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February 19, 1982

L. G. Hulman, Chief
 Accident Evaluation Branch
 Division of Systems Integration
 Office of Nuclear Reactor Regulation
 U.S. Nuclear Regulatory Commission
 Washington, D.C. 20555



Dear Mr. Hulman:

TMI ACTION PLAN: III.D.3.4
CONTROL ROOM HABITABILITY
THREE MILE ISLAND NUCLEAR STATION, UNIT-1
METROPOLITAN EDISON COMPANY

Based upon PNL review of the information submitted by the licensee in response to NUREG-0660, NUREG-0737, and other NRC Guidance, the control room meets the requirements of SRP 2.2.1 - 2.2.2, 2.2.3, and 6.4; and therefore meets the requirements of General Design Criteria (GDC) 3, 4, and 19. The conclusions are based on the present plant system and presumes implementation of effective HVAC modifications addressed by the licensee and incorporation of the recommendations of this evaluation.

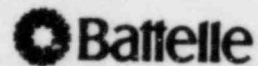
The licensee has committed to the modification of the existing Control Building Ventilation System (CBVS). The modifications include the addition of redundant low leakage dampers on the outside air intake, exhaust air outlet, and the 306' - 0" elevation of the control building. Although no values were provided, the licensee has committed to designing the CBVS to meet the intent of General Design Criterion 19 for maintaining occupancy of the control room.

The licensee has committed to the installation of a quick-acting toxic gas detector system (including chlorine). The licensee should ensure that the modifications maintain adequate smoke detection for sources internal and external to the control room.

The licensee states that 5 self-contained breathing apparati (SCBA) are available in the control room for 3 to 5 operators under normal operating conditions. If a complement of five persons are required in the control room during a working shift, then an additional SCBA is needed to meet single failure criteria.

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Based on the submittals, implementation of the licensee's modifications, and incorporation of the above recommendations, PNL concludes that the control room habitability systems will provide safe, habitable conditions within the control room under both normal and accident conditions, including loss of coolant accidents, and that occupancy can be maintained under accident conditions. Therefore, upon implementation of the modifications, the program will meet the criteria identified in Item No. III.D.3.4, "Control Room Habitability" of NUREG-0737 and is, therefore, acceptable.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Dennis W. Murphy", written over a horizontal line.

Dennis W. Murphy
Senior Research Scientist
Dosimetry Technology Section

DWM/jkr

cc: B.L. Grenier, NRC
H.E.P. Krug, NRC
T.R. Quay, NRC