

# June 19, 2002

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

Subject:

Docket No. 50-361

Errata Sheet: Inservice Inspection of Steam Generator Tubes,

**Cycle 12, dated June 14, 2002** 

San Onofre Nuclear Generating Station, Unit 2

Reference:

Southern California Edison Letter from D. E. Nunn to U. S. Nuclear

Regular Commission Document Control Desk, dated June 14, 2002

### Gentlemen:

This letter provides a single page errata sheet for the above referenced letter. Please replace report page 2 of 17 with the enclosed replacement page.

If you have any questions, please contact Mr. Clay E. Williams at (949)-368-6707.

Sincerely

#### Attachment:

cc: E. W. Merschoff, Regional Administrator, NRC Region IV

A. B. Wang, NRC Project Manager, San Onofre Units 2 & 3

C. C. Osterholtz, NRC Senior Resident Inspector, San Onofre Units 2 & 3 Institute of Nuclear Power Operations (INPO)

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# **Repair of Tubes**

Table 5 provides an itemized listing of the tubes plugged in steam generator E-088 along with the corresponding Table 3 category specifying the indication orientation/location.

Table 6 provides an itemized listing of the tubes sleeved in steam generator E-088 along with the corresponding Table 3 category specifying the indication orientation/location.

Table 7 provides an itemized listing of tubes plugged in steam generator E-089 along with the corresponding Table 3 category specifying the indication orientation/location.

Table 8 provides an itemized listing of the tubes sleeved in steam generator E-089 along with the corresponding Table 3 category specifying the indication orientation/location.

# Repair Methods, Number of Tubes Repaired and Effective Plugging Percentage

All tube plugging was performed using the design, materials, and installation methods of FRAMATOME ANP (FANP). A "roll" method was used for all tube plugs. One tube was "stabilized" in the vicinity of the top of the tubesheet using the design, materials, and installation methods of FANP.

All tube sleeving was performed using the welded sleeve design, materials, and installation methods of Westinghouse (formerly ABB Combustion Engineering). This repair method is specifically addressed in Technical Specification 5.5.2.11.f.1.j for Unit 2.

Forty-nine tubes were plugged, and seventy-five tubes were sleeved in Steam Generator E-088 during the Cycle 12 refueling outage. A total of 773 tubes have been plugged, and to date, 252 sleeved tubes are in service. The design number of tubes is 9350 tubes and the sleeve to plug equivalency ratio is thirty-eight sleeves per plug. The effective plugging percentage for E-088 is 8.4%.

Fifty-two tubes were plugged, and forty-three tubes were sleeved in Steam Generator E-089 during the Cycle 12 refueling outage. A total of 817 tubes have been plugged, and to date, 146 sleeved tubes are in service. The design number of tubes is 9350 tubes and the sleeve to plug equivalency ratio is thirty-eight sleeves per plug. The effective plugging percentage for E-089 is 8.8%.

### **Causes and Corrective Actions**

The degradation detected during this inspection remained within the Technical Specification category C-3. There is no significant update from previous reports of causes and corrective actions for Category C-3 results. Thus, this portion of a previous report is provided below.