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Docket File 50-320
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Docket No. 50-320

Voss A. Moore, Assistant Director
for Light Water Reactors, Group 2
Directorate of Licensing

METROPOLITAN EDISON CO. - THREE MILE ISLAND NUCLEAR STATION, UNIT 2
FIRST REQUEST FOR STRUCTURAL INFORMATION, FSAR REVIEW

Plant Name: Three Mile Island, Unit 2
Licensing Stage: FSAR - OL Review
Docket Number: 50-320
Responsible Branch and Project Manager: LWR 2-2, B. Washburn
Requested Completion Date: August 2, 1974
Applicant's Response Date Necessary for Completion of Next Action
Planned on Project: October 18, 1974
Description of Response: Answers to Questions
Review Status: Waiting for Information

The first round review of the FSAR has been completed by the Structural Engineering Branch and we find that additional information is required before we can complete our review. The additional information requested, which concerns structural aspects, is contained in the enclosure. The material reviewed to date consisted of information provided through Amendment No. 18 dated July 15, 1974.

B. R. Meccary, Assistant Director
for Engineering
Directorate of Licensing

Enclosure:
First Request for Additional
Information for Three Mile
Island, Unit 2

cc w/o encl:	cc w/encl:	
A. Giambusso, L	S. Haeuser, DRTA	L. Shao, L
W. G. McDonald, L	F. Schroeder, L	N. Washburn, L
	S. Varga, L	K. Kapur, L
	K. Koell, L	A. Gluckmann, L

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DATE →	7/29/74	7/29/74	7/29/74	7/29/74

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STRUCTURAL ENGINEERING

13.1

(3.5.4.2)

Justify your statement that the Petry formula is less conservative than the Army Corps of Engineers and the Ballistic Research Laboratory formulas and that Ballistic Research Laboratory formula is the most conservative.

13.2

(3.7.4)

The seismic instrumentation program given in Section 3.7.4 is not in accordance with Regulatory Guide 1.12 (Rev. 1). As a minimum requirement, one multi-element seismoscope should be installed at the basement of the containment for a rapid determination of the ground input response spectra during an earthquake. Provision for time history accelerographs alone is not adequate. State your intent to comply with the requirement.

13.3

(3.8.1.4)

Your use of concrete interlock approach for tangential shear is not suitable for prestressed concrete. Demonstrate that the design for tangential shear is in accordance with ACI-318 or ACI/ASME (Committee-359) codes, which are applicable.

13.4

(3.8.1.5)

Justify the use of a reduction factor of 0.95 for prestressing steel instead of 0.9, as recommended in the ACI/ASME (Committee-359) Code.

13.5

(3.8.3 &
3.8.4)

As requested in our preliminary review, state that the design criteria and design methods are in accordance with Document (B) prepared by the Structural Engineering Branch, Directorate of Licensing "Structural Design Criteria for Evaluating the Effects of High-Energy Pipe Breaks on Category I Structures Outside the Containment". This document, prepared originally for structures outside of the containment is also applicable to interior structures.

13.6

(3.8)

Your response to our question on degree of conformance with Regulatory Safety Guide 1.18 is not complete. Provide a comprehensive discussion of degree of conformance.

13.7

(3.8)

Reference in Section 3.8 your discussion of conformance with Regulatory Safety Guide 1.13.