

June 14, 2010

MEMORANDUM TO: Harold K. Chernoff, Chief
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

FROM: Richard B. Ennis, Senior Project Manager */ra/*
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNIT NO. 2,
DRAFT REQUEST FOR ADDITIONAL INFORMATION
(TAC NO. ME3884)

The attached draft request for information (RAI) was transmitted on June 14, 2010, to Mr. Jeff Keenan of PSEG Nuclear LLC (the licensee). This information was transmitted to facilitate an upcoming conference call in order to clarify the licensee's April 30, 2010, letter which submitted the results of the steam generator tube inspections performed at Salem Nuclear Generating Station (Salem), Unit No. 2, during refueling outage 2R17.

This memorandum and the attachment do not convey or represent an NRC staff position regarding the licensee's submittal.

Docket No. 50-311

Attachment: Draft RAI

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ACCESSION NO.: ML101660117

OFFICE	LPLI-2/PM
NAME	REnnis
DATE	6/14/10

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DRAFT REQUEST FOR ADDITIONAL INFORMATION
REGARDING STEAM GENERATOR TUBE INSPECTION REPORT
FOR REFUELING OUTAGE 2 R17
SALEM NUCLEAR GENERATING STATION, UNIT NO. 2
DOCKET NO. 50-311

By letter dated April 30, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML101250176), PSEG Nuclear LLC (the licensee) submitted the results of the steam generator (SG) tube inspections performed at Salem Nuclear Generating Station (Salem), Unit No. 2, during refueling outage 2R17 (fall 2009). This report was submitted in accordance with the requirements in Salem Unit 2 Technical Specification (TS) 6.9.1.10.

The Nuclear Regulatory Commission (NRC) staff has reviewed the information provided by the licensee and would like to discuss the following issues to clarify the submittal.

1. In order for the NRC staff to better understand the design of your replacement SGs and the information presented in your report, please provide the following:
 - a. Tubesheet thickness (with and without clad)
 - b. Material used for anti-vibration bars and dimensions
 - c. Tube support plate and anti-vibration bar thickness
 - d. Tube supplier
 - e. Radius of shortest radius U-bend
 - f. Tubesheet map
2. Please discuss the scope and results of any secondary side inspections.
3. You indicated that your condition monitoring limit for wear is 46%. Please confirm this number. If this number is correct, please discuss the plugging criteria used during your 2009 inspections given the growth rates observed during the first inspection. Please identify which tubes were plugged.
4. A few indications of wear were detected at the anti-vibration bar support/positioning device. Please discuss whether there is any operating experience with such a design and whether continued monitoring of these locations (even in plugged tubes) is necessary, since it appears that these structures support the anti-vibration bars (and may continue to interact with the tube due to the weight of the complex).
5. Your TSs still indicate that W^* may be applied to your replacement SGs and have reporting requirements related to implementation of W^* . Presumably, W^* was not implemented during the 2009 outage because there was no mention of it in your April 30, 2010, letter (as required per TS 6.9.1.10.h). Given that the technical basis for W^* relies on explosive expansion of the tubes into the tubesheet and that the explosive expansion process most likely results in different contact pressures between the tube and the tubesheet than the hydraulic expansion process used in your replacement SGs, please discuss any plans to remove W^* from your TSs. It appears that the criteria should not be applied to the replacement SGs (even though the TSs indicate it may be applied).