April 23, 2002

Mr. Douglas E. Cooper
Site Vice President
Palisades Plant
Nuclear Management Company, LLC
27780 Blue Star Memorial Highway
Covert, MI 49043-9530

SUBJECT: PALISADES PLANT - CORRECTION TO AMENDMENT NO. 190 RE: BACKUP STEAM SUPPLY FOR TURBINE-DRIVEN AUXILIARY FEEDWATER PUMP (TAC NO. MB1899)

Dear Mr. Cooper:

On March 14, 2000, the Commission issued Amendment No. 190 to Facility Operating License No. DPR-20 for the Palisades Plant to change the Technical Specifications (TSs) in response to an application dated February 18, 2000, as supplemented on March 8, 2000. The changes to the TSs removed requirements associated with the backup steam supply to turbine-driven auxiliary feedwater pump P-8B.

Subsequently, in a letter dated May 2, 2001, Consumers Energy Company (CEC, who at that time was the licensed operator for the Palisades Plant) stated that two sentences in the application dated February 18, 2000 (and in a related request for a Notice of Enforcement Discretion dated February 16, 2000) were incorrect in stating that:

> Only one case exists where use of the underground steam supply through [Control Valve] CV-0522A was considered as available to help the plant in achieving cold shutdown. This case is associated with a fire in the Southwest Cable Penetration Room, which will affect controls for [motor-driven auxiliary feedwater pump] P-8A, and CV-0522B.

CEC stated in its May 2, 2001, letter that the paragraph containing those two sentences, and the subsequent paragraph therein, should have been replaced with:

> For [10 CFR Part 50] Appendix R fire areas, either Auxiliary Feedwater Pump P-8B with steam supply through CV-0522B or pump P-8C is available to satisfy decay heat removal requirements. In all cases the backup underground steam supply through CV-0522A is not relied upon to mitigate the event and therefore, is not required to fulfill any safety function.

CEC stated that the two incorrect sentences did not affect its conclusion in the application dated February 18, 2000, or in the letter dated February 16, 2000, that the backup steam supply to pump P-8B through valve CV-0522A was not required for compliance with 10 CFR Part 50, Appendix R, requirements.

Page 3 of the NRC staff's safety evaluation issued with Amendment No. 190 contained a paragraph reflecting the above incorrect statements. The enclosure to this letter provides a corrected page 3 that is consistent with the correction described in CEC's letter dated May 2, 2001. The correction does not change the NRC staff's conclusions in the safety evaluation. Please replace page 3 of the NRC staff's safety evaluation issued with Amendment 190 with the enclosed, corrected page 3.

Sincerely,

/RA/

Darl S. Hood, Senior Project Manager, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-255

Enclosure: Replacement page 3 of Safety Evaluation
for Amendment No. 190

cc w/encl: See next page

Page 3 of the NRC staff's safety evaluation issued with Amendment No. 190 contained a paragraph reflecting the above incorrect statements. The enclosure to this letter provides a corrected page 3 that is consistent with the correction described in CEC's letter dated May 2, 2001. The correction does not change the NRC staff's conclusions in the safety evaluation. Please replace page 3 of the NRC staff's safety evaluation issued with Amendment 190 with the enclosed, corrected page 3.

Sincerely,

/RA/

Darl S. Hood, Senior Project Manager, Section 1
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-255

Enclosure: Replacement page 3 of Safety Evaluation
for Amendment No. 190

cc w/encl: See next page

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Palisades Plant

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For Appendix R fire areas, either auxiliary feedwater pump P-8B with steam supply through valve CV-0522B or pump P-8C is available to satisfy decay heat removal requirements. In all cases, the backup underground steam supply through valve CV-0522A is not relied upon to mitigate the event and, therefore, is not required to fulfill any safety function.

Another criteria that must be considered in eliminating the backup steam supply line deals with reliability of the AFW system. As stated in Section 10.4.9 of the SRP, Paragraph I, Item 17:

> An AFWS [AFW system] reliability analysis is performed in accordance with Item ll.E.1.1 of NUREG-0737 using the methodology defined by Appendix Ill and Annex 1 of Appendix X in NUREG-0611 and NUREG-0635 to determine the system reliability and major contributors to AFWS system failure under various loss of main feedwater transients.[1]

The licensee evaluated the reliability of the AFW system with and without the backup steam supply line to AFW pump P-8B using the AFW system model that was developed for the plant Probabilistic Safety Assessment. The evaluation addressed the reliability of the AFW system to perform its intended functions under three specific transient event scenarios identified in NUREG-0635: (1) loss of main feedwater, (2) loss of main feedwater with loss of offsite power, and (3) loss of main feedwater with concurrent loss of all alternating current power (station blackout). Significant assumptions and features of the reliability analyses included:

(1) A mission time of six hours was used (the water inventory from the condensate storage tank and primary makeup water tank have sufficient volume to last at least six hours and there is a high likelihood that offsite power could be recovered within six hours),

(2) Component test and maintenance unavailabilities and operator actions to restore components after test or maintenance are included in the system model,

(3) Loss of AFW pump room cooling from the turbine building fans would not fail the AFW pumps because room heatup calculations show that room temperatures would not exceed equipment qualification limits during the mission time, and

(4) Nitrogen backup to instrument air for certain AFW injection valves (CV-0727 and CV-0749) is available to control flow to the steam generators.

[1] NUREG-0737, "Clarification of TMI Action Plan Requirements," was published November 1980. NUREG-0611, "Generic Evaluation of Feedwater Transient and Small Break Loss-of-Coolant Accidents in Westinghouse-Designed Operating Plants," was published January 1980. NUREG-0635, "Generic Evaluation of Feedwater Transients and Small Break Loss-of-Coolant Accidents in Combustion Engineering-Designed Operating Plants," was published January 1980.