Mr. Leon R. Eliason Chief Nuclear Officer & President-Nuclear Business Unit Public Service Electric and Gas Company Post Office Box 236 Hancocks Bridge, NJ 08038

Dear Mr. Eliason:

REQUEST FOR ADDITIONAL INFORMATION ON RESPONSE TO GENERIC LETTER SUBJECT:

(GL) 95-03, "CIRCUMFERENTIAL CRACKING OF STEAM GENERATOR TUBES" (TAC

NOS. M92269 AND M92270)

On April 28, 1995, the U.S. Nuclear Regulatory Commission issued Generic Letter (GL) 95-03 "Circumferential Cracking of Steam Generator Tubes" which requested addressees to evaluate recent operating experience related to circumferential cracking, justify continued operation until the next scheduled steam generator tube inspections, and to develop plans for the next steam generator tube inspections. The staff has reviewed the response provided by Public Service Electric and Gas Company for Salem Nuclear Generating Station, Units 1 and 2. As a result of the review of your response, the staff has identified areas for which additional information and/or clarification is needed. The enclosure to this letter contains the information needed for the staff to complete its review of your response to GL 95-03. Please provide your response by October 2, 1995.

This request is within the original reporting burden for information collection of 350 hours covered by the Office of Management and Budget clearance number 3150-0011, which expires July 31, 1977.

Sincerely,

original signed by Leonard N. Ölshan, Senior Project Manager Project Directorate I-2 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Docket Nos. 50-272 and 50-311

Enclosure: As stated

cc w/encl: See next page

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UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 12, 1995

Mr. Leon R. Eliason Chief Nuclear Officer & President-Nuclear Business Unit Public Service Electric and Gas Company Post Office Box 236 Hancocks Bridge, NJ 08038

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Sincerely,

Leonard N. Olshan, Senior Project Manager

Project Directorate I-2

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Docket Nos. 50-272 and 50-311

Enclosure: As stated

cc w/encl: See next page

Mr. Leon R. Eliason
Public Service Electric & Gas
Company

cc:

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REQUEST FOR ADDITIONAL INFORMATION

SALEM NUCLEAR GENERATING STATION, UNITS 1 AND 2

- 1. For the inspections performed at the expansion transition during 2R8 and 1R11, clarify if the percentages cited were the percentages of the total number of tubes in the steam generator or the number of tubes in Zone 4 (e.g., for steam generator 11 in 1R11, does the 39% imply that 39% of all the tubes in the steam generator were examined with the examinations concentrated in Zone 4 or does the 39% imply that 39% of the tube in Zone 4 were examined?).
- 2. It was indicated that 5 tubes have been plugged as a result of circumferential cracking. Please clarify that all tubes with circumferential indications were removed from service. Clarify the outages in which these indications were detected.
- 3. In your response, it was indicated that dented locations (specifically dented support plate locations) are susceptible to circumferential cracking and that augmented rotating pancake coil examinations have been performed for detecting circumferential cracking at dented tube support plates. Specify the inspections performed during the previous Salem Units 1 and 2 steam generator tube inspection outages.

It was indicated that dents greater than 5.0 volts will be inspected with an Appendix H qualified probe (Cecco 5 or plus point) during the next steam generator tube inspections. Provide the procedures used for sizing the dents. If the procedure is identical to the procedure for the voltage-based repair criteria, a detailed description is not necessary.

Future inspection plans for dented (> 5V) intersections concentrate at the lowest hot-leg tube support plates. A large dent at an upper tube support plate may be more significant in terms of corrosion susceptibility as a result of higher stresses than a small dent at a lower tube support plate even though the temperature is lower at the upper tube support plate. Given this, discuss the basis for the proposed sample strategy given that cracking depends on many factors including temperature and stress levels. The inspection plan for dented locations differs from Units 1 and 2. Discuss the reason for this difference.

4. Please provide the expansion criteria to be used for all locations susceptible to circumferential cracking.