

February 3, 2003

Mr. Harold W. Keiser
Chief Nuclear Officer & President
PSEG Nuclear LLC - X04
Post Office Box 236
Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNIT NO. 1, EVALUATION OF
RELIEF REQUEST S1-RR-A04 (TAC NO. MB6089)

Dear Mr. Keiser:

By letter dated July 8, 2002, as supplemented on December 19, 2002, PSEG Nuclear LLC (PSEG) submitted 12 requests for relief from Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) under the provisions of 10 CFR 50.55a(a)(3). The enclosed safety evaluation (SE) refers to one of the 12 relief requests. Specifically, the SE refers to relief request S1-RR-A04 regarding the use of ASME Code Case N-532-1, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission."

Based on its review, the U.S. Nuclear Regulatory Commission (NRC) staff concludes that PSEG's use of ASME Code Case N-532-1 proposed in Relief Request S1-RR-A04 provides an acceptable level of quality and safety, provided that the Owners Activity Report prepared following each refueling outage is provided to the NRC within 90 days of the completion of the outage as required by Code Case N-532-1. Therefore, the NRC staff authorizes use of the proposed alternative pursuant to 10 CFR 50.55a(a)(3)(i) for the third 10-year interval for Salem Nuclear Generating Station, Unit No. 1. Subject to the Code Case requirement to submit the Owners Activity Report within 90 days of the completion of each outage, use of Code Case N-532-1 as described in the enclosed SE is authorized until such time as the code case is published in a revision to Regulatory Guide (RG) 1.147 "Inservice Inspection Code Case Acceptability—ASME Section XI, Division 1". At that time, if PSEG intends to continue to implement this code case, the licensee must follow all provisions in Code Case N-532-1 with limitations issued in RG 1.147, if any.

H. Keiser

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The NRC staff's SE is enclosed. If you have any questions, please contact your Project Manager, Robert Fretz at 301-415-1324.

Sincerely,

/RA/

James W. Clifford, Chief, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-272

Enclosure: Safety Evaluation

cc w/encl: See next page

H. Keiser

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

THIRD 10-YEAR INSERVICE INSPECTION INTERVAL

REQUEST FOR RELIEF S1-RR-A04

SALEM NUCLEAR GENERATING STATION, UNIT NO. 1

PSEG NUCLEAR LLC

DOCKET NO. 50-272

1.0 INTRODUCTION

By letter dated July 8, 2002, as supplemented on December 19, 2002, PSEG Nuclear LLC, (PSEG or the licensee) submitted 12 requests for relief from Section XI of the ASME Code. This Nuclear Regulatory Commission (NRC) staff safety evaluation addresses relief request S1-RR-A04 regarding the use of American Society of Mechanical Engineers (ASME) Code Case N-532-1, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission," as an alternative to certain documentation and reporting requirements of IWA-4000 and IWA-6000. The staff will document its review of the other requests for relief contained in the July 8, 2002, letter under separate cover.

2.0 BACKGROUND

Inservice inspection (ISI) of the ASME Code Class 1, 2, and 3, components is to be performed in accordance with Section XI of the ASME Code and applicable addenda as required by 10 CFR 50.55a(g), except where specific relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i). As stated in 10 CFR 50.55a(a)(3), alternative to the requirements of paragraph (g) may be used, when authorized by the NRC, if the licensee demonstrates that: (i) the proposed alternatives would provide an acceptable level of quality and safety, or (ii) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety. An alternative has been previously authorized to use Code Case N-532 at Salem Nuclear Generating Station, Unit Nos. 1 and 2 (Salem), during the second 10-year ISI interval on the grounds that it provided an acceptable level of quality and safety.

Enclosure

3.0 EVALUATION

3.1 Licensee's Request (As stated)

Component Description

Repair and replacement documentation requirements and Inservice summary report preparation and submission.

ASME Section XI Class

1, 2, 3, MC, CC components, and their associated Component Supports.

Code Requirement

Articles IWA-4000 and IWA-6000 of the 1995 Edition, including the 1996 Addenda of Section XI.

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 the continued use of Code Case N-532-1 during the Third Inspection Interval. This case provides the alternatives to the current ASME Section XI repair/replacement activity documentation requirements, and regulatory reporting requirements related to Inservice Inspections. It is the intent of PSEG Nuclear LLC to periodically submit the Owner's Activity Report identified by Code Case N-532-1. The Owners Activity Report Form OAR-1 will be completed by PSEG Nuclear, LLC in accordance with Code Case N-532-1 and the OAR-1 will [be] submitted to the regulatory authority within 90 days of outage completion.

