



LR-N12-0043

February 7, 2012

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Salem Generating Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-70 and DPR-75
NRC Docket Nos. 50-272 and 50-311

Subject: IST Relief Request to Implement OMN-18 for the Fourth Ten-Year Inservice Testing Interval for Salem Units 1 and 2

In accordance with 10 CFR 50.55a, "Codes and standards," paragraph (a)(3), PSEG Nuclear, LLC (PSEG) hereby requests NRC approval for a proposed alternative to requirements associated with the In-Service Testing Program for Salem Units 1 and 2. The attachment identifies the affected components, applicable code requirements, reasons for the request, proposed alternative, basis for use and duration.

The proposed alternative would be implemented during the fourth ten-year interval. PSEG requests approval of this request by February 7, 2013.

There are no regulatory commitments contained in this submittal. If you have any questions or require additional information, please contact Lee Marabella at (856) 339-1208.

Respectfully,

A handwritten signature in black ink, appearing to read "Paul R. Duke". The signature is fluid and cursive, with a large loop at the end.

Paul R. Duke
Manager, Licensing

Attachments: 10 CFR 50.55a Request Number P-03

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cc: Regional Administrator – NRC Region 1
NRC Senior Resident Inspector – Salem
NRC Project Manager
NJBNE
Salem Commitment Coordinator
Corporate Commitment Coordinator

10 CFR 50.55a Request Number P-03
Proposed Alternative
In Accordance with 10 CFR 50.55a(a)(3)(i):
Alternative Provides Acceptable Level of Quality and Safety

1. ASME Code Component(s) Affected

Pump	Description	Class	Category	Unit
S1CVC-1CVE4	11 Boric Acid Transfer Pump	3	Group A	1
S1CVC-1CVE5	12 Boric Acid Transfer Pump	3	Group A	1
S2CVC-2CVE4	21 Boric Acid Transfer Pump	3	Group A	2
S2CVC-2CVE5	22 Boric Acid Transfer Pump	3	Group A	2
S1CC -1CCE2	11 Component Cooling Pump	3	Group A	1
S1CC -1CCE4	12 Component Cooling Pump	3	Group A	1
S1CC -1CCE3	13 Component Cooling Pump	3	Group A	1
S2CC -2CCE2	21 Component Cooling Pump	3	Group A	2
S2CC -2CCE4	22 Component Cooling Pump	3	Group A	2
S2CC -2CCE3	23 Component Cooling Pump	3	Group A	2
S1CH -1CHE5	11 Chilled Water Pump	3	Group A	1
S1CH -1CHE6	12 Chilled Water Pump	3	Group A	1
S2CH -2CHE6	21 Chilled Water Pump	3	Group A	2
S2CH -2CHE7	22 Chilled Water Pump	3	Group A	2
S1SF -1SFE5	11 Spent Fuel Cooling Pump	3	Group A	1
S1SF -1SFE6	12 Spent Fuel Cooling Pump	3	Group A	1
S2SF -2SFE5	21 Spent Fuel Cooling Pump	3	Group A	2
S2SF -2SFE6	22 Spent Fuel Cooling Pump	3	Group A	2

2. Applicable Code Edition and Addenda

ASME OM Code-2001, with Addenda through OMB-2003

3. Applicable Code Requirements

Table ISTB-3400-1, "Inservice Test Frequency"

Table ISTB-3500-1, "Required Instrument Accuracy"

Table ISTB-5100-1, "Centrifugal Pump Test Acceptance Criteria"

ISTB-5123, "Comprehensive Test Procedure" – for centrifugal pumps (except vertical line shaft)

4. Reason for Request

Pursuant to 10 CFR 50.55a, "Codes and Standards," paragraph (a)(3), relief is requested from the requirements of ASME OM Code ISTB-5123, Table ISTB-3400-1 and Table ISTB-5100-1. The basis for the relief request is that the proposed alternative would provide an acceptable level of quality and safety.

The ASME OM Code Committee has approved Code Case OMN-18, "Alternative Testing Requirements for Pumps Tested Quarterly within +/- 20% of Design Flow," which allows owners to perform a Group A test in lieu of the Comprehensive Pump Test (CPT) if the Group A test is conducted at +/- 20% of the design flow rate and uses pressure instruments that meet the CPT accuracy requirements (+/- 1/2%). This Code Case was not reviewed for approval in Regulatory Guide 1.192, "Operation and Maintenance Code Case Acceptability, ASME OM Code", June 2003.

The basis for this change is that a quarterly Group A pump test, performed at the CPT flow rate provides more consistent data for trending than a Group A test in conjunction with a biennial CPT. The increased requirements imposed by the proposed alternative on the parameters to be monitored during every quarterly pump test and the more accurate instruments that must consistently be used during quarterly testing of pumps classified as Group A, allow PSEG to perform better trending of pump performance data due to the more consistent requirements for each of the quarterly tests.

Due to the increased requirements on the parameters imposed by the proposed alternative during all quarterly tests there is no added value in performing the biennial Comprehensive Test.

5. Proposed Alternative and Basis for Use

PSEG proposes that in lieu of the CPT requirements of Table ISTB-3400-1, Group A tests will be performed quarterly within ± 20 percent of the pump design flow rate, with pressure measuring instrumentation meeting the (+/- 1/2%) instrument accuracy requirements of Table ISTB-3500-1 specified for the biennial Comprehensive Test. In addition, PSEG has elected to restrict the upper limit for differential pressure to 6%, which is more conservative than the 10% upper limit established in Table ISTB-5100-1 for Group A tests as this limit provides needed margin while maintaining an acceptable level of quality and safety, and is consistent with the limit authorized by NRC in similar relief requests. This proposed change to the acceptance range is more restrictive than specified in the current Code Case (OMN-18).

Vibration testing will continue to be performed under the proposed modified Group A test and the acceptance criteria for vibration will be the same as required for Group A tests as shown in Table ISTB-5100-1.

Using the provisions of this relief request as an alternative to those specified in ISTB-5123 will provide adequate indication of pump performance, permit consistent detection of component degradation, and continue to provide an acceptable level of quality and safety.

Therefore, pursuant to 10 CFR 50.55a(a)(3)(i), PSEG requests relief from the specific ISTB requirements identified in this request.

6. Duration of Proposed Alternative

The proposed alternative will be used for the remainder of the Fourth Ten-Year Inservice Testing Interval for Salem Units 1 and 2.

7. Precedents

Similar requests have been authorized at other facilities including;

- PERRY NUCLEAR POWER PLANT, UNIT NO.1 -RELIEF REQUEST PR-3 FOR THIRD 10-YEAR PUMP AND VALVE INSERVICE TESTING PROGRAM (TAC NO. ME0820) (ML092640690)
- ST. LUCIE UNIT NOS. 1 AND 2 -RELIEF FROM THE REQUIREMENTS OF THE ASME CODE, RELIEF REQUEST NO.9 (TAC NOS. ME5190 AND ME5191) (ML11143A077)
- SOUTH TEXAS PROJECT, UNITS 1 AND 2 -RELIEF REQUEST NOS. VRR-01, PRR-01, PRR-02, AND PRR-03 FOR THE THIRD 10-YEAR INSERVICE TESTING PROGRAM INTERVAL (TAC NOS. ME3515, ME3516, ME3517, ME3518, ME3519, ME3520, ME3521, AND ME3522) (ML102150077)

8. References

ASME OM Code, 2001 Edition with Addenda through Omb-2003, Subsection ISTB

Code case OMN-18, "Alternative Testing Requirements for Pumps Tested Quarterly within \pm 20% of Design Flow"