

Mr. William T. Cottle
Executive Vice-President &
General Manager, Nuclear
Houston Lighting & Power Company
South Texas Project Electric
Generating Station
P. O. Box 289
Wadsworth, TX 77483

January 22, 1997

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (RAI) REGARDING STEAM GENERATOR
TUBE VOLTAGE BASED REPAIR CRITERIA 90-DAY REPORT, SOUTH TEXAS
PROJECT, UNIT 1 (TAC NO. M97305)

Dear Mr. Cottle:

The Nuclear Regulatory Commission staff is reviewing the subject report, dated September 5, 1996. This 90-day report was submitted in accordance with Generic Letter 95-05, "Voltage-Based Repair Criteria for Westinghouse Steam Generator Tubes Affected by Outside Diameter Stress Corrosion Cracking."

Based on its review, the staff has determined that additional information is needed. It is requested that you provide the additional information requested in the enclosure within 30 days from the date of this letter.

Sincerely,

ORIGINAL SIGNED BY:
Thomas W. Alexion, Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-498

Enclosure: RAI

cc w/encl: See next page

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Document Name: STP97305.RAI *See previous concurrence

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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Sincerely,

A handwritten signature in cursive script that reads "Thomas W. Alexion".

Thomas W. Alexion, Project Manager
Project Directorate IV-1
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

Docket No. 50-498

Enclosure: RAI

cc w/encl: See next page

Mr. William T. Cottle
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REQUEST FOR ADDITIONAL INFORMATION

STEAM GENERATOR TUBE VOLTAGE BASED REPAIR CRITERIA 90-DAY REPORT

SOUTH TEXAS PROJECT, UNIT 1

DOCKET NO. 50-498

By letter dated September 5, 1996, "Steam Generator Tube Voltage Based Repair Criteria 90-Day Report," information was provided pertaining to the licensee's assessment of the structural and leakage integrity of the steam generator tubes. As a result of a review of this document, the staff requests that the licensee provide responses to the following questions and comments in order for the staff to assess differences between the results provided by the licensee and results generated by the staff.

1. For the projected end-of-cycle (EOC) voltage distributions provided in the report, discuss the key assumptions in the methodology (e.g., is interpolation between voltage bins performed, is WCAP-14277 Equation 3.5 or 3.6 used, how are values of probe wear that exceed the probe wear cutoff handled, is the non-destructive examination uncertainty adjustment applied to the beginning-of-cycle (BOC) voltage only or to the sum of the BOC voltage and the growth rate, what method is used to account for the fractional indications, how are the probe wear adjustment and analyst variability adjustment determined).
2. For the projected EOC voltage distributions contained in Table 4-8, it appears that when the number of indications was less than 0.1, the values were not reported. If this is the case, provide an updated EOC voltage distribution which shows all EOC voltages observed regardless of the frequency of occurrence (e.g., 0.003 indications).
3. In the determination of the probability of burst and the primary-to-secondary leakage under postulated accident conditions, discuss how fractional indications were accounted (e.g., 7.3 indications, 0.002 indications).
4. Provide the mean probability of burst associated with the 95% upper confidence limit values provided in Table 5-1. Provide the number of trials used in determining the probability of burst (e.g., 100,000).

Since one of the purposes of the information requested in Questions 1 and 2 is to assess differences between the licensee's EOC projections and projections made by the staff, it would be acceptable to provide additional calculations of the EOC voltage distribution using assumptions that are different than those made in the September 5, 1996, letter provided the assumptions and the input data are provided.

ENCLOSURE