The cost effective alternatives afforded by this Code Case have been determined by the ASME to provide an acceptable alternative to existing requirements. The alternatives provide a substantial reduction in the overall administrative burden since each PSEG Nuclear LLC plant is required to meet the requirements of IWA-6000. Further, Code Case N-532-1 does not create any technical changes that would impact the existing ISI programs or the Technical Specifications at Salem (or Hope Creek), and does not introduce a condition that would compromise existing levels of safety or quality.

Relief has been previously granted (RR-AI) to utilize Code Case N-532 at Salem [Nuclear] Generating Station, Unit 1 & 2, as well as for Hope Creek Generating Station. Reference: NRC Safety Evaluation for Relief Request for the Implementation of Code Case N-532, TAC Nos.: M94067, M94068 & M94069, respectively.

Alternate Requirements

PSEG Nuclear, LLC proposes to implement the alternative requirements of Code Case N-532-1. An Owners Activity Report Form OAR-1 will be prepared and certified upon

completion of each refueling outage. The OAR-1 will [be] submitted to the regulatory authority within 90 days of outage completion.

Applicability

This Relief Request is applicable to:

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

3.2 NRC Staff's Evaluation

The use of form NIS-1, *Owner's Report for Inservice Inspections*, and form NIS-2, *Owner's Report for Repair and Replacements*, and submittal of the 90-day Summary Report are Code requirements. Alternatives contained in Code Case N-532-1, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission," allow the licensee to submit these records in an abstract format on form NIS-2A, *Repair/Replacement Certification Record*, and Form OAR-1, *Owner's Activity Report*, following the completion of an inspection period.

Based on review of the ASME Code, the NRC staff has determined that requirements associated with the documentation of inservice examinations and repairs and replacements and the subsequent submittal of Forms NIS-1 and NIS-2 within 90 days following a refueling outage are administrative only. Under Code Case N-532-1 the required forms have changed; however, the information required by the Code remains available for review. Code Case N-532-1 provides alternate documentation requirements for repair/replacement activities and inservice inspection summary which is not yet approved by reference in Regulatory Guide 1.147. The Code Case requires preparation of the Repair/Replacement Certification Record, Form NIS-2A, which shall be certified by an Authorized Nuclear Inservice Inspector (ANII). Furthermore, the *Owner's Activity Report*, Form OAR-1, shall be prepared and certified by an ANII upon completion of every refueling outage. The OAR-1 form shall contain an abstract of applicable examinations and tests; a list of items with flaws or relevant conditions that require evaluation to determine acceptability for continued service; and an abstract of repair, replacement, and corrective measures performed as a result of unacceptable flaws or relevant conditions. The Form OAR-1 that is prepared and certified upon completion of each refueling outage will be submitted to the NRC following the completion of the inspection period. The staff believes that the information provided in each Form OAR-1 can be used to assess the safety implications of inservice examinations performed during the outage. The staff, therefore, finds the use of Code Case N-532-1 to be acceptable provided that each Form OAR-1 is submitted to the NRC for evaluation within 90 days of the completion of each refueling outage as required by the ASME Code.

The alternative proposed by the licensee only affects documentation and reporting requirements specified in the Code. The staff has determined, therefore, that the alternate documentation requirement of Code Case N-532-1 will provide an acceptable level of quality and safety, provided Form OAR-1 is submitted to the NRC for review within 90 calendar days of the completion of each refueling outage.

4.0 CONCLUSION

The NRC staff has evaluated the licensee's request to implement alternatives to Code requirements contained in Code Case N-532-1. The staff has determined that implementation of this Code Case will continue to provide an acceptable level of quality and safety. The alternative contained in request for relief S1-RR-A04 is approved for use pursuant to 10 CFR 50.55a(a)(3)(i) for the third 10-year ISI interval at Salem 1 provided that all requirements of the Code Case are satisfied and Form OAR-1 is submitted to the NRC within 90 days of the completion of each refueling outage. Use of Code Case N-532-1 is authorized for the third 10-year inservice inspection interval at Salem Unit 1 until such time as the Code Case is published in a revision to Regulatory Guide (RG) 1.147. At that time, if the licensee intends to continue to implement this Code Case, the licensee must follow all provisions in Code Case N-532-1 with limitations issued in RG 1.147, if any.

Principal Contributor: G. Wunder

Date: February 3, 2003