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September 12, 1984
EF2-69282

Mr. James G. Keppler
Regional Administrator
Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

- Reference:
- (1) Fermi 2
NRC Docket No. 50-341
 - (2) Letter, H. Tauber to J. G. Keppler,
April 20, 1981, EF2-52623
 - (3) Letter, D. A. Wells to J. G. Keppler,
January 12, 1983, EF2-61532
 - (4) Letter, D. A. Wells to J. G. Keppler,
June 28, 1983, EF2-64304
 - (5) Letter, D. A. Wells to J. G. Keppler,
November 25, 1983, EF2-66478

Subject: Final Report of 10CFR50.55(e) Item 84
"Equipment Supported from Block Walls"

This is Detroit Edison's final report of Item 84, "Equipment Supported from Block Walls". Item 84 was originally reported as a potential deficiency on December 13, 1982, and subsequently documented in References (3), (4) and (5).

Description of Deficiency

During the installation of the Fire Protection/Detection, Security and Communications Systems, it was discovered that some of this equipment had been attached to masonry walls in safety related areas of the Reactor and Auxiliary buildings.

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Mr. James G. Keppler
September 12, 1984
EF2-69282
Page 2

Subsequently, during a walkdown by qualified structural engineers to locate all items attached to masonry walls, safety related tubing and a safety related thermostat were found attached to masonry walls. Such installations conflict with Edison's response to NRC Bulletin 80-11 (Reference 2). This response states, in part, that piping and equipment shall not be supported on block walls. Where items are installed on the walls, they must either weigh less than 2% of the wall weight or be included in the design calculations.

Analysis of Safety Implications

In locations where safety related items are mounted on block walls, there is a potential for loss of support for these safety related items.

Because unauthorized additions add unanalyzed loads to the masonry walls, the structural integrity of the walls during a seismic event is indeterminate. This may result in failure of the wall and damage to any equipment located on or near these walls.

Corrective Action

The following actions were taken to correct the deficiency and prevent recurrence:

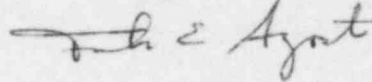
- o Plant walkdowns were performed by qualified structural engineers to locate all items attached to the masonry walls. All safety-related items attached to masonry walls were removed. A subsequent walkdown confirmed that the problem was not recurring.
- o For items left on masonry walls, the design calculations were revised to account for the additional equipment loads. These calculations assure the structural integrity of the walls for design seismic event conditions (Seismic Class II/I).
- o Design changes were issued as required to provide additional wall bracing or to remove heavy items.
- o Edison Engineering and Contractor Supervisory personnel have been instructed that no safety related items shall be attached to any masonry wall and that no item shall be attached to seismically designed masonry walls without prior structural review.

Mr. James G. Keppler
September 12, 1984
EF2-69282
Page 3

- o Erection specifications for field run piping, tubing and conduit have been revised to prohibit attachments to block walls without specific approval.
- o Edison has re-emphasized Engineering work procedures which require seismic analysis and approval of every design change that could affect or have proximate effect on the structural integrity of a safety related structure.

This is Detroit Edison's final report on this item. If you have questions concerning this matter, please contact Mr. Lewis P. Bregni, (313) 586-5083.

Sincerely,



cc: Mr. P. M. Byron
Mr. R. C. DeYoung
Mr. R. C. Knop