

Southern California Edison Company

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October 19, 1989

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U. S. Nuclear Regulatory Commission Document Control Desk Washington, D. C. 20555

Subject: Decket No. 50-361 Special Report Inservice Inspection of Steam Generator Tubes San Onofre Nuclear Generating Station, Unit 2

- References: A. PWR Steam Generator Examination Guidelines, Revision 2, Electric Power Research Institute (EPRI) Report Number NP-6201, dated December 1988.
 - B. Letter from M. O. Medford (SCE) to Mr. G. W. Knighton (USNRC) dated April 5, 1985.

Pursuant to Surveillance Requirement 4.4.4.5(a) of Appendix A, Technical Specifications to Facility Operating License NPF-10, this report is being submitted to the Commission following the completion of inservice inspection of steam generator tubes at San Onofre Unit 2.

Eddy current inspection of the steam generator tubing was completed on October 4, 1989. A total of 4316 tubes (23.7% of the tubes in service) in two steam generators were inspected full length and 62 tubes were removed from service by mechanical plugging. This inspection significantly exceeded the amount of tubing required to be inspected per Surveillance Requirements 4.4.4.0 through 4.4.4.2 including all prospective C-2 expansions [i.e., a 3% sample plus a 6% (25) and a 12% (45) expansion in each steam generator].

The planned inspection programs for both steam generators were fully consistent with recent industry recommendations in the "PWR Steam Generator Examination Guidelines" (Reference A). The programs included inspection of the full length of 100% of the tubing in the area of the tube bundle where the batwing wear mechanism previously described in Reference B is active. The programs also included general surveillance of the full length of 20% of the remainder of the tubing. The programs were expanded to include tubes adjacent to, or associated with tubes exhibiting new eddy current indications.

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In Steam Generator E-088, 2170 tubes were inspected. No tubes were found to be defective. Twenty-nine tubes were preventively plugged due to the wear mechanism previously described in Reference B. One tube was preventively plugged due to degradation at a vertical strap support, and one tube was preventively plugged due to tie-rod denting.

In Steam Generator E-089, 2146 tubes were inspected. One tube was found to be defective and was plugged. Eddy Current data indicates this tube is dented at the top of the hot leg tubesheet. Notably it is adjacent to a carbon steel tie rod. In steam generator E-089, fourteen tubes were preventively plugged due to the wear mechanism described in Reference B, and sixteen tubes were preventively plugged due to the tie-rod denting.

As required by Surveillance Requirement 4.4.4.5(b), complete results of the recently completed inservice inspection will be submitted to the Commission by October 3, 1990.

If you require any additional information, please so advise.

Sincerely, HEMOR-

cc: J. B. Martin (Regional Administrator, USNRC Region V)
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