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

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### REQUEST FOR CHANGE TO TECHNICAL SPECIFICATIONS CONTAINMENT ISOLATION VALVES SALEM GENERATING STATION, UNIT NOS. 1 AND 2 FACILITY OPERATING LICENSES DPR-70 AND DPR-75 DOCKET NOS. 50-272 AND 50-311

In accordance with the requirements of 10 CFR 50.90, PSEG Nuclear LLC (PSEG) hereby transmits a request for amendment of the Technical Specifications (TS) for Salem Generating Station, Unit Nos. 1 and 2. Pursuant to the requirements of 10 CFR 50.91(b)(1), a copy of this request for amendment has been sent to the State of New Jersey.

The proposed change will eliminate the Surveillance Requirement for containment isolation valves that are being returned to service after maintenance, repair or replacement work to be consistent with the requirements in NUREG-1431, "Standard Technical Specifications, Westinghouse Plants." The proposed change will minimize unnecessary testing and plant transients while continuing to assure that the necessary quality of systems and components is maintained.

Attachment 1 provides an evaluation of the proposed changes. Attachment 2 provides the existing TS pages marked up to show the proposed changes. Attachment 3 provides a regulatory commitment to put administrative controls in place to implement the recommendations from Section 4.4.2 of NUREG-1482, Revision 1, "Guidelines for Inservice Testing at Nuclear Power Plants," upon approval of this request.

PSEG does not have specific schedule needs for the proposed changes and processing can be pursued in accordance with the normal NRC review schedule for this type of request. PSEG requests implementation within 60 days of receipt of the approved amendment.

If you have any questions concerning this request, please contact Mr. Paul Duke at (856) 339-1466.



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I declare under penalty of perjury that the foregoing is true and correct.

9/26/15 (Date) Executed on \_

Sincerely,

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Thomas P. Joyce Site Vice President Salem Generating Station

Attachments (3)

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### SALEM GENERATING STATION – UNIT 1 AND UNIT 2 FACILITY OPERATING LICENSES NOS. DPR-70 AND DPR-75 DOCKET NO. 50-272 AND 50-311

# REQUEST FOR CHANGE TO TECHNICAL SPECIFICATIONS CONTAINMENT ISOLATION VALVES

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# 1. DESCRIPTION

The purpose of this amendment is to eliminate Salem Unit 1 Surveillance Requirement (SR) 4.6.3.1.1 and Salem Unit 2 Surveillance Requirement 4.6.3.1 for containment isolation valves being returned to service after maintenance, repair or replacement work.

The proposed change is consistent with the requirements in NUREG-1431, "Standard Technical Specifications, Westinghouse Plants." The proposed change will minimize unnecessary testing and plant transients as a result of maintenance, repair or replacement work on containment isolation valves while Salem is in Modes 1, 2, 3 or 4 while continuing to assure that the necessary quality of systems and components is maintained.

# 2. PROPOSED CHANGE

Salem Unit 1 SR 4.6.3.1.1 and Salem Unit 2 SR 4.6.3.1 would be deleted by the proposed change. The proposed change is shown on the attached proposed changed pages (Attachment 2).

# 3. BACKGROUND

Salem Unit 1 SR 4.6.3.1.1 and Salem Unit 2 SR 4.6.3.1 require that each containment isolation valve be demonstrated OPERABLE prior to returning the valve to service after maintenance, repair or replacement work is performed on the valve or its associated actuator, control or power circuit by performance of a cycling test and verification of isolation time. Performance of the SR typically requires the associated system to be removed from service. In some instances, closure of containment isolation valves cannot be performed safely without the removal of the plant from service.

Salem Unit 1 SR 4.6.3.1.4 and Salem Unit 2 SR 4.6.3.4 require that the isolation time of each power operated or automatic containment isolation valve be determined to be within its limit when tested pursuant to Specification 4.0.5. Specification 4.0.5 includes requirements for inservice testing of pumps and valves in accordance with Section XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code.

