

March 15, 2013

10 CFR 50.4

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 54)
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. Email from Mr. James R. Hall (USNRC) to Mr. Ryan Treadway (SCE), dated February 21, 2013, Request for Additional Information (RAIs 53-67) Regarding Response to Confirmatory Action Letter, San Onofre Nuclear Generating Station, Unit 2

Dear Sir or Madam,

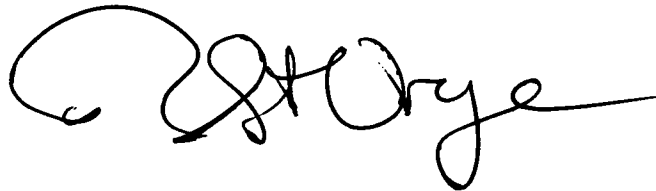
On March 27, 2012, the Nuclear Regulatory Commission (NRC) issued a Confirmatory Action Letter (CAL) (Reference 1) to Southern California Edison (SCE) describing actions that the NRC and SCE agreed would be completed to address issues identified in the steam generator tubes of San Onofre Nuclear Generating 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 email dated February 21, 2013 (Reference 3), the NRC issued Requests for Additional Information (RAIs) regarding the CAL response. Enclosure 1 of this letter provides the response to RAI 54.

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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,

A handwritten signature in black ink, appearing to read "E. E. Collins". The signature is fluid and cursive, with a long horizontal line extending to the right.

Enclosure:

1. Response to RAI 54

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 54

RAI 54

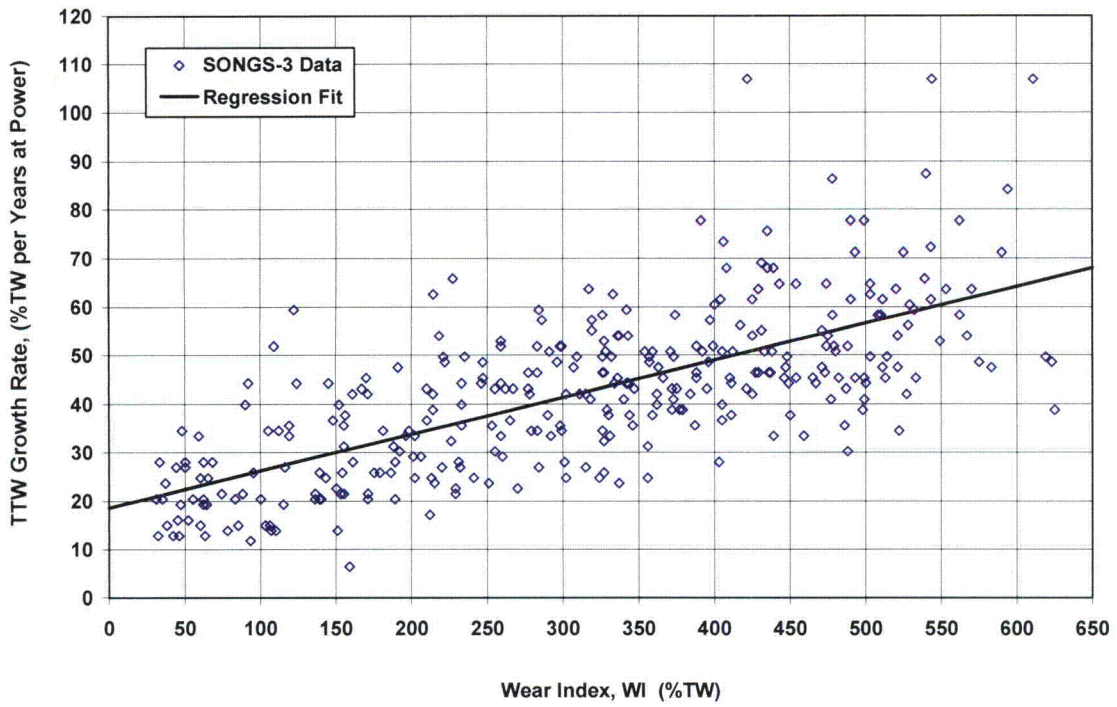
In Reference 1, Figures 4-11 and 4-13, the maximum depths in Figure 4-11 have been divided by the Unit 3 cycle length of 0.926 years to yield the growth rates in Figure 4-13. The staff understands that Figure 4-13 should be simply a scaled version of Figure 4-11. Please explain why some of the data in Figure 4-11 are not shown in Figure 4-13; for example, the three flaws shown in Figure 4-11 with maximum depths ranging from 89 to 100% (AREVA resized).

