April 19, 1986

HRC/THI 86-036

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Docket No. 50-320

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

Dear Mr. Standerfer:

Subject: TMI-2 Temporary Reactor Vessel Filtration System

Reference (a) forwarded, for NRC staff approval, a Safety Evaluation Report (SER) on your proposed modified Temporary Reactor Vessel Nater Filtration System (TRVWFS). The previous system was described in the SER's forwarded by references (b) and (c). MRC staff approval for the operation of the system was documented in references (d) and (e).

The most significant changes incorporated into the modified system include use of a larger filter with the potential for accumulation of a larger quantity of fuel debris in the filter media, and the use of a defueling knockout canister as a receptacle for the discharged filter media.

References (f) and (g) provide criticality analyses that show that there is no potential for achieving a criticality in any credible fuel debris configuration in the presence of water borated to at least 4350 ppm boron. Since the TRVWFS will only process water borated to the technical specification limits, there is no potential for criticality in the filter or the attached piping. Reference (h) provides an analysis which demonstrates that the defueling knockout canister is a critically safe storage receptacle for fuel debris regardless of particle size when loaded to within its design weight limits.

We have completed our review of reference (a) and have concluded that operation of the proposed TRYMES presents no adverse impact on public health and safety and does not involve an unreviewed safety question.



REFERENCES

- (a) GPUN letter F. R. Standerfer to W. D. Travers, THI-2 Temporary Reactor Vessel Filtration System, Revision 2 dated April 14, 1986
- (b) GPUN letter, F. R. Standerfer to M. D. Travers, TMI-2 Temporary Reactor Vessel Water Filtration
- System, 4410-86-L-0029, dated February 6, 1986 (c) GPUM letter, F. R. Standerfer to H. D. Travers. Til-2 Temporary Reactor Vessel Mater Filtration
- Til-2 Temporary Reactor Vessel Water Filtration System - Revision 1, 4410-86-L-9047, dated March 6, 1986
- (d) NRC letter, W. D. Travers to F. R. Standerfer, Safety Evaluation Report for the TRYMFS, NRC/TMI 86-015 dated February 7, 1986
- (e) MRC letter, W. D. Travers to F. R. Standerfer, TMI-2 Temporary Reactor Vessel Filtration System, NRC/THI 85-086 dated March 18, 1936
- (f) GPUN letter, F. R. Standerfer to B. J. Snyder with attached Reactor Coolant System Criticality Report, 4410-84-L-0199 dated November 8, 1984
- g) MRC letter, B. J. Snyder to F. R. Standerfer re Reactor Coolant System Criticality Report dated March 15, 1985
- (h) NRC Tetter, W. D. Travers to F. R. Standerfer, Fines/Debris Vacuum System Modifications, NRC/THI 85-019 dated February 21, 1986