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September 22, 1980
TLL 450

Office of Inspection and Enforcement
Attn: Mr. Boyce H. Grier, Director
Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
IE Bulletin 80-12

This letter is in response to IE Bulletin 80-12 and is being submitted subsequent to our letter of June 9, 1980 (TLL 272).

The subject bulletin, "Decay Heat Removal System Operability", was prompted principally by an event at Davis-Besse, Unit 1, involving a reactor in the refueling mode, containing fuel with a high decay heat rate. The considerable need for assurance of operation of decay heat removal system where fuel with a high decay heat rate is the heat source is of substantial difference from the current situation at TMI-2. This is shown by the rate of temperature rise, which, at Davis-Besse, was on the order of 23^oF/hour when the decay heat removal system ceased operation. The long decay time that the TMI-2 fuel has undergone provides for the heat-up rate of approximately 0.4^oF/hour of the core bulk temperature. Furthermore, as RCS temperature increases, RCS heat-up rate decreases such that our conservative estimate indicates that a maximum RCS temperature of 190^oF would be reached and the passive cooling mode of "Loss to Ambient" would be adequate to limit the RCS bulk temperature to this predicated maximum value.

This condition at TMI-2 is not just recently recognized. That, eventually, decay heat removal from the core could be solely by conduction to the containment building atmosphere was addressed as long ago as April, 1979, in NUREG 0557, Section 6.2. It was further addressed more completely in the GPUSC document, "Update of Long-Term Cooling Options", dated March 1, 1980.

It is in the above context that we address IE Bulletin 80-12.

The Bulletin identifies three (3) factors which, if corrected, could have precluded or mitigated the event which occurred at Davis-Besse. The discussion below addresses each of the factors:

The first specific factor identified in the Bulletin is "Inadequate Procedures and/or Administrative Controls". TMI-2 is operating under a very rigorous and special set of Technical Specifications during the recovery mode, with safety-related procedures subject to NRC review and approval. This provides

assurance that procedures and controls are adequate. This assurance is backed up by the lengthy period of time available for corrective action, whereas, in the case of Davis-Besse and generally in the case of other operating reactors, long corrective actions times may not be available due to the relatively short period of time since shutdown.

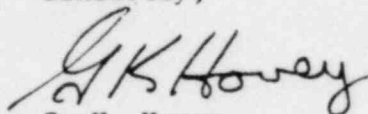
The second factor in the Bulletin is "Excessive Maintenance Activities". At TMI-2, thorough analyses are made prior to removal of any safety-related equipment or system from service or to any realignment of electric power or fluid flow which might affect safety.

The third factor addressed is related to SFAS functions. With TMI-2 in the recovery mode, the SFAS interlocks have been defeated. Accordingly, at TMI-2 SFAS interlocks cannot be a contributory factor to loss of decay heat removal capability.

Given that we are not affected by any of the three contributing factors as referenced in the bulletin, and given that the Unit 2 facility, due to such a low decay heat generation, could safely operate in a "Loss to Ambient" cooling mode, no corrective action as addressed in this bulletin is either necessary or applicable.

This constitutes our complete response to IE Bulletin 80-12, as applicable to TMI-2 in the recovery mode.

Sincerely,



G. K. Hovey
Director, TMI-2

GKH:SDC:dad

cc: John T. Collins
Bernard J. Snyder