The NRC staff provided guidelines and recommendations to licensees for developing and implementing programs for the inservice testing of pumps and valves at commercial nuclear power plants in NUREG-1482, Revision 1, "Guidelines for Inservice Testing at Nuclear Power Plants," (Reference 1). Section 4.4.2 of Reference 1 discusses post-maintenance testing after valve stem packing adjustments and backseating of valves performed during power operation in order to stop stem packing leaks on valves that must remain in position for operations to continue. The NRC staff concluded that if a required valve stroke test is not practical in the current plant mode, the licensee must, at a minimum, justify by analysis that (1) the packing adjustment is within manufacturer-specified torque limits for the existing packing configuration, (2) the backseating does not deform the valve stem, and (3) the performance parameters of the valve are not adversely affected. In addition, the licensee must perform a confirmatory test at the first available opportunity when plant conditions allow testing. Packing adjustments beyond the manufacturer's limits may not be performed without (1) an engineering analysis showing that the performance parameters of the valve are not adversely affected, and (2) input from the manufacturer, unless tests can be performed after adjustments.

The effect of Salem Unit 1 SR 4.6.3.1.1 and Salem Unit 2 SR 4.6.3.1 is to require valve stroke testing after repairs, such as valve packing adjustments, even when it can be demonstrated that the repairs would not adversely affect valve performance parameters. For containment isolation valves that are required to remain open to support power operation, Salem Unit 1 SR 4.6.3.1.1 and Salem Unit 2 SR 4.6.3.1 result in plant transients to perform testing that was found to be unnecessary by guidance provided in Reference 1.

### 4. TECHNICAL ANALYSIS

Currently, Salem Unit 1 SR 4.6.3.1.1 and Salem Unit 2 SR 4.6.3.1 would require post-maintenance stroke testing, even when it can be demonstrated by engineering evaluation in accordance with Reference 1 that the repairs would not adversely affect valve performance parameters. Post-maintenance testing ensures that equipment meets all applicable SRs before restoring the equipment to operable status. When it can be conclusively demonstrated that valve performance parameters are not adversely affected, the performance of the SR is not necessary and should not be required.

Elimination of Salem Unit 1 SR 4.6.3.1.1 and Salem Unit 2 SR 4.6.3.1 would not adversely affect the ability of the containment isolation valves to perform their required function. SR 4.0.1 states that Surveillance Requirements shall be met during the OPERATIONAL MODES or other specified conditions in the Applicability for individual Limiting Conditions for Operation, unless otherwise stated in the Surveillance Requirement. For maintenance activities that could adversely affect isolation time, SR 4.0.1 would still require the isolation time to be determined to be within limits in accordance with Salem Unit 1 SR 4.6.3.1.4 and Salem Unit 2 SR 4.6.3.4 before the affected valve could be restored to OPERABLE status.

The proposed change is consistent with the Surveillance Requirements for containment isolation valves in NUREG-1431, "Standard Technical Specifications, Westinghouse Plants."

## 5. REGULATORY SAFETY ANALYSIS

### 5.1 No Significant Hazards Consideration

PSEG Nuclear LLC (PSEG) has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment" as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

#### Response: No.

The proposed amendment would revise the Technical Specification (TS) Surveillance Requirements (SRs) for containment isolation valves, consistent with NUREG-1431, "Standard Technical Specifications, Westinghouse Plants." SRs are not initiators to any accident previously evaluated. Consequently, the probability of an accident previously evaluated is not significantly increased. The equipment specified in the Limiting Conditions for Operation is still required to be operable and capable of performing the accident mitigation functions assumed in the accident analysis. By performing the analysis, valve operability is maintained. This equipment will continue to be tested in a manner and at a frequency to give confidence that the equipment can perform its intended safety function. As a result, the proposed SR changes do not significantly affect the consequences of any accident previously evaluated.

Therefore, the proposed changes do not involve a significant increase in the probability or radiological consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

#### Response: No.

The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated in the Updated Final Safety Analysis Report. No new accident scenarios, failure mechanisms, or limiting single failures are introduced as a result of the proposed changes. Specifically, no new hardware is being added to the plant as part of the proposed change, no existing equipment is being modified, and no significant changes in operations are being introduced

(only certain post-maintenance testing is eliminated leaving operation functions unchanged).

