SOUTHERN CALIFORNIA
EDISON®
An *EDISON INTERNATIONAL*® Company

A. Edward Scherer
Manager of
Nuclear Regulatory Affairs

December 19, 2006

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

Subject: **Docket Nos. 50-361 and 50-362**
2005 Emergency Core Cooling System Annual 10 CFR 50.46 Report
San Onofre Nuclear Generating Station, Units 2 and 3

References:
1. Letter from A. E. Scherer (SCE) to Document Control Desk (NRC), dated December 15, 2005, Subject: Docket Nos. 50-361 and 50-362, 2004 Emergency Core Cooling System Annual 10 CFR 50.46 Report, San Onofre Nuclear Generating Station, Units 2 and 3

2. CENPD-279, Supplement 17, "Annual Report on Combustion Engineering ECCS Performance Evaluation Models for PWRs," March 2006

Gentlemen:

This letter transmits as Enclosures 1 and 2 the San Onofre Units 2 and 3 annual report for the 2005 calendar year required by paragraph (a)(3)(ii) of 10 CFR 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors." This regulation requires Southern California Edison (SCE) to annually report to the NRC for San Onofre Units 2 and 3 the nature of each change to or error discovered in the Emergency Core Cooling System (ECCS) evaluation model or in the application of this model that affects the temperature calculation and estimated effects of any such changes, errors, or applications on the limiting ECCS analysis. Any significant change or error is required to be reported to the NRC within 30 days.

The previous Emergency Core Cooling System Annual 10 CFR 50.46 Report was submitted to the NRC by Reference 1.

Reference 2 (included as Enclosure 1) describes the codes and methodology used by Westinghouse Electric Company for the San Onofre Units 2 and 3 ECCS analysis for this reporting period. Reference 2, Appendix C summarizes the plant specific evaluation for San Onofre Units 2 and 3. Appendices A, B, D, E, and F of Reference 2 apply to plants other than San Onofre, and therefore, are not included.

SCE made no changes to the Loss of Coolant Accident (LOCA) evaluation models.

P.O. Box 128
San Clemente, CA 92672
949-368-7501
Fax 949-368-7575

A001

Enclosure 2 provides a summary of the effect on Peak Clad Temperature (PCT) of the errors or changes to the ECCS evaluation model reported under 10 CFR 50.46 for this reporting period. While not limiting with regard to PCT, detailed information for the Small Break LOCA is also included in Enclosure 2 (in accordance with Supplement 1 to Information Notice 97-15).

Operating Cycle Information

Unit 2 and Unit 3 operation for the current reporting period is outlined below.

Unit	Year	Cycle 13
2	2005	January 1, 2005 through December 31, 2005
3	2005	January 1, 2005 through December 31, 2005

SONGS Units 2 and 3 Large Break LOCA Evaluation Model - **2005 Reporting Period**

The Large Break LOCA analysis uses the 1985 evaluation model. The limiting Large Break LOCA PCT did not exceed the 10 CFR 50.46(b)(1) acceptance criterion of 2,200 °F. This is documented in Table 1 (Enclosure 2).

The cumulative (sum of the absolute magnitudes of PCT changes) Large Break LOCA 10 CFR 50.46 model changes and model errors, since the approval of the "1985 Evaluation Model," remains less than 1 °F. This is documented in Table 2 (Enclosure 2).

SONGS Units 2 and 3 Small Break LOCA Evaluation Model - **2005 Reporting Period**

The Small Break LOCA analysis uses the Supplement 2 Model (S2M) Small Break LOCA evaluation model. The limiting Small Break LOCA PCT did not exceed the 10 CFR 50.46(b)(1) acceptance criterion of 2,200 °F, and remained bounded by the large break LOCA PCT. This is documented in Table 3 (Enclosure 2).

The cumulative (sum of the absolute magnitudes of PCT changes) Small Break LOCA 10 CFR 50.46 model changes and model errors, since the approval of the "S2M Evaluation Model," is 19 °F. This is documented in Table 4 (Enclosure 2).

An authorization for the NRC to reproduce the copyrighted Reference 2 is provided in Enclosure 1 in the "Copyright Notice" Section.

If you have any questions or need additional information on this subject, please contact me at (949) 368-7501.

Sincerely,

Lynn Dressen
for AES

Enclosures

cc: B. S. Mallett, Regional Administrator, NRC Region IV
N. Kalyanam, NRC Project Manager, San Onofre Units 2 and 3
C. C. Osterholtz, NRC Senior Resident Inspector, San Onofre Units 2 and 3