



10CFR50.55a(g)(5)(iii)

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United States Nuclear Regulatory Commission  
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Washington, DC 20555

SALEM GENERATING STATION – UNIT 1 and UNIT 2  
FACILITY OPERATING LICENSE NOS. DPR 70 and DPR-75  
NRC DOCKET NOS. 50-272 and 50-311

Subject: **RE-SUBMITTAL OF INSERVICE TESTING PROGRAM RELIEF  
REQUESTS P01, V03 AND V04**

- References:
- (1) Letter from PSEG to NRC: "Salem Generating Station Inservice Testing Program, for the Third IST Interval, Salem Nuclear Generating Station, Units 1 and 2, Facility Operating Licenses DPR-70 and DPR-75, Docket Nos. 50-272 and 50-311," dated August 30, 1999
  - (2) Letter from NRC to PSEG: "Salem Nuclear Generating Station, Unit Nos. 1 and 2, Re: Inservice Testing Program – Third Interval Submittal," dated September 26, 2001
  - (3) Letter from PSEG to NRC: "Response to Request for Additional Information Regarding Relief Requests SI-RR-04-V01 and V02 Salem Nuclear Generating Station, Units 1, Facility Operating Licenses DPR-70, Docket Nos. 50-272," dated January 6, 2005.

In Reference 1, PSEG Nuclear LLC (PSEG) first submitted Relief Requests P01, V03 and V04 as part of the original Salem Inservice Testing Program (IST) Third Interval submittal to the NRC:

P01 was to allow the ability to analyze pump conditions rather than just repair or replace. This ability was originally in the old 1983 edition of the ASME Code, but was inadvertently removed in the 1988 edition.

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V-03 was to allow for major component testing, versus individual testing for certain skid-mounted, non-code components. Solenoid operated globe valves in the air supply lines to the diesel generator starting air motors are skid-mounted and were not provided with position indication to facilitate individual valve exercise and stroke time testing. As alternate testing, the stroke time and exercise testing of these valves is considered satisfactory by satisfactory testing of the major component they support (per NUREG 1482).

V-04 is related to the remote position indication for certain containment sump valves. It is impractical to open these containment compartments to verify remote position indication by direct observation every two years. As alternate testing they will be verified once every other refueling concurrent with Environmental Qualification inspections.

The NRC had previously granted the equivalent V04 relief request for the Salem IST Second Interval period.

In Reference 2, the NRC stated its understanding that the Salem IST Program Third Interval, and associated relief requests, would be resubmitted by PSEG. The NRC further stated that they would close out the original request (Reference 1) and would review the resubmitted Salem IST Program, with its associated relief requests, upon receipt.

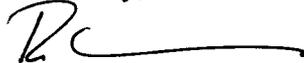
In Reference 3, the Salem IST Program, Third Interval, was subsequently resubmitted, including Relief Requests P-01, V-03 and V-04, as part of the RAI response submittal.

However, since the relief requests were included as part of the larger program document, they were apparently not reviewed; in subsequent discussions the NRC indicated that relief requests should be made as separate submittals.

Consequently, pursuant to 10CFR50.55a(g)(5)(iii), this letter re-submits the relief requests associated with the Salem IST Program Third Interval, for NRC approval (Attachment 1 to this letter).

If you have any questions or require additional information, please do not hesitate to contact Mr. Jeff Kennan at (856) 339-5429.

Sincerely,



Robert C. Braun  
Site Vice President  
Salem Generating Station

Attachments: 1 (IST Relief Requests P01, V03 and V04)

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**SALEM GENERATING STATION  
IST PUMP RELIEF REQUEST P01**

**COMPONENTS:** ASME Class 2 and 3 Pumps

**CLASS:** ASME Section XI Class 2 and 3

**ASME TEST REQUIREMENTS:**

OMa – 1988, Part 6, Paragraph 6.1 states, in part – If deviations fall within the required action range of Table 3, the pump shall be declared inoperable until the cause of the deviation has been determined and the condition corrected.

**BASIS FOR RELIEF:**

The 1983 ASME Section XI Code, subsection IWP-3230(c) stated that,

“Corrective actions shall be either replacement or repair per IWP-3111, or shall be an analysis to demonstrate that the condition does not impair pump operability and that the pump will fulfill its function. A new set of reference values shall be established after such analysis.”

The OMc – 1994 Addenda (ISTB 6.2.2) and the OM 1995 Edition (ISTB 6.2.2) both state that,

“If the measured test parameter values fall within the required action range of Table 5.2.1-1, Table 5.2.2-1, or Table 5.2.3-1, as applicable, the pump shall be declared inoperable until either the cause of the deviation has been determined and the condition is corrected, or an analysis of the pump is performed and new reference values are established in accordance with ISTB 4.6.”

