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**Richard J. St. Onge**
Director, Nuclear Regulatory Affairs and
Emergency Planning

10 CFR 50.4

January 21, 2013

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: **Docket No. 50-361**
**Response to Request for Additional Information (RAI 28)**
**Regarding Confirmatory Action Letter Response**
**(TAC No. ME 9727)**
**San Onofre Nuclear Generating Station, Unit 2**

References:
1. Letter from Mr. Elmo E. Collins (USNRC) to Mr. Peter T. Dietrich (SCE), dated March 27, 2012, Confirmatory Action Letter 4-12-001, San Onofre Nuclear Generating Station, Units 2 and 3, Commitments to Address Steam Generator Tube Degradation

2. Letter from Mr. Peter T. Dietrich (SCE) to Mr. Elmo E. Collins (USNRC), dated October 3, 2012, Confirmatory Action Letter – Actions to Address Steam Generator Tube Degradation, San Onofre Nuclear Generating Station, Unit 2

3. Letter from Mr. James R. Hall (USNRC) to Mr. Peter T. Dietrich (SCE), dated December 26, 2012, Request for Additional Information Regarding Response to Confirmatory Action Letter, San Onofre Nuclear Generating Station, Unit 2

Dear Sir or Madam,

On March 27, 2012, the Nuclear Regulatory Commission (NRC) issued a Confirmatory Action Letter (CAL) (Reference 1) to Southern California Edison (SCE) describing actions that the NRC and SCE agreed would be completed to address issues identified in the steam generator tubes of San Onofre Nuclear Generating Station (SONGS) Units 2 and 3. In a letter to the NRC dated October 3, 2012 (Reference 2), SCE reported completion of the Unit 2 CAL actions and included a Return to Service Report (RTSR) that provided details of their completion.

By letter dated December 26, 2012 (Reference 3), the NRC issued Requests for Additional Information (RAIs) regarding the CAL response. Enclosure 1 of this letter provides the response to RAI 28.

There are no new regulatory commitments contained in this letter. If you have any questions or require additional information, please call me at (949) 368-6240.

Sincerely,

P.O. Box 128
San Clemente, CA 92672

IE36
NRR

Enclosures:

1. Response to RAI 28

cc: E. E. Collins, Regional Administrator, NRC Region IV
J. R. Hall, NRC Project Manager, SONGS Units 2 and 3
G. G. Warnick, NRC Senior Resident Inspector, SONGS Units 2 and 3
R. E. Lantz, Branch Chief, Division of Reactor Projects, NRC Region IV

# ENCLOSURE 1

SOUTHERN CALIFORNIA EDISON

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

REGARDING RESPONSE TO CONFIRMATORY ACTION LETTER

DOCKET NO. 50-361

TAC NO. ME 9727

**Response to RAI 28**

**RAI 28**

Reference 5, Section 2.6.1 - What is the estimated growth rate of the tube to tube wear in steam generator 3E0-88, tube R106C78? Describe how it was determined.

**RESPONSE**

Note: Reference 5 in RAI 28 is the Westinghouse operational assessment.

Tube-to-tube wear (TTW) rates were not calculated for tubes in Unit 3 since that was not required as part of the operational assessment for Unit 2. Benchmarking of Unit 3 determined that all tubes with TTW were found to either be unstable in the in-plane direction, or were in contact with tubes that were unstable.

The Westinghouse evaluation determined that the wear associated with tube-to-tube contact in Unit 2 was not a result of in-plane instability. The analysis determined that the tube-to-tube contact was a result of a proximity condition, meaning that the tubes were closer together than what would be indicated in the design. Therefore, no significant TTW growth is predicted in Unit 2. Appendix A of Reference 5 contains a summary of the TTW that occurred in the free span of Unit 2. This appendix addressed the Unit 2 tubes with TTW and did not evaluate TTW in Unit 3.

In summary, no TTW calculations were performed for SG 3E-088, tube R106C78, as the tube wear in Unit 3 was produced from a different mechanism than the TTW that occurred in Unit 2. As a result, this was not a necessary calculation to support the Unit 2 operational assessment.