Public Service
Electric and Gas
Company

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LR-N95016
LCR 94-28

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

Gentlemen:

REQUEST FOR AMENDMENT
CONTAINMENT PRESSURE/VACUUM RELIEF 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 10CFR50.90, Public Service Electric and Gas Company (PSE&G) hereby transmits a request for amendment of Facility Operating Licenses DPR-70 and DPR-75 for Salem Generating Station (SGS) Unit Nos. 1 and 2. Pursuant to the requirements of 10CFR50.91(b)(1), a copy of this request for amendment has been sent to the State of New Jersey.

The proposed changes would delete the quarterly leak rate test for the containment pressure-vacuum relief valves, which is presently required because of the valves' resilient seat material. The valves would remain in the 10CFR50 Appendix J, Type C leak rate test program. This change is based on replacement of the resilient valve seat material with a hard seat (metal to metal) design. The requested changes are similar to those approved for Washington Public Power Supply System Unit No. 2 (Amendment 124, dated June 15, 1994).

Attachment 1 includes a description and justification for the proposed changes, including PSE&G's Determination of No Significant Hazards Consideration. Attachment 2 contains the Technical Specification pages revised with pen and ink changes.

The design modifications associated with the proposed changes require a plant outage to implement. PSE&G therefore requests an

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amendment requiring implementation upon restart following the 12th refueling outage for SGS Unit 1 (Fall 1995) and the 9th refueling outage for SGS Unit 2 (Spring 1996).

Sincerely,

Affidavit
Attachments (2)
C Mr. T. T. Martin, Administrator - Region I
U. S. Nuclear Regulatory Commission
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King of Prussia, PA 19406

Mr. Leonard N. Olshan
Licensing Project Manager - Salem
U. S. Nuclear Regulatory Commission
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Mr. C. Marschall (S09)
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Mr. K. Tosch, Manager, IV
NJ Department of Environmental Protection
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CN 415
Trenton, NJ 08625

REF: LR-N95016

STATE OF NEW JERSEY)
) SS.
COUNTY OF SALEM)

J. J. Hagan, being duly sworn according to law deposes and says:

I am Vice President - Nuclear Operations of Public Service Electric and Gas Company, and as such, I find the matters set forth in the above referenced letter, concerning the Salem Generating Station, Unit Nos. 1 and 2, are true to the best of my knowledge, information and belief.

J. J. Hagan

Subscribed and Sworn to before me
this 18th day of April, 1995

Kimberly Jo Brown
Notary Public of New Jersey

My Commission expires on KIMBERLY JO BROWN
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires April 21, 1998

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ATTACHMENT 1

I. DESCRIPTION OF THE PROPOSED CHANGES

Revise Salem Generating Station (SGS) Unit No. 1 and 2 Technical Specification (TS) to delete Surveillance Requirement (SR) 4.6.3.1.6.b (Unit 1) and SR 4.6.3.6.b (Unit 2), which require a quarterly pressure drop test to identify excessive degradation of the resilient valve seals for the containment pressure-vacuum relief isolation valves.

II. REASON FOR THE PROPOSED CHANGES

The resilient seating material in the containment pressure-vacuum relief valves is subject to wear and consequent reduction in leaktightness. The valves are therefore pressure tested on a quarterly basis, and have a history of frequent maintenance. Replacing the resilient seats with hard seated (metal to metal) material will improve the leaktightness and durability of the valves. This would support elimination of the quarterly surveillance test and reduce the need for corrective maintenance on the valves.

III. JUSTIFICATION FOR THE PROPOSED CHANGES

NRC Branch Technical Position (BTP) CSB 6-4, "Containment Purging During Normal Plant Operations" contains NRC acceptance criteria for purge system design and operation. SGS compliance with these criteria is documented in UFSAR Section 9.4.4.3.2. The proposed changes do not adversely impact SGS compliance with the Branch Technical Position. The flow characteristics of the replacement valves and the existing valves are the same. The containment isolation function of the system is not affected by the proposed change.

Operating experience with butterfly valves used in containment vent and purge systems has shown that resilient valve seat materials are subject to deterioration and loss of leaktightness (ref: NRC I&E Circular 77-11, September 6, 1977 and NRC Generic Issue B-20, "Containment Leakage Due to Seal Degradation"). For this reason, SGS Technical Specifications require augmented (quarterly) pressure testing of the pressure/vacuum relief valves to determine their leak rate and identify potential degradation. Upon replacement of the pressure/vacuum relief valves, quarterly testing would no longer be warranted because the replacement valves will use metal to metal seating surfaces instead of resilient material. Valve leakage will continue to be subject to the criteria of 10 CFR 50, Appendix J Type C test program, consistent with Technical Specification 3/4.6.1.2.

IV. **DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION**

The proposed changes for Salem Unit Nos. 1 and 2:

(1) do not involve a significant increase in the probability or consequences of an accident previously evaluated.

The containment pressure/vacuum relief valves are normally closed, and are used under administrative control to maintain containment internal pressure within -1.5 psig and +0.3 psig, as required by SGS Technical Specifications. The pressure/vacuum relief valves are relied upon for containment isolation and automatically close on high containment pressure or high containment atmosphere radioactivity. The pressure/vacuum relief system does not affect the probability of any previously evaluated accident.

The containment isolation function of the pressure/vacuum relief valves limits the consequences of a radiological release inside containment (i.e., Loss of Coolant Accident). The proposed changes to eliminate quarterly pressure drop (leak rate) testing would not increase the consequences of any previously evaluated accident. The valve flow characteristics and closure time requirements are not affected. The valves will continue to be subject to the Type C leak rate test criteria of 10 CFR 50, Appendix J. The deletion of the augmented quarterly test requirement is justified by replacement of the resilient valve seat material (which has a history of degradation and loss of leaktightness) with a metal to metal seating design.

(2) do not create the possibility of a new or different kind of accident from any accident previously evaluated.

Eliminating quarterly leak rate testing based on improved valve design would not result in any new or different kind of accident. The valves would continue to perform the containment isolation function consistent with the plant safety analyses, and would not adversely affect the initiation or progression of any accident sequence.

3) do not involve a significant reduction in a margin of safety.

This proposal involves replacement of the existing pressure/vacuum relief valves, which have resilient seating material, with valves using a hard seat (metal to metal design). Based on the improved design and operating experience of the replacement valves, augmented quarterly leak rate testing is no longer necessary or appropriate to verify leaktightness of the valves. Periodic leak rate testing will continue to be performed in accordance with 10 CFR 50, Appendix J. The pressure/vacuum relief valves will continue to maintain their containment isolation capability such that no margin of safety is affected by

the proposed changes.

Therefore, PSE&G has concluded that the changes proposed herein do not involve a Significant Hazards Consideration.

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ATTACHMENT 2