

Mr. Gregory M. Rueger
Senior Vice President and General Manager
Pacific Gas and Electric Company
Diablo Canyon Nuclear Power Plant
P. O. Box 3
Avila Beach, CA 93424

File Center

December 13, 1999

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - REVIEW OF WCAP-14707,
"MODEL 51 STEAM GENERATOR LIMITED TUBE SUPPORT PLATE
DISPLACEMENT ANALYSIS FOR DENTED OR PACKED TUBE TO TUBE
SUPPORT PLATE CREVICES" - DIABLO CANYON POWER PLANT, UNITS 1
AND 2 (TAC NOS. M99011 AND M99012)

Dear Mr. Rueger:

In a letter dated October 4, 1996, Pacific Gas and Electric Company submitted for staff review and approval a technical report prepared by Westinghouse Electric Corporation that assesses the potential for tube support plate (TSP) displacement during a postulated main steam line break (MSLB) event. The report, WCAP-14707, "Model 51 Steam Generator Limited Tube Support Plate Displacement Analysis for Dented or Packed Tube to Tube Support Plate Crevices," concludes that the TSPs in Model 51 steam generators (SGs) are essentially "locked" in place due to corrosion product buildup in the tube-to-TSP crevices. The NRC staff has identified the enclosed information as necessary to initiate a review of the WCAP from a reactor systems standpoint.

These questions were discussed with Pat Nugent of your staff on December 10, 1999. A mutually agreeable target date of February 29, 2000, for your response was established. If circumstances result in the need to revise the target date, please call me at the earliest opportunity.

If you have any questions regarding this matter, please contact me at (301) 415-1313.

Sincerely,

/s/
Steven D. Bloom, Project Manager, Section 2
Project Directorate IV and Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-275
and 50-323

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Enclosure: Request For Additional Information

cc w/encl: See next page

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**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

WASHINGTON, D.C. 20555-0001

December 13, 1999

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Pacific Gas and Electric Company
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Sincerely,

A handwritten signature in black ink, appearing to read "S.D. Bloom", written over a horizontal line.

Steven D. Bloom, Project Manager, Section 2
Project Directorate IV and Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-275
and 50-323

Enclosure: Request For Additional Information

cc w/encl: See next page

Diablo Canyon Power Plant, Units 1 and 2

cc:

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REQUEST FOR ADDITIONAL INFORMATION

WCAP-14707. "MODEL 51 STEAM GENERATOR LIMITED TUBE SUPPORT PLATE
DISPLACEMENT ANALYSIS FOR DENTED OR PACKED TUBE TO TUBE SUPPORT
PLATE CREVICES"

DIABLO CANYON POWER PLANT, UNITS 1 AND 2

DOCKET NOS. 50-275 AND 50-323

1. Please provide the paper version of Reference 6: "TRANFLO: A Computer Program for Transient Thermal Hydraulic Analysis with Drift Flux," MPR663, November 1980, and the computer code in electronic form.
2. Please provide a description of all input assumptions used for the TRANFLO and RELAP5 analyses. If "input calculation notebooks" have been prepared for these analyses, provide copies of the notebooks.
3. Please provide the TRANFLO and RELAP5 input decks in electronic form.
4. Please provide all nodalization sensitivity studies performed for both TRANFLO and RELAP5.
5. Please provide all assessment analyses performed for both TRANFLO and RELAP5, including descriptions of the test facilities, code input models, and code results/data comparisons.
6. Please provide the results of Model 51 steam generator analyses performed using the RELAP5 code including pressure drops, void fractions, and mass flow rates (all phases) for all nodes within the steam generator.
7. Please provide all user guidance documents that are in the possession of Westinghouse or Pacific Gas and Electric that describe or otherwise relate to the use of the TRANFLO code.
8. Please provide a description of the dominant physical processes, the needed model capabilities, how the chosen tool meets these needs, and the inherent uncertainties in the chosen model.

Enclosure