



Northern States Power Company

Prairie Island Nuclear Generating Plant

1717 Wakonade Dr. East
Weich, Minnesota 55089

February 21, 1997

10 CFR Part 50
Section 50.90

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

PRAIRIE ISLAND NUCLEAR GENERATING PLANT

Docket Nos. 50-282 License Nos. DPR-42
50-306 DPR-60

**Revision to License Amendment Request Dated July 28, 1995
Boron Credit in the Spent Fuel Pool**

Attached is a revision to our July 28, 1995 License Amendment Request which proposed changes that would allow the use of credit for soluble boron in spent fuel pool criticality analyses.

The original License Amendment Request was submitted in conjunction with a Westinghouse Owners Group submittal requesting NRC review of generic methodology for crediting soluble boron in spent fuel rack criticality analyses. The generic methodology for crediting soluble boron in spent fuel rack criticality analyses was approved by the NRC Staff on October 25, 1996. However, because of changes made to the generic methodology as a result of comments from the NRC Staff, it was necessary to revise the original Prairie Island spent fuel rack criticality analysis. In addition to the changes necessary to make the new criticality analysis consistent with the approved methodology, the revised criticality analysis has also incorporated credit for radioactive decay time of the spent fuel and the presence of gadolinium absorber.

The original License Amendment Request proposed the relocation of the spent fuel pool operating limits to the Unit 1 Core Operating Limits Report (COLR). By letter dated November 4, 1996, the NRC Staff informed NSP that they did not concur with the proposed placement of spent fuel operating limits in the COLR. Therefore, the Technical Specification page changes proposed by this License Amendment Request have been revised to eliminate the use of the COLR.

9702280022 970221
PDR ADDCK 05000292
P PDR

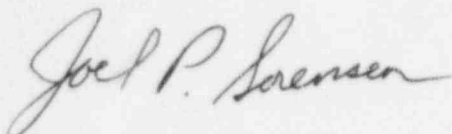
A001/1

In support of the July 28, 1995 submittal, the Westinghouse Owners Group developed and submitted a generic evaluation of the potential for diluting PWR spent fuel pools that was based on a probabilistic risk assessment of a composite plant model. The July 28, 1995 License Amendment Request included a comparison of the Prairie Island spent fuel pool to the generic composite plant analysis along with a plant specific deterministic evaluation of spent fuel pool dilution events. By letter dated January 16, 1997, the NRC Staff informed the Westinghouse Owners Group that the evaluation of dilution events must be performed on a plant specific basis. Therefore, a revised plant specific dilution analysis, which takes no credit for the generic evaluation, has been prepared and is included with this revised License Amendment Request.

Exhibit A contains a description of the proposed changes, the reasons for requesting the changes, the supporting safety evaluations and significant hazards determinations. Exhibit B contains current and new Prairie Island Technical Specification pages marked up to show the proposed changes. Exhibit C contains the revised Technical Specification pages. Exhibit D contains a copy of the Prairie Island spent fuel pool dilution analysis. Exhibit E contains a copy of the Prairie Island spent fuel rack criticality analysis with credit for soluble boron.

On November 27, 1996 NSP notified the NRC that some of the Prairie Island spent fuel storage rack cells had experienced a significant loss of boron carbide from the Boraflex neutron absorber panels, and that some of those cells were outside their design bases and did not meet the analysis assumptions detailed in the Technical Specifications. That notification was followed up by a Licensee Event Report (1-96-19), dated December 20 1996, which provided details of the Boraflex degradation. Because of the continuing degradation of the Boraflex neutron absorber panels, it is important that this License Amendment Request be reviewed and approved in a timely manner. As such, we respectfully request that this revision to the July 28, 1995 License Amendment Request be processed in an expedited manner.

In this letter we have made new Nuclear Regulatory Commission commitments indicated as the italicized statements in the attachment. Please contact Gene Eckholt (612-388-1121) if you have any questions related to this License Amendment Request.



Joel P Sorensen
Plant Manager
Prairie Island Nuclear Generating Plant

c: Regional Administrator - Region III, NRC
Senior Resident Inspector, NRC
NRR Project Manager, NRC
J E Silberg

Attachments:

Affidavit

- Exhibit A - Evaluation of Proposed Changes to the Technical Specifications.
- Exhibit B - Proposed Changes Marked Up on Existing Technical Specification Pages.
- Exhibit C - Revised Technical Specification Pages.
- Exhibit D - Prairie Island Spent Fuel Pool Dilution Analysis
- Exhibit E - Northern States Power Prairie Island Units 1 and 2 Spent Fuel Rack Criticality Analysis Using Soluble Boron Credit, February 1997