

## Hall, Randy

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**From:** Hall, Randy  
**Sent:** Friday, February 01, 2013 2:32 PM  
**To:** 'Ryan.Treadway@sce.com'  
**Cc:** 'joseph.bashore@sce.com'; 'John.Brabec@sce.com'; 'Mark.Morgan@sce.com'; 'Lee.Kelly@sce.com'; Broadus, Doug; Jackson, Christopher; Kulesa, Gloria; Elliott, Robert; Pelton, David; Paige, Jason; Murphy, Emmett; Karwoski, Kenneth; Thurston, Carl; Hoxie, Chris; Grover, Ravinder; Beaulieu, David; Parks, Benjamin; Clifford, Paul; Schulten, Carl; Lantz, Ryan; Werner, Greg; Taylor, Nick; Rahn, David; Thorp, John; Benney, Brian; Andersen, James  
**Subject:** ~~PROPRIETARY INFORMATION~~ Draft Request for Additional Information on SCE's Response to NRC's Confirmatory Action Letter for San Onofre Nuclear Generating Station Unit 2 (ME9727)  
**Attachments:** Prop RAIs 33 to 37.docx

February 1, 2013

Mr. Ryan Treadway  
Manager, Nuclear Regulatory Affairs  
San Onofre Nuclear Generating Station  
Southern California Edison Company

Ryan:

By letter dated October 3, 2012, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML122850320) Southern California Edison (SCE) submitted its response to the NRC Confirmatory Action Letter (CAL) dated March 27, 2012, for San Onofre Nuclear Generating Station (SONGS), Unit 2. In support of that response, SCE submitted proprietary versions of several reports by letter dated November 28, 2012 (ADAMS Accession No. ML12348A287).

The CAL, as it relates to Unit 2, specifies in part that SCE will provide to NRC the results of your assessment of the replacement steam generator tube wear identified at SONGS, the actions taken to prevent loss of tube integrity in Unit 2, and the basis for SCE's conclusion that there is reasonable assurance that the unit can be operated safely. The CAL further stipulates that it will remain in effect until the NRC has reviewed SCE's response to the actions specified therein, including responses to staff's questions and the results of your evaluations; and the NRC staff communicates to SCE in writing that it has concluded that Unit 2 can be operated without undue risk to public health and safety, and the environment.

The NRC staff is continuing its detailed review of SCE's CAL response and supporting information for SONGS Unit 2 in order to reach a conclusion regarding the CAL actions and the proposed restart of Unit 2. The staff has determined that further additional information is needed in order to complete our evaluation. The NRC staff previously provided draft requests for additional information (RAIs) regarding the CAL response to you on November 30, December 10 and December 20, 2012 (ADAMS Accession Nos. ML12338A110, ML12345A427, and ML12356A198, respectively). The 32 questions in these draft RAIs were formally sent to SCE by letter dated December 26, 2012 (ADAMS Accession No. ML12361A065).

The staff's latest draft RAI is attached. Please note that the NRC staff has designated several of the attached questions as proprietary, based on the requests for withholding provided in your October 3, 2012, letter. Please review NRC's designation of proprietary information in the attached RAI and provide any comments or revisions if you do not agree with our designation. We intend to issue a redacted, non-proprietary version of this RAI to be made publicly available, so we request that you provide any comments promptly.

The NRC staff may develop additional questions, which we will transmit to SCE as they become available.

Please provide an estimated date for your response to this draft RAI, and let me know if SCE would like additional clarification on any of these questions.

Sincerely,

Randy Hall, Senior Project Manager  
San Onofre Special Projects Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation  
USNRC  
(301) 415-4032  
[Randy.Hall@nrc.gov](mailto:Randy.Hall@nrc.gov)

**Attachment to February 1, 2013, electronic mail from Randy Hall, USNRC, to Ryan Treadway, Southern California Edison**

**OFFICE OF NUCLEAR REACTOR REGULATION**

**REQUEST FOR ADDITIONAL INFORMATION**

**SOUTHERN CALIFORNIA EDISON**

**SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2**

**RESPONSE TO MARCH 27, 2012, NRC CONFIRMATORY  
ACTION LETTER**

**DOCKET NO. 50-361**

**TAC NO. ME9727**

**(Redacted)**

**Redacted information is identified by blank space enclosed within double brackets**

**PROPRIETARY INFORMATION** grH

OFFICE OF NUCLEAR REACTOR REGULATION  
REQUEST FOR ADDITIONAL INFORMATION  
SOUTHERN CALIFORNIA EDISON  
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2  
RESPONSE TO MARCH 27, 2012, NRC CONFIRMATORY ACTION LETTER  
DOCKET NO. 50-361  
TAC NO. ME9727

By letter dated October 3, 2012, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML122850320) Southern California Edison (SCE) submitted its response to the NRC Confirmatory Action Letter (CAL) dated March 27, 2012, for San Onofre Nuclear Generating Station (SONGS), Unit 2. By letter dated November 28, 2012 (ADAMS Accession No. ML12348A287), SCE submitted proprietary versions of several reports enclosed with the October 3, 2012 CAL response.

The NRC staff is continuing its detailed review of SCE's CAL response for SONGS Unit 2 and has determined that additional information is needed in order to complete our evaluation. This draft request for additional information (RAI) addresses some of the proprietary information submitted by SCE on November 28, 2012, and will be withheld from public disclosure as marked, pending the NRC staff's final determination on SCE's request for withholding under 10 CFR 2.390.

The NRC transmitted previous RAI questions to SCE by letter dated December 26, 2012 (ADAMS Accession No. ML12361A065). For continuity, the numbering scheme for these additional questions begins where the NRC's previous RAI questions ended.

33. Reference 1, Figure 5-5: [[

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34. Reference 1, Section 6.4.2, page 60 of 129: [[

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35. Reference 1, Section 7.3, page 98 of 129: The "upper bound contact forces" shown in Figure 7-2 are average values. Clarify whether these "average values" are averages of the upper bound contact forces for each tube in the bundle at each AVB. Why is it acceptable that the calculated upper bound contact force prevents motion for only 97.7 percent of the force spectrum from turbulence? Finally, why has only turbulence excitation been considered in the development of these upper bound contact forces?

36. Reference 1, Section 7.4, page 98 of 129: [[

**PROPRIETARY INFORMATION** grH

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37. Reference 1, Section 8.0, page 107 of 129, and Figure 8-3 indicate that Unit 2 can be operated for 8 months after BOC 17 before exceeding the 5% probability limit. What is the sensitivity of this estimate to a higher assumed value of median contact force for support effectiveness?

REFERENCES

1. Letter from Richard J. St. Onge, SCE, to Document Control Desk, USNRC, "Docket No. 50-361, Confirmatory Action Letter Response – Proprietary Documents, San Onofre Nuclear Generating Station, Unit 2," November 28, 2012. (ADAMS Accession No. ML12348A287); Enclosure 6, "SONGS U2C17 Steam Generator Operational Assessment for Tube-to-Tube Wear," prepared by Areva NP Inc., Document No. 51-9187230-000.