The Code applicable for the second interval IST Program and the latest issued Code both provide for analysis of pump test data in lieu of repair or replacement of the pump if the test parameters fall within the required action range. The OMa Code-1988 Edition did not include such provisions. Communications with members of the OM Committee indicate that this was an oversight and that it was never intended to delete the ability to analyze the test data and determine if the pump is still capable of performing its intended safety function.

**ALTERNATIVE TESTING:**

Should pump test parameters fall within the required action range of Table 3 (OMa Code 1988 Edition), then the OM Code 1995 Edition, subsection ISTB

6.2.2 will be utilized. Since subsection ISTB 4.6 in the 1995 Code Edition references ISTB 6.2.2, subsection ISTB 4.6 from the OM Code 1995 Edition will also be applied.

**SALEM GENERATING STATION  
(NON-CODE) VALVE RELIEF REQUEST V03**

**SYSTEM:** Diesel Starting Air – Salem 1 and 2

**COMPONENTS:** 11DA13A, 13B, & 13C                      21DA13A, 13B, & 13C  
12DA13A, 13B, & 13C                      22DA13A, 13B, & 13C  
11DA14A, 14B, & 14C                      21DA14A, 14B, & 14C  
12DA14A, 14B, & 14C                      22DA14A, 14B, & 14C

**FUNCTION:**

These solenoid operated globe valves are located in the air supply lines to the diesel generator starting air motors from the starting air receivers and are skid-mounted. These valves perform an active safety function in the open position. The valves must be capable of opening when the associated engine receives a start signal to provide a flow path for starting air to the engine.

**CATEGORY:** B

**CLASS:** NONE

**TEST REQUIREMENTS:**

- (1) The stroke time for all power operated valves shall be measured in accordance with the requirements of Part 10-4.2.1.4.
- (2) Stroke times for power-operated valves shall be evaluated and corrective action taken in accordance with Part 10-4.2.1.9.

**BASIS FOR RELIEF:**

These valves are maintained in the closed position and are not provided with position indication to facilitate individual valve exercise and stroke time testing. There are four (4) solenoid valves per generator, which are exercised together during monthly diesel generator start testing. On a quarterly basis the diesel generator is started from one starting air bank to demonstrate design capability of the diesel to start using a pair of starter motors. Stroke time and exercise testing of these solenoid valves is considered satisfactory if the diesel achieves Technical Specification voltage and frequency in  $\leq 13$  seconds during monthly diesel testing when the diesel is started on a single air bank. Individual valve stroke timing is not possible during the diesel start process since this skid-mounted system was not designed to include features for inservice testing. NUREG 1482, Revision 0, Section 3.4 identifies that for skid-mounted

components testing of the major component is an acceptable means for verifying component subassembly operational readiness.

**ALTERNATE TESTING:**

Quarterly open stroke time and exercise testing shall be considered satisfactory if the diesel achieves Technical Specification voltage and frequency in  $\leq 13$  seconds when started from one air bank during monthly diesel testing per Technical Specification 4.8.1.1.2.

**SALEM GENERATING STATION  
IST VALVE RELIEF REQUEST V04**

**SYSTEM:** ECCS – Salem 1 and 2

**COMPONENTS:** 11SJ44, 12SJ44  
21SJ44, 22SJ44

**FUNCTION:**

These motor operated valves are located in the supply lines from the containment sump to the respective RHR pump suction. The valves perform an active safety function in the open position. The valves must be capable of opening to align the containment sump to the ECCS subsystems during the recirculation phase of emergency core cooling. The valves perform a passive safety function in the closed position to properly align ECCS subsystems to the RWST during the injection phase of emergency core cooling, and to prevent the RWST inventory from back flowing to the containment sump.

**CATEGORY:** B

**CLASS:** 2

**TEST REQUIREMENTS:**

Position Indication - Valves with remote position indicators shall be observed at least once every 2 years, in accordance with the requirements of Part 10-4.1.

**BASIS FOR RELIEF:**

These valves are located in separate compartments in the containment. The compartments are accessible from outside the containment through four-foot diameter manways which must be unbolted and manually removed for entry. These manways are sealed by gaskets on the flange surface to which they are bolted. The proper sealing of this surface is necessary to ensure containment integrity. If the valves are verified for proper remote position indication (RPI) every two years, hatch removal would be required for RPI verification only. In order to minimize the potential for damage to flange surfaces and gaskets, the valves should be verified for RPI accuracy when other scheduled maintenance/inspection activities are performed. It is impractical to open these compartments to verify remote position indication by direct observation every two years.

**ALTERNATE TESTING:**

Remote position indication will be verified once every other refueling concurrent with Environmental Qualification inspections, or at any other time the manways are removed (ref. Maintenance Procedure SC.MD-EU.ZZ-0006(Q)), but in no case more often than once every two years. This alternate testing was previously approved in NRC Safety Evaluations dated October 9, 1992 (TAC Nos. M74790 and M74791) and April 15, 1994 (TAC Nos. M88144 and M88145).

There has been no change in the field to invalidate the above basis for relief from the Second to the Third IST interval.