

King



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March 2, 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 EVALUATION
POINT BEACH NUCLEAR PLANT UNITS 1 & 2
WISCONSIN ELECTRIC POWER 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, 5 and 19. The conclusions are based on the present plant system and presumes implementation of modifications addressed by the licensee and incorporation of the recommendations of this evaluation.

The licensee has determined that neither toxic gas/chemical detectors nor control room modification are needed at the plant based on a review of potential onsite and offsite hazards. The plant does maintain four self-contained breathing apparatus (SCBA) in the control room, in addition to the six air-line supply connections. Additional SCBA's are needed to provide adequate protection for the normal complement of personnel in the control room and to meet single-failure criteria.

The licensee has determined that the whole-body and thyroid doses to the control room operators meet the requirements of 10 CFR 50. The licensee identified credits for reduced iodine levels based on potassium iodide tablets and iodine plate-out in containment. However, the habitability of the control room following reactor accidents is being analyzed for the licensee by a private contractor. The report of this analysis is expected to be delivered to the licensee and forwarded in the near future.

In reviewing the licensee's submittal, PNL identified a misinterpretation of the SRP 6.4 infiltration rate for recirculation mode. Although information was not available for an independent analysis, it appears

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that the thyroid dose using the recirculation mode could be maintained less than 30 rem (assuming an iodine protection factor of 100) with appropriate administrative measures.

The licensee has indicated potential high radiation areas could exist at the doors of the control room and at the small windows next to the doors. The licensee has committed to designing and producing portable shielding to be used in the event of an accident. Additionally, the licensee is planning to install detection capabilities for radioactive iodine and noble gases in the HVAC air supply duct.

Based on this submittal, implementation of the licensee's modifications, incorporation of the above recommendations, and pending the results of the licensee-hired contractor's review, we conclude that the control room habitability systems can 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 dark ink, appearing to read "Dennis W. Murphy", written over a horizontal line.

Dennis W. Murphy
Senior Research Scientist
Dosimetry Technology Section

DWM/jkr

cc: HEP Krug, NRC
TR Quay, NRC