March 5, 1986
NRC/TMI 86-022

Docket No. 50-320

Mr. F. R. Standerfer
Vice President/Director, TMI-2
GPU Nuclear Corporation
P. O. Box 480
Middletown, PA 17057

Dear Mr. Standerfer:

By a letter dated January 23, 1986, you submitted a Safety Evaluation Report (SER) for Reactor Building (RB) Sump Criticality. Based on our initial review of the SER and discussions held between APHN and the TMI-2 Cleanup Project Directorate staff on February 27, 1986, we have determined that we need additional information to complete our review. We request that you respond to the enclosed questions.

Sincerely,

/s/ C. Cowgill for

William D. Travers
Director
TMI-2 Cleanup Project Directorate

Enclosure: As stated

cc: T. F. Dernott
R. E. Rogan
S. Levin
H. H. Linton
J. J. Byrne
A. W. Miller
Service Distribution List
(See attached)
ENCLOSURE

1. What information is available regarding the amount of fuel under the reactor vessel? What further information gathering do you plan and what is the schedule for gathering this information?

2. Page 8 of your SER states that "no known mechanism is available for establishing flow across the basement floor". How do you discount the force of steam/two phase flow from the RCDT as a driving force and the flow from decontamination spray water?

3. What data demonstrates that molten fuel did not penetrate incore instrument guide tubes and drop into the sump with the remainder of the molten material re-solidifying and sealing the leakage path?

4. By what method would you detect an inadvertent criticality in the sump?

5. If an inadvertent criticality occurred what remediant actions are available?
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