RESPONSE

RAI Reference 1 is the Operational Assessment for SONGS Unit 2 Steam Generators for Upper Bundle Tube-to-Tube Wear Degradation at End of Cycle 16," prepared by Intertek APTECH for Areva, Report No. AES 12068150-2Q-1, Revision 0, September 2012.

The wear rates shown in Figure 4-13 were computed by dividing the tube-to-tube wear (TTW) maximum depths by the operating cycle length. The Staff is correct to state that Figure 4-13 is simply a scaled version of Figure 4-11 in RAI Reference 1. A few data points for corresponding wear rates fell above the 100% through wall (TW) per years at power. Figure 4-13 has a vertical axis range of zero to 100% TW per years at power so these points are not seen. Attached are the same graphs in Figure 4-13 with the wear rate axis extended to 120% TW per years at power. The three data points mentioned in the RAI are now visible.

ETSS 27902.2 Sizing



AREVA Resized

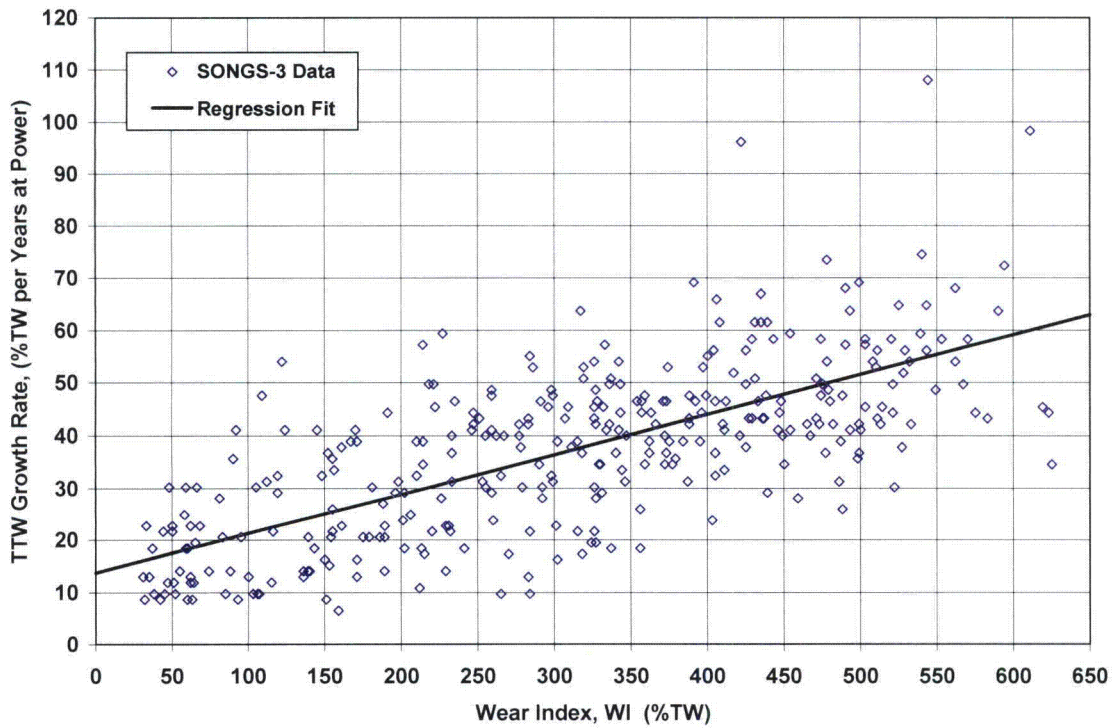


Figure 4-13 – Tube-to-Tube Wear Rate as a Function of Wear Index