

OCT 10 2002

LRN-02-0348



United States Nuclear Regulatory Commission  
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**SALEM GENERATING STATIONS - UNIT 1 and 2  
FACILITY OPERATING LICENSE DPR-70 and DPR-75  
DOCKET NOS. 50-272 and 50-311**

**REQUEST FOR ADDITIONAL INFORMATION - RELIEF REQUEST SC-RR-A01**

By letter dated July 8, 2002, PSEG Nuclear LLC (PSEG) submitted the subject relief request for Nuclear Regulatory Commission (NRC) approval. The relief request, SC-RR-A01, was submitted for the use of Code Case N-533-1, *Alternative Requirements for VT-2 Visual Examination of Class 1, 2 and 3 Insulated Pressure Retaining Bolted Connections*.

Subsequent discussions with NRC staff on October 10, 2002 resulted in identifying information that had been inadvertently omitted from the relief request. This information has been added and the relief request is re-submitted in entirety.

Should you have any questions regarding this request, please contact Mr. Howard Berrick at 856-339-1862.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Salamon", with a long horizontal line extending to the right.

G. Salamon  
Manager – Nuclear Safety and Licensing

**Enclosure:**  
Relief Request SC-RR-A01

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**Relief Request: SC-RR-A01****Use of Code Case N-533-1**

NRC Approved (Yes or No): \_\_\_\_\_ Date: \_\_\_\_\_ Ref: \_\_\_\_\_

**Component Description**

Insulated, Pressure Retaining Bolted Connections on Class 1, 2, and 3 systems borted for the purpose of controlling reactivity.

**ASME Section XI Class 1, 2, and 3****Code Requirement**

Paragraph IWA-5242 of the 1995 Edition, including the 1996 Addenda of Section XI, requires in part that insulation shall be removed from pressure-retaining bolted connections for VT-2 visual examination of systems borted for the purpose of controlling reactivity.

Similarly, Paragraph IWA-5242 of the 1986 Edition (without Addenda) of Section XI requires in part, that, insulation shall be removed from pressure-retaining bolted connections for visual examination VT-2 of systems borted for the purpose of controlling reactivity.

**Basis for Relief**

Pursuant to 10 CFR 50.55a(a)(3)(i), relief is requested on the basis that the proposed alternative provides an acceptable level of quality and safety.

PSEG Nuclear, LLC requests relief to incorporate the alternate examination requirements of ASME Code Case N-533-1, titled 'Alternative Requirements, for VT-2 Visual Examination of Class 1, 2, and 3 Insulated Pressure Retaining Bolted Connections', for Salem Generating Station, Units 1 and 2.

**For Class 1 Systems:**

- Salem Generating Station, Unit 1 Technical Specification 3.4.9.1 does not allow pressurization of the Reactor Coolant System to nominal operating pressure without a heat up.
- Similarly, Salem Generating Station, Unit 2 Technical Specification 3.4.10.1 does not allow pressurization of the Reactor Coolant System to nominal operating pressure without a heat up.
- Re-installation of insulation requires exposing personnel to the safety hazards of higher radiation dose, additional personnel support, and elevated temperatures (550 degrees F) and a pressure of 2235 PSI, which constitute a heat stress environment.

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- The activities will be conducted at the end of the outage and will have the effect of extending the refueling outage durations by a minimum of 2 days.
- Boric acid leakage, leaves boric acid crystalline residue when evaporated, therefore it is not necessary to examine for boric acid leakage in conjunction with a pressure test.

**For Class 2 & 3 Systems:**

- Re-installation of insulation requires exposing personnel to the safety hazard at elevated temperatures, which includes a heat stress environment.
- Boric acid leakage, leaves boric acid crystalline residue when evaporated, therefore it is not necessary to examine for boric acid leakage in conjunction with a pressure test.

A similar relief was evaluated and previously granted for Salem Generating Station, Unit 2 for Insulated Pressure Retaining Bolted Connections on Class 1 systems boric acid for the purpose of controlling reactivity. REFERENCE: NRC Safety Evaluation for Relief From ASME Code on VT-2 Visual Inspection of Bolted Connections, Salem Nuclear Generating Station, Unit 2 (TAC No. M86246).

This relief will permit application of the alternative rules from Code Case N-533-1 for Unit 1, and extend the application of the alternative rules to Class 2 and 3 systems at Unit 2.

Based on the alternative requirements of Code Case N-533-1 and the approval of a similar Relief Request Salem Generating Station, Unit 2, there is reasonable assurance that structural integrity will be assured, and an acceptable level of quality and safety will be maintained during the Third Ten-Year Inspection Interval.

**Alternate Requirements**

PSEG Nuclear, LLC proposes to fully implement the alternative requirements of Code Case N-533-1. This case requires that as an alternative to the requirements of IWA-5254 (a) to remove insulation from Class 1, 2, and 3 pressure-retaining bolted connections to perform VT-2 visual examinations, the following requirements shall be met:

(a) A system pressure test and VT-2 visual examination shall be performed each refueling outage for Class 1 connections and each period for Class 2 and 3 connections without removal of insulation. **The affected insulated system shall have been at operating conditions for a minimum of 4 hours prior to commencement of the VT-2 visual examination.**

(b) The insulation shall be removed from the bolted connection, each refueling outage for Class 1 connections and each period for Class 2 and 3 connections, and a VT-2 visual examination shall be performed. The connection is not required to be pressurized. Any evidence of leakage shall be evaluated in accordance with IWA-5250.

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**Use of Code Case N-533-1**

**Applicability**

This Relief Request is applicable to the following:

Salem, Unit 1 - Third Ten-Year Inservice Inspection Interval.

Salem, Unit 2 - Second Ten-Year Inservice Inspection Interval.