Mr. Roger O. Anderson, Director Licensing and Management Issues Northern States Power Company 414 Nicollet Mall Minneapolis, Minnesota 55401

SUBJECT:

REQUEST FOR ADDITIONAL INFORMATION ON THE PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 AND 2, AMENDMENT OF SPENT FUEL POOL SPECIAL VENTILATION TECHNICAL SPECIFICATION (TAC NOS. M98752 AND M98753)

Dear Mr. Anderson:

By letters dated May 7, 1997, and supplemented May 30, 1997, Northern States Power Company submitted a request to amend the Prairie Island Technical Specifications pertaining to the spent fuel pool special ventilation system. In order to review the proposed changes the staff requires some additional information. Our request for additional information (RAI) is enclosed.

In order to continue our review of your submittal on an expedited basis, please provide your response to the staff's RAI as soon as practical. If you have any questions regarding the content of the RAI, please contact me at (301) 415-1355.

Sincerely,

ORIGINAL SIGNED BY

Beth A. Wetzel, Project Manager Project Directorate III-I Division of Reactor Projects - III/IV Office of Nuclear Reactor Regulation

Docket Nos. 50-282, 50-306

Enclosure: As stated

cc w/encl: See next page

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JMcCormick-Barger, RIII

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Mr. Roger O. Anderson, Director Northern States Power Company

cc:

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Kris Sanda, Commissioner Department of Public Service 121 Seventh Place East Suite 200 St. Paul. Minnesota 55101-2145 Prairie Island Nuclear Generating Plant

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Tribal Council
Prairie Island Indian Community
ATTN: Environmental Department
5636 Sturgeon Lake Road
Welch, Minnesota 55089

REQUEST FOR ADDITIONAL INFORMATION FOR REVIEW OF THE AMENDMENT OF THE SPENT FUEL POOL SPECIAL VENTILATION ZONE TECHNICAL SPECIFICATIONS

- 1. Step 8.27 of D95.2, "TN-40 Cask Unloading Procedure" directs the cask to be filled with water. The caution prior to step 8.27 reads, "The water/steam mixture from the vent port hose may contain some radioactive gas. The area directly above where the hose is discharging shall be closely monitored to determine if there is a radiological hazard." Is the spent fuel pool special ventilation system operable during the performance of this step of the unloading procedure? If the spent fuel pool special ventilation system is inoperable during this step and other portions of the unloading procedure because the overhead crane is supporting the cask through the open spent fuel pool enclosure slot doors, discuss why an inoperable ventilation system does not pose a radiological hazard and give any precautions and protections that ensure that 10 CFR Part 20 and Part 100 requirements are not exceeded.
- 2. Section 5.5 of the Prairie Island ISFSI [independent spent fuel storage installation] safety analysis report (SAR) states in part, "After moving the cask into the fuel pool area, the cavity will be depressurized and the cask lowered into the spent fuel pool." However, Step 8.4 of procedure D95.2 directs the cask to be depressurized while it is still located in the rail bay area. Explain the discrepancy between the two documents. Also, what is the basis for the SAR requiring the cask to be moved to the spent fuel pool area prior to depressurization? Does the SAR assume that the spent fuel pool special ventilation system will be operable during the cask depressurization evolution?
- 3. When the spent fuel cask is filled with water prior to unloading the fuel (per Step 8.27 of D95.2, "TN-40 Cask Unloading Procedure"), discuss the likelihood that this will result in cracking of the spent fuel rods due to the interaction of the cool spent fuel pool water with the hot fuel elements. If any fuel cracking is predicted, list the expected radionuclides and quantities that will be released into the cask and into the fuel building when the cask is vented. If the filtered ventilation system is not operating during cask venting, describe how you plan to detect and prevent these radioactive gases from being released into the environment.