified during an inspection May 19-22 by a team of inspectors from the NRC's Regional Office of Inspection and Enforcement in Chicago. In a sample of 51 cables examined in the inspection, NRC inspectors found one or more installation deficiencies with 24 of the cables. These installation problems included failure to meet separation and seismic criteria, improper routing, inadequate testing, and damage to cable insulation.

The problems found were indicative of a breakdown in the Company's quality assurance program, which is intended to make certain the safety-related components are designed and installed to meet applicable specifications and standards. NRC inspectors found that the electrical quality assurance program had broken down at all levels -- the subcontractor, Fischbach & Moore; the contractor, Bechtel Corporation; and Toledo Edison Company. (The primary cause of the problem was attributed by the NRC Regional inspection staff to Toledo Edison's overreliance on its contractors and subcontractors for quality assurance inspection without providing an adequate check on the activities.)

It is not uncommon to find scattered problems during the construction of a facility as large and complex as a nuclear power plant. However, the scope and nature of the electrical installation deficiencies make them more serious than the problems normally encountered.

After discussions with the Region III staff, Toledo Edison agreed to reinspect all previously installed safety-related wiring with inspection work beginning in early June. The problems were also discussed in a top management meeting in June between NRC representatives and utility officials.

The company has also taken steps to augment its own quality assurance program. The number of Toledo Edison quality assurance inspectors has been increased from seven to eleven, and the utility has asked all construction workers to notify it directly of any construction problems or deficiencies noticed.

The reinspection commitment is judged to be appropriate to deal with the problems encountered, and any deficiencies identified by Toledo Edison personnel or the NRC will be corrected before the plant is authorized to begin operations. Since the plant is not scheduled for operation until late 1976, the company has sufficient time to correct deficiencies found.

NRC inspectors are continuing to monitor the reinspection effort and additional inspections are planned for an independent check of the electrical work. Because of the quality assurance problems encountered at the plant site, Region III has intensified its inspection effort, both in scope and in frequency. Inspections will be scheduled to review construction work in other safety-related areas. One such inspection was made in late July to check safety-related piping. Using the inspection approach used in the wiring inspection (checking sample systems from beginning to end) the inspection team did not find any significant deficiencies in the piping work.

The Region III inspection report and the NRC staff's letter to the company confirming the reinspection commitment are in the Public Document Room.

The Davis-Besse Plant will use a Babcock and Wilcox pressurized water reactor with a design capacity of 906 megawatts (electrical). Total construction is about 80 percent complete with initial operation scheduled for 1976. It is scheduled to be the first operating power reactor in Ohio.