



Portland General Electric Company

James E. Cross
Vice President and Chief Nuclear Officer

December 10, 1992

Trojan Nuclear Plant
Docket 50-344
License NPF-1

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

Dear Sirs:

Trojan Technical Specification 4.4.5.5.
Steam Generator Tube Repair Report

During the forced outage for a steam generator tube leak, selected inspection of steam generator tubes (those with sleeves) was conducted. The inspection and subsequent steam generator tube repairs were completed November 25, 1992. Pursuant to the requirement of Trojan Technical Specification 4.4.5.5.a to report the number of tubes plugged or sleeved in each steam generator within 15 days of completion of each (inservice) inspection, attached are the Trojan steam generator tube repair results.

Sincerely,

W. R. Robinson for
J. E. Cross

Attachment

c: Mr. John B. Martin
Regional Administrator, Region V
U.S. Nuclear Regulatory Commission

Mr. David Stewart-Smith
State of Oregon
Department of Energy

Mr. R. C. Barr
NRC Resident Inspector
Trojan Nuclear Plant

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TROJAN TECHNICAL SPECIFICATION 4.4.5.5.a
STEAM GENERATOR TUBE REPAIR REPORT

The following table lists the number of tubes repaired by plugging or sleeving in each steam generator. The total number of tubes plugged and sleeved and the effective plugging ratio are also provided below.

STATUS OF STEAM GENERATOR TUBE REPAIRS
AT THE END OF NOVEMBER 1992

	<u>Number of Tubes Repaired</u>				
	<u>S/G A</u>	<u>S/G B</u>	<u>S/G C</u>	<u>S/G D</u>	<u>Total</u>
Repaired prior to 1991:					
Repair by plugging ¹	155	154	260	285	862
Repair by sleeving ¹	0	0	1	0	1
Repaired during 1991:					
Repair by plugging	374	498	365	343	1,580
Repair by sleeving	0	97	431	489	1,017
Beginning of Cycle 14 Status:					
Total tubes plugged	539	652	625	626	2,442
Total tubes sleeved	0	97	432	489	1,018
Total sleeves Inservice	0	101	463	532	1,096
Repaired during November 1992:					
Repair by plugging	0	1	2	1	4
Repair by sleeving	0	0	0	0	0
November 1992 Status:					
Total tubes plugged ³	539	653	627	627	2,446
Total tubes sleeved ³	0	96	430	488	1,014
Total sleeves inservice	0	100	461	529	1,090
Effective Plugging Ratio ²	15.91%	19.48%	19.48%	19.62%	18.62%

- ¹ The number of tubes repaired by sleeving reported in 1990 has been reduced from two to one. One tube in Steam Generator "C" (Row 15 Col 13) sleeved in 1990 was removed from service by plugging in 1991 due to a reduction in the inner diameter of one sleeve above the rolled transition area of the tube at the tube sheet.
- ² Effective Plugging Ratios are based on the equivalence of 14 sleeves to one plug. Actual equivalency values may differ based on the number of sleeves installed per tube. However, the sleeve-to-plug ratio of 14:1 is conservative with respect to the current sleeving distribution.
- ³ One previously sleeved tube in each of Steam Generators B and D and two previously sleeved tubes in Steam Generator C were removed from service in November 1992. One tube was the failed tube, one tube exceeded the criteria which requires plugging, and two tubes exhibited a reduction in the inner diameter of a sleeve.