GPU NUCLEAR

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June 02, 1997
6710-97-2226

U. S. Nuclear Regulatory Commission
Attn.: Document Control Desk
Washington, DC 20555

Dear Sir:

Subject: Three Mile Island Nuclear Station, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
GPU Nuclear Supplemental Response to Generic Letter (GL) 96-06, "Assurance of Equipment Operability and Containment Integrity During Design-Basis Accident Conditions," – Corrective Actions

Generic Letter (GL) 96-06 requested that licensees determine if the piping which penetrates the containment is susceptible to overpressurization from thermal expansion of fluid trapped between the containment isolation valves or if the containment air cooler cooling water systems are susceptible to either water hammer or two-phase flow conditions during postulated accident conditions. Licensees were further requested to assess operability for any systems found to be susceptible to these phenomena and to provide a report on the actions taken, conclusions reached relative to susceptibility, the basis for continued operability of the affected systems, as applicable, and corrective actions implemented or planned.

GPU Nuclear provided a response to Generic Letter (GL) 96-06 on February 14, 1997. In our response we discussed the systems and components that were found to be affected by the concerns raised by the GL and we provided the basis for our conclusion that operability was unaffected. At the time of our response, we had not completed design verification of our calculations and analysis; nor had we completed the identification of the long-term corrective actions. Therefore, the purpose of this letter is to supplement our response and describe our plans for corrective actions. This letter is being provided on the first work day following our May 31, 1997 commitment schedule with the concurrence of our NRC Project Manager, Bart Buckley on May 28, 1997.

The design verification of calculations and analyses related to GPU Nuclear review of GL 96-06 has been completed and the conclusions provided in our previous letter regarding operability
120018 have been confirmed. Our letter reported that eleven (11) piping segments were affected although none exceeded the ASME Section III, Appendix F criteria. None of these piping segments represent a pressurization concern during normal plant operation and none are required to operate post accident. The condition of these piping segments were reviewed and determined

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to be operable because they maintain containment integrity and are not required to open following a LOCA. None of the pipes will fail based on ASME Section III, Appendix F criteria for Level D events. Therefore, containment integrity is assured and the containment isolation function of these pipe segments remains operable. Further analysis has demonstrated that the stresses under the postulated accident conditions for one of these piping segments (the Reactor Coolant Pump Seal Return Line) are within the code allowable stress. Therefore, modifications for this piping segment will not be required.

To assure compliance with the applicable code requirements, corrective actions are being planned for those ten (10) piping segments that were found to be potentially stressed beyond that allowed by the code. These ten piping segments are identified as follows: the "A" and "B" Once Through Steam Generator (OTSG) Sampling Lines, the Intermediate Closed Cooling Water (ICCW) Return Line, the Reclaimed Water Supply Line, the Makeup and Purification Letdown Outlet Line, the Pressurizer/Reactor Coolant Sampling Line, the Reactor Coolant Drain Tank (RCDT) Transfer Line, the Reactor Coolant Pump Cooling Return Line, and the "A" and "B" Core Flood Tank Sampling Lines. Modifications are being planned to install pressure protection for these piping segments during the Cycle 12 Refueling (12R) Outage which is scheduled for September 1997.

Our letter also reported that we had evaluated the consequences if a Reactor Building Emergency Cooling (RBEC) System relief valve (RR-V11A/B/C) were to leak, or in the worst case, to lift and fail to reseat during a design basis accident. We stated that there is adequate time to detect and isolate the leaking relief valve before dilution of reactor coolant or flooding of safety related equipment would occur, but we were considering hardware changes or procedural actions to eliminate the need for detection and isolation of a leaking relief valve. To alleviate this concern, a modification to the RBEC System is being planned for the 12R Outage to relocate these valves from the Reactor Building to the Intermediate Building.

Sincerely,

James W. Langenbach

J. W. Langenbach
Vice President and Director, TMI

MRK
Attachment

cc: Administrator, NRC Region I
TMI Senior NRC Resident Inspector
TMI Senior NRC Project Manager

6710-97-2226
Attachment

METROPOLITAN EDISON COMPANY
JERSEY CENTRAL POWER AND LIGHT COMPANY
PENNSYLVANIA POWER AND LIGHT COMPANY
GPU NUCLEAR INCORPORATED

Three Mile Island Nuclear Station, Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289

I, James W. Langenbach being duly sworn, state that I am a Vice President of GPU Nuclear, Inc. and that I am duly authorized to execute and file this response on behalf of GPU Nuclear. To the best of my knowledge and belief, the statements contained in this document are true and correct. To the extent that these statements are not based on my personal knowledge, they are based upon information by other GPU Nuclear employees and/or consultants. Such information has been reviewed in accordance with company practices and I believe it to be reliable.

James W. Langenbach

James W. Langenbach
Vice President and Director, TMI

Signed and sworn before me this

2nd day of June, 1997.

Cynthia J McElwee
Notary Public

Notarial Seal
Cynthia J. McElwee, Notary Public
Londonderry Twp., Dauphin County
My Comm[illegible] June 5, 1999
Member, [illegible] Association of Notaries