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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION REGARDING GENERIC LETTER 95-03 FOR THE PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNITS 1 & 2 (TAC

NOS. M92266 and M92267)

Dear Mr. Anderson:

By letter dated June 27, 1995, Northern States Power Company (NSP) submitted a response to the Generic Letter 95-03, "Circumferential Cracking of Steam Generator Tubes." The staff has reviewed your response and has identified several areas where additional information is needed. Enclosed is our request for additional information (RAI). The staff also noted during the review of your June 27, 1995, letter that your response was not submitted under oath or affirmation. Please include your oath or affirmation for the June 27, 1995. submittal with your response to the RAI. Please provide your response to the RAI within 60 days of receipt.

If you have any questions regarding this request, please call me at (301) 415-1355.

This request is within the original reporting burden for information collection of 350 hours covered by the Office of Management and Budget clearance number 3150-0011, which expires July 31, 1997.

Sincerely,

Original Signed By:

Beth A. Wetzel, Project Manager Project Directorate III-1 Division of Reactor Projects - III/IV Office of Nuclear Reactor Regulation

Docket Nos. 50-282 and 50-306

Enclosure: Request for Additional Information

cc w/encl: See next page

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UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 16, 1996

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

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Beth A. Wetzel, Project Manager

Project Directorate III-1

Both a. Wetel

Division of Reactor Projects - III/IV Office of Nuclear Reactor Regulation

Docket Nos. 50-282 and 50-306

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

Prairie Island Nuclear Generating Plant

cc:

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REQUEST FOR ADDITIONAL INFORMATION

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 AND 2

GENERIC LETTER 95-03, "CIRCUMFERENTIAL CRACKING OF STEAM GENERATOR TUBES"

- The following areas have been identified as being susceptible to circumferential cracking:
 - Expansion transition circumferential cracking
 Small radius U-bend circumferential cracking
 - c. Dented location (including dented TSP) circumferential cracking
 - d. Sleeve joint circumferential cracking

In your response, area c was not specifically addressed except for dented locations at the top of the tubesheet. Please submit the information requested in Generic Letter (GL) 95-03 per the guidance contained in the GL for this area (and any other area susceptible to circumferential cracking). The staff realizes that some of the above areas may not have been addressed since they may not be applicable to your plant; however, the staff requests that you clarify this (e.g., no sleeves are installed; therefore, the plant is not susceptible to sleeve joint circumferential cracking).

If a voltage threshold is used for determining the severity of dented locations (if applicable), provide the calibration procedure used (e.g., 2.75 volts peak-to-peak on 4-20% through-wall ASME holes at 550/130 mix).

2. In section 1.2 of your response, a sentence detailing the past inspection scope of tubes with small radius U-bends (i.e., Rows 1 and 2) appears to have been inadvertently deleted. Please clarify the past inspection scope and results for the tubes with small radius U-bends in both Units 1 and 2 (e.g., x% of the tubes in Row 1 and 2 were examined with a rotating pancake coil probe. No circumferential cracks have ever been detected in these tubes.).

Please provide your future inspection plans at Units 1 and 2 per the guidance in GL 95-03 for small radius U-bend tubes (e.g., Rows 1 and 2).

3. It was indicated that in May 1994, 319 sleeved tubes were examined with the "I"-coil probe in Unit 1. Discuss the inspection results from these examinations. Discuss the number and types (e.g., CE TIG welded) of sleeves installed at Unit 1.

For Unit 2, discuss the past inspection scope and results for any sleeved tube examinations performed. Discuss the number and types of sleeves installed at Unit 2, if applicable.

Please provide your future inspection plans at Units 1 and 2 per the guidance in GL 95-03 for sleeve joints.

- 4. Please clarify your commitment regarding the 100% inspection of the hot leg tubesheet region. Specifically address whether this commitment includes inspecting both the roll transition and the top of the tubesheet region similar to that performed in prior examinations.
- During the Maine Yankee outage in July/August 1994, several weaknesses were identified in its eddy current program as detailed in NRC Information Notice 94-88, "Inservice Inspection Deficiencies Result in Severely Degraded Steam Generator Tubes." In Information Notice 94-88, the staff observed that several circumferential indications could be traced back to earlier inspections when the data was reanalyzed using terrain plots. These terrain plots had not been generated as part of the original field analysis for these tubes. For the rotating pancake coil (RPC) examinations performed at your plant at locations susceptible to circumferential cracking during the previous inspection (i.e., previous inspection per your GL 95-03 response), discuss the extent to which terrain plots were used to analyze the eddy current data. If terrain plots were not routinely used at locations susceptible to circumferential cracking, discuss whether or not the RPC eddy current data has been reapalyzed using terrain mapping of the data. If terrain plots were not routinely used during the outage and your data has not been reanalyzed with terrain mapping of the data, discuss your basis for not reanalyzing your previous RPC data in light of the findings at Maine Yankee.

Discuss whether terrain plots will be used to analyze the RPC eddy current data at locations susceptible to circumferential cracking during your next steam generator tube inspection (i.e., the next inspection per your GL 95-03 response).