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed changes will not alter any assumptions, initial conditions, or results of any accident analyses. The proposed changes do not affect the operational limits or the physical design of the containment isolation valves. The containment isolation valves will remain capable of performing their design function. Unnecessary testing and associated plant transients will be minimized by the proposed changes. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, PSEG concludes that the proposed changes present no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

The following regulatory requirements are applicable:

10 CFR 50.36 states that surveillance requirements shall be included in Technical Specifications. The revised SRs continue to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the Limiting Conditions for Operation will be met.

10 CFR 50.55a(f) specifies inservice testing requirements for pumps and valves that are classified as ASME Code Class 1, Class 2, Class 3, Class MC and Class CC. The revised SRs continue to assure inservice testing of containment isolation valves is performed in accordance with the applicable requirements.

In conclusion, based on the considerations discussed above:

 There is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner;

- 2) Such activities will be conducted in compliance with the Commission's regulations; and
- 3) Issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

# 6. ENVIRONMENTAL CONSIDERATION

PSEG has determined the proposed amendment relates to changes in a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or relates to changes in an inspection or a surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), an environmental impact statement or environmental assessment of the proposed change is not required.

# 7. REFERENCES

- 1. NUREG-1482, Revision 1, "Guidelines for Inservice Testing at Nuclear Power Plants"
- 2. NUREG-1431, "Standard Technical Specifications, Westinghouse Plants"

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# **TECHNICAL SPECIFICATION PAGES WITH PROPOSED CHANGES**

The following Technical Specifications for Facility Operating License DPR-70 are affected by this change request:

Technical Specification	Page
4.6.3.1.1	3/4 6-12
The following Technical Specifications for F affected by this change request:	acility Operating License DPR-75 are

Technical Specification	<u>Page</u>
4.6.3.1	3/4 6-14

#### CONTAINMENT SYSTEMS

#### 3/4.6.3 CONTAINMENT ISOLATION VALVES

#### LIMITING CONDITION FOR OPERATION

3.6.3.1 Each containment isolation valve shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

NOTE

Penetration flow paths, except for the containment purge valves, may be unisolated intermittently under administrative controls.

With one or more of the isolation valve(s) inoperable, maintain at least one isolation valve OPERABLE in each affected penetration that is open and either:

- Restore the inoperable valve(s) to OPERABLE status within 4 hours, or
- b. Isolate each affected penetration within 4 hours by use of at least one deactivated automatic valve secured in the isolation position, or
- c. Isolate each affected penetration within 4 hours by use of at least one closed manual valve or blind flange; or
- d. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

4.6.3.1.1 Each containment isolation valve shall be demonstrated OPERABLE prior to returning the valve to service after maintenance, repair or replacement work is performed on the valve or its associated actuator, control or power circuit by performance of a cycling test and verification of isolation time.

### Deleted

SALEM - UNIT 1

3/4 6-12

Amendment No.235

#### CONTAINMENT SYSTEMS

#### 3/4.6.3 CONTAINMENT ISOLATION VALVES

#### LIMITING CONDITION FOR OPERATION

3.6.3 Each containment isolation valve shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

NOTE Penetration flow paths, except for the containment purge valves, may be unisolated intermittently under administrative controls.

With one or more of the containment isolation valve(s) inoperable, maintain at least one isolation valve OPERABLE in each affected penetration that is open and either:

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- d. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

4.6.3.1 Each containment isolation valve shall be demonstrated OPERABLE prior to returning the valve to service after maintenance, repair or replacement work is performed on the valve or its associated actuator, control or power circuit by performance of a cycling test and verification of isolation time.

# Deleted

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# LIST OF REGULATORY COMMITMENTS

The following table identifies those actions committed to by PSEG in this document. Any other statements in this submittal are provided for information only purposes and are not considered to be regulatory commitments. Please direct questions regarding these commitments to Mr. Paul Duke at (856) 339-1466.

Regulatory Commitment	Due Date/Event
PSEG will put administrative controls in place to implement the recommendations from Section 4.4.2 of NUREG-1482, Revision 1, "Guidelines for Inservice Testing at Nuclear	Concurrent with implementation of the amendment
Power Plants."	