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Technical Specification 4.12.E.1

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

Steam Generator Tube Plugging and sleeving

In accordance with Technical Specification 4.12.E.1, the following steam generator tube plugging and sleeving information is provided for the information of the NRC staff.

Following the recent inservice inspection of the Unit 1 steam generators, sixteen tubes were plugged for the first time and one tube which was previously sleeved was plugged. The percentage of tubes plugged is 2.15% on steam generator 11. The percentage of tubes plugged is 2.34% on steam generator 12. A summary is attached.

This information will be expanded upon in the Inservice Inspection Report for Unit 1 which will be submitted within 90 days of the end of the current refueling outage. Also Table 4.3-13 of the Prairie Island Updated Safety Analysis Report will be updated in the next revision.

If you have any questions concerning this information please call.

Thomas M. Parker
for Thomas M Parker
Manager
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c: Regional Administrator - Region III, NRC
Senior Resident Inspector, NRC
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Attachment: Steam Generator Tube Plugging/Sleeving Summary

Adol 1/1

STEAM GENERATOR TUBE PLUGGING/SLEEVEING SUMMARY

Steam Generator No. 11 Summary

New Indications Plugged This Outage:	1
Total Tubes Plugged:	73
Total Tubes Sleeved:	0
11 Steam Generator * Plugged:	2.15%

Plug Removal: No plugs were removed in response to NRC Bulletin 89-01 during this outage.

New Indications:

One tube was plugged for a single axial indication in a Row 1 U-bend. This indication is typical of PWSCC in Row 1 U-bends.

Tube Plug Inspection:

A visual plug inspection was done this outage. During this inspection one hot leg plug had unusual boric acid residue. During subsequent examination, water dripped intermittently from the plug. The plug was a welded tube plug installed in January 1990. The plug was removed and a mechanical plug was installed.

Steam Generator No. 12 Summary

New Indications Plugged This Outage:	15
New Indications Sleeved This Outage:	0
Sleeved Tubes Plugged This Outage:	1
Total Tubes Plugged:	72
Total Tubes Sleeved:	162

12 S/G * Plugged + * Sleeved Equivalent: 2.34%

Plug Removal: No plugs were removed in response to NRC Bulletin 89-01 during this outage.

New Indications:

Fifteen defective tubes were identified:

One tube was plugged for thinning at cold leg tube support plate.

Fourteen tubes were plugged which contained single or multiple axial indications in the lower half of the tubesheet crevice region. These indications are typical of the IGA/SCC corrosion occurring in the tubesheet of 12 steam generator.

Defective Sleeve:

One sleeve was plugged due to leakage through the lower sleeve weld. See detailed discussion below.

Tube Plug Inspection:

The tube plug inspection in 12 steam generator was satisfactory.

Tube Leakage Identification:

The primary to secondary leak rate in 12 steam generator was 0.006 gpm prior to the Unit 1 shutdown. No tube leakage was identified with the steam generator full of water. One tube, R3C34, identified by eddy current inspection, had a 4 inch long axial indication in the hot leg tube sheet region which might have been one source of leakage. Another leakage inspection was done during a hydrostatic test of the secondary side of steam generator 12 performed following feedwater check valve repair (R3C34 had been plugged prior to the hydrostatic test). Water was found dripping from the sleeved hot leg end of tube R20C42. This leakage was from the lower sleeve weld. The sleeve was installed in August 1988. Evaluation of eddy current data on Sleeve R20C42 shows that the axial indication present in tube R20C42 in 1988 changed during the recent cycle. Tube R20C42 was plugged with a welded tubesheet plug on the hot leg side and a mechanical plug on the cold leg side.