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United States Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Gentlemen:

**INSERVICE INSPECTION PROGRAM  
RELIEF REQUEST RR-B10  
SALEM GENERATING STATION - UNIT 1  
FACILITY OPERATING LICENSES DPR-70  
DOCKET NOS. 50-272**

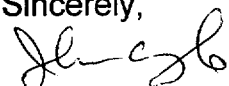
Pursuant to 10 CFR 50.55a(a)(3)(ii), PSEG Nuclear LLC requests relief from a requirement of Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code for the Salem Unit 1 Generating Station. Specifically, PSEG Nuclear is requesting relief from Code Case N-498-1 system pressure test hold time of four (4) hours for the insulated portions of the high-head Charging/Safety Injection system from the Boron Injection Tank to the Reactor Coolant System Cold Legs on the basis that compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

The attachment to this letter includes the proposed alternative and supporting justification for the relief. Based on the evaluation contained in the attachment, PSEG Nuclear has concluded that the proposed alternative provides an acceptable level of quality and safety. Accordingly, this proposal satisfies the requirements of 10 CFR 50.55a(a)(3)(ii).

PSEG Nuclear requests that the NRC approve this relief request by April 2001 in order to support the Salem Unit 2 outage currently scheduled to begin April 7, 2001.

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

Sincerely,

  
for G. Salamon  
Manager – Licensing

Attachment: ISI Relief Request No. RR-B10

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**PSEG NUCLEAR LLC  
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COMPONENT DESCRIPTION:

Insulated portions of the Nos. 11 & 12 Charging/Safety Injection(C/SI) system from the Boron Injection Tank (BIT) outlet to all Reactor Coolant System (RCS) cold leg piping.

ASME CODE CLASS:

ASME Section XI Class 1

ASME SECTION XI EXAMINATION REQUIREMENTS:

ASME Section XI Code Case N-498-1 was approved for ISI application in Regulatory Guide 1.147 and for use at Salem Generating Station by NRC letter dated March 17, 1995. Code Case N-498-1 allows a system pressure test to be performed at nominal operating pressure on Class 1 components as an alternative to the ten year system hydrostatic test required by ASME, Section XI Table IWB-2500-1, Category B-H. The system pressure test alternative provided by the Code Case requires a four-hour hold time at nominal operating pressure before performing the required visual examination for components that are partially insulated (approximately 10% of the piping). Since the components identified above are partially insulated, a four-hour hold time would be required for this test.

RELIEF REQUESTED:

Pursuant to 10CFR50.55a(a)(3)(ii), PSEG Nuclear requests relief from the Code Case N-498-1 requirements of a four hour hold time and at normal operating system pressure.

BASIS FOR RELIEF:

Pursuant to 10 CFR 50.55a(a)(3)(ii), PSEG Nuclear is requesting The basis for the relief request is that compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

As part of the Emergency Core Cooling System, the high-head C/SI system is not required to operate during normal plant operation. The system is, however, periodically tested in accordance with applicable requirements. These periodic tests are conducted to verify the operability of the applicable components.

The flow balancing test of the Nos. 11 & 12 C/SI pumps during refueling outages normally includes about sixty minutes of pump run time at a reduced pressure of 1,000 to 1,100 psig. The C/SI pumps are aligned to inject into the RCS. The

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determining factor on the length of time the pumps run (i.e., approximately one hour) is Pressurizer level.

To satisfy the hold time requirement of Code Case N-498-1, the test would require the C/SI pumps run in excess of 4 hours (hold time plus examination time). Running the C/SI pumps for this duration represents an undue hardship on the facility without a compensating increase in the level of quality and safety.

Operating the C/SI pump(s) for the period of time required to satisfy the four hour hold time in Mode 3, with the use of temporary jumpers from the inlet to outlet of the BIT, would require the system to be inoperable for greater than 4 hours, violating Technical Specification 3.5.2 L.C.O., and has the potential to inject water into the RCS.

Removal of the insulation from the subject components in order to use the ten minutes hold time allowed by Code Case N-498-1 would be equally burdensome. The costs associated with insulation removal and reinstallation, including resource diversion, radiation exposure and additional radwaste, are not justified by a compensating increase in the level of quality and safety.

As previously stated, the flow balancing test of the Nos. 11 and 12 C/SI pumps during refueling outages is at a pressure of 1,000 to 1,100 psig. While this pressure is less than the normal operating pressure (required by Code case N-498-1) it does provide reasonable assurance that a leak in the insulated areas will migrate through insulation within the required hold time.

The C/SI pumps are aligned to inject into the RCS. Performing a hydrostatic test of the C/SI High-Head system from the BIT outlet to all cold leg piping would be burdensome. This hydrostatic test would require installation of blind flanges, temporary pipe supports, and gagging (or removal) of relief valves. The time, costs and radiation exposure incurred in carrying out a hydrostatic test would result in a hardship without a compensating increase in the level of quality and safety.

**ALTERNATIVE EXAMINATION:**

The system pressure test described in Code Case N-498-1 will be conducted as required, except that a sixty minute hold time will be used in lieu of the four hour hold time requirement with a reduced pressure of 1,000 to 1,100 psig. The sixty minute hold period will allow time for potential leaks to migrate through the insulation without violating Technical Specifications.