Northern States Power Company
Prairie Island Nuclear Generating Plant
1717 Wakonade Dr. East
Welch, Minnesota 55089

May 24, 1995

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

Update to Response to Request for Additional Information
Related to F* Steam Generator License Amendment Request

This letter is provided to update information included in our March 15, 1995 response to your March 8, 1995 letter which transmitted NRC Staff questions related to our License Amendment Request dated January 9, 1995. In our March 15, 1995 response to Question A-2 of your March 8, 1995 letter we made the following commitment:

> "To summarize, when eddy current is used to measure location, an uncertainty value of 0.20 inches will be used. This value will be confirmed by testing with Prairie Island specific values prior to the May 1995 outage."

We made this commitment because at Prairie Island the F* distance will be controlled by a combination of eddy current inspection and/or process control. For a new additional roll expansion, the requirement will be at least 1.2 inches of new hard roll. This is controlled by the length of the rollers (1.25 inch effective length). The distance from the original roll transition zone is also controlled by the process in that the lower end of the new roll expansion is located one inch above the original roll expansion. In the case of the new roll, eddy current examination will confirm there are no indications in the new roll region and that there is a new roll region with well defined upper and lower expansion transitions.

When eddy current examination, alone, must determine the F* distance, such as in the existing hard roll region, or when multiple lengths of additional hard rolls have been added, the eddy current uncertainty is qualified by testing against known standards. That value is expected to be 0.2 inches.

We were unable to complete the committed confirmation of the eddy current uncertainty by testing with Prairie Island specific values prior to the May

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1995 outage due to difficulties with fabrication of the eddy current probe to be used for measurement of the F* distance. While the F* steam generator repair criteria will be utilized during the current Unit 2 refueling outage, there are only a few defective tubes which would require eddy current examination to accurately determine the F* distance. A new additional roll expansion will be applied to the majority of the defective tubes meeting the F* repair criteria. As stated in our March 15, 1995 response to question A-2, for tubes with new additional roll expansions, the position of the new roll expansion is controlled by the process. This process control will ensure that the minimum F* distance is maintained for those tubes, no eddy current examination will be required to verify the F* distance.

In the few cases where new additional roll expansions will not be utilized, the tube indications are 0.3 inch or less above the tube end. In these tubes, the original sound hard roll expansion distance of 2.75 inches minus the top of the crack location of 0.3 inch equals 2.45 inches of sound hard roll above the indications. The 2.45 inch distance in this case exceeds the calculated F* distance of 1.07 inches by 1.38 inches. This provides a sufficiently large margin beyond the anticipated eddy current uncertainty of 0.2 inch. *Until the eddy current uncertainty value of 0.2 inch can be confirmed by testing with Prairie Island specific values, an F* distance of 1.5 inches will be applied to provide sufficient margin.*

In this letter we have made one new Nuclear Regulatory Commission commitment. That commitment is identified above as the statement which is in italics.

Please contact Gene Eckholt (612-388-1121) if you have any questions related to this letter.

M D Wadley for

Roger O Anderson
Director
Licensing and Management Issues

c: Regional Administrator - Region III, NRC
Senior Resident Inspector, NRC
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