



**Northern States Power Company**

**Prairie Island Nuclear Generating Plant**

1717 Wakonade Dr. East  
Welch, Minnesota 55089

August 4, 2000

Technical Specification 4.12.E

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 2000 Unit 2 Steam Generator Inspection Results**

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By letter dated June 9, 2000, NSP submitted information on steam generator tube inspection and repair. Upon further review, changes were identified. Thus, Attachment 1 is included to update the original submittal. The affected pages are included in Attachment 1 (with revised information highlighted); these pages supersede those of the June 9, 2000 submittal. Specific changes include:

- A change to Table 2 (of Attachment 2) to reassign the degradation mechanism of some tubes. Although some tubes have multiple degradation mechanisms, as a matter of course, we assign only one mechanism to each tube. The total number of tubes repaired and defective is correct and does not change, only the assignments of degradation mechanisms.
- A change to Attachment 4 corrects the location of the u-bend indication.

None of these changes is considered to be significant to safety.

In this letter we have made no new Nuclear Regulatory Commission commitments. Please contact Jeff Kivi (651-388-1121) if you have any questions related to this letter.

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Site General Manager  
Prairie Island Nuclear Generating Plant

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**NORTHERN STATES POWER COMPANY**

C: Regional Administrator - Region III, NRC  
Senior Resident Inspector, NRC  
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Attachments:

1. Revised Table 2 (of Attachment 2) and Attachment 4 of the 2000 Unit 2 Steam Generator Inspection Results

## **ATTACHMENT 1**

**Revised Table 2 (of Attachment 2) and Attachment 4 of the  
2000 Unit 2 Steam Generator Inspection Results**

**Table 2: Prairie Island Steam Generator Tube Degradation and Repair Status**

<b>Type of Degradation<sup>1</sup></b>	<b>11 SG</b>	<b>12 SG</b>	<b>21 SG</b>	<b>22 SG</b>
Cold Leg TSP Thinning	58	33	80	143
Antivibration Bar Wear	24	3	9	31
Tubesheet Sec Side IGA/SCC Only	16	751	25	6
Roll Transition Zone PWSCC Only	30	400	803	447
RTZ PWSCC and Sec Side IGA/SCC	2	47	19	3
Hot Leg Tube Support Plate	22	42	1	0
Voltage Based ARC TSP Distorted Indications	315	144	0	0
U-Bend PWSCC	1	2	2	0
Loose Parts	8	0	4	2
Free Span & Top of Tubesheet	16	18	5	6
Tube End Axial Indications	250	4	111	85
Other	4	3	7	5
ET Data Quality	0	0	7	3
<b>Total Tubes Defective</b>	<b>746</b>	<b>1447</b>	<b>1073</b>	<b>731</b>
<b>% Tubes Defective</b>	<b>22%</b>	<b>43%</b>	<b>32%</b>	<b>22%</b>

<b>Type of Repair</b>				
Tubes Plugged	156	348	211	217
Voltage Based Repair Criteria	315	144	0	0
Tubesheet Sleeves (IGA/SCC) <sup>2,3</sup>	0	969	0	0
F*0 Alternate Repair Criteria	250	4	111	85
F*1 ARC w/ Additional Roll Expansions	6	6	717	398
F*2 ARC w/ Additional Roll Expansions	0	0	34	31
EF* ARC w/ Additional Roll Expansions	19	0	0	0
<b>Total Tubes Repaired</b>	<b>746</b>	<b>1471</b>	<b>1073</b>	<b>731</b>
<b>% Equivalent Plugged</b>	<b>4.60%</b>	<b>11.29%</b>	<b>6.23%</b>	<b>6.40%</b>
<b>% Equivalent Plugged per Unit</b>	<b>7.95%</b>		<b>6.32%</b>	

<sup>1</sup>Except for sleeved tubes, only one degradation classification given per tube

<sup>2</sup>Includes 26 preventive sleeves installed in 1988 in 12 SG (2 of which have subsequently been plugged.)

<sup>3</sup>28 Sleeves = 1 plug

## ATTACHMENT 4

### Prairie Island Unit 2 In Situ Test List – May 2000 Refueling Outage

SG	Row	Column	Indication	Location	Voltage	Reason	Length inch	Width deg.	Leakage Result	Max. Pressure
21	7	21	SAI	1BH +0.96" to +1.32"	1.3	ReRoll PWSCC	0.36"		0	2900
21	11	54	SAI	1BH +17.08" to +17.48"	0.17	Crevice ODSCC	0.4"		0	2900
21	1	93	SCI	07H +3.58" to +3.84" Note 1	1.68	U-Bend Circ	0.3"	66	0.005 gpm	5700

Note 1: Tube R1C93 included a 3% through wall bobbin coil indication (0.48 Volumetric indication by Plus Point exam) at 01C which was also tested by the full tube in situ pressure test required for the u-bend indication. Post-test Plus Point examination found that the u-bend indication increased in depth such that a short distance of the indication had become through wall.