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Electric and Gas
Company

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SEP 28 1995

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LCR 95-23

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

Gentlemen:

**REQUEST FOR AMENDMENT
ELECTRICAL POWER SYSTEMS - SHUTDOWN
SALEM GENERATING STATION
UNIT NOS. 1 AND 2
DOCKET NOS. 50-272 AND 50-311**

In accordance with the requirements of 10CFR50.90, Public Service Electric & Gas Company (PSE&G) hereby transmits a request for amendment to Facility Operating Licenses DPR-70 and DPR-75 for Salem Generating Station Unit Nos. 1 and 2 respectively. 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 amendment modifies specification 3/4.8.1.2, Electrical Power Sources - Shutdown. The surveillance requirement 4.8.1.2 is clarified by a Note to identify those surveillances which are required to be performed during Modes 5 and 6. The proposed changes are consistent with NUREG-1431, Standard Technical Specifications - Westinghouse Plants, Revision 1, dated April 1995.

The proposed change has been evaluated in accordance with 10CFR50.91(a)(1), using the criteria in 10CFR50.92(c), and it has been determined that this request involves no significant hazards considerations.

A description of the requested amendment, supporting information and analyses for the proposed change, and the basis for a no significant hazards consideration determination are provided in Attachment 1. The Technical Specification pages affected by the proposed changes are provided in Attachment 2. A cross reference between the current Salem Surveillance Requirements of Specification 3/4.8.1 and the corresponding surveillance requirements of NUREG-1431 is included in Attachment 3.

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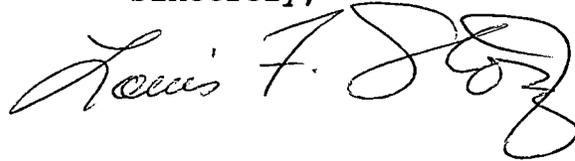
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Should you have any questions regarding this request, we will be pleased to discuss them with you.

Sincerely,



Affidavit
Attachments (2)

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ELECTRICAL POWER SYSTEMS - SHUTDOWN**I. DESCRIPTION OF THE PROPOSED CHANGES**

Specifications 4.8.1.2 is revised by adding a modifying Note identified as **Insert 1** which is shown below and on the marked-up pages of Attachment 2.

Insert 1**Note**

The following surveillances are not required to be performed to maintain operability during Modes 5 and 6. These surveillance are: 4.8.1.1.1.b, 4.8.1.1.2.d.2, 4.8.1.1.2.d.3, 4.8.1.1.2.d.4, 4.8.1.1.2.d.6, 4.8.1.1.2.d.7, 4.8.1.1.2.d.9, 4.8.1.1.2.e, and 4.8.1.1.2.f.

The Bases for Specifications 3/4.8.1 and 3/4.8.2 are included for information only. The bases are being revised by adding **Insert 2** which is shown below and on the marked-up pages of Attachment 2.

Insert 2

Surveillance requirement 4.8.1.2 is modified by a Note. The reason for the Note is to preclude requiring the OPERABLE Diesel Generators (DG) from being paralleled with the offsite power network or otherwise rendered inoperable during performance of the surveillance requirement, and to preclude de-energizing a required ESF bus or disconnecting a required offsite circuit during performance of surveillance requirements. With limited AC sources available, a single event could compromise both the required circuit and the DG. It is the intent that these surveillance requirements must still be capable of being met, but actual performance is not required during periods when the DG and offsite circuit are required to be OPERABLE. During Startup, prior to entering Mode 4, the surveillance requirements are required to be completed if the surveillance frequency has been exceeded or will be exceeded prior to the next scheduled shutdown.

II. REASON FOR THE CHANGES

Due to the amount of equipment that is inoperable during a refueling outage, performance of the AC Sources 18 month surveillance requirements is not practicable. Performance of these surveillances with the limited availability of electrical power could compromise both the offsite power source and the onsite DGs. All surveillances will be completed prior to entry into Mode 4.

III. JUSTIFICATION FOR CHANGES

The Class 1E AC electrical power distribution system consists of the offsite power sources and the onsite standby DGs. The design of the electrical power system provides independence and redundancy to ensure an available source of power to the Engineered Safety Feature (ESF) systems.

The Salem onsite Class 1E distribution system is divided into three redundant trains, such that, loss of any one train does not prevent the minimum safety functions from being performed. Each train has connections to two offsite power sources and a single DG.

Offsite power is supplied from the switchyard by two electrically and physically separated independent circuits.

The initial conditions of the design basis accident (DBA) and transient analyses assume ESF systems are operable. The electrical power sources are designed to provide sufficient capacity, capability, redundancy, and reliability to ensure the availability of necessary power to ESF systems, so that the fuel, reactor coolant system, and containment design limits are not exceeded.

The operability of the minimum AC sources during Modes 5 and 6 ensures that:

- a. The unit can be maintained in the shutdown or refueling condition for extended periods.
- b. Sufficient instrumentation and control capability is available for monitoring and maintaining unit status, and
- c. Adequate AC electrical power is provided to mitigate events postulated during shutdown.

Many DBA's are analyzed in Modes 1, 2, 3, and 4 but have no corresponding analyses in Modes 5 and 6. Worst case bounding events are not deemed credible in Modes 5 and 6 because the energy contained within the reactor pressure boundary, reactor coolant temperature and pressure, and the corresponding stresses result in the probability of occurrence being significantly reduced and the consequences being minimized.

The minimum specified systems satisfy the requirements of General Design Criteria 17 of Appendix "A" to 10CFR50 and the Surveillance Requirements for demonstrating OPERABILITY of the diesel generators are based upon the recommendations of Regulatory Guide 1.9, Selection of Diesel Generator Set Capacity for Standby Power Supplies, March 10, 1971, and Regulatory Guide 1.108, Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants, Revision 1, August 1977.

Surveillance requirement 4.8.1.2 identifies those surveillances associated with Electrical Power Systems - Shutdown. The surveillance requirements of this specification refer to surveillance requirements of LCO 3.8.1.1 Electrical Power Systems - Operating. This surveillance requirement is modified by the new Note. The reason for the Note is to preclude requiring the operable DGs from being paralleled with the offsite power network, or otherwise rendered inoperable during performance of surveillance requirements and to preclude de-energizing a required 4160 Volt ESF bus or disconnecting a required offsite circuit during performance of the surveillance requirement. With limited AC Sources available, a single event could compromise both the required circuit and the DG. It is the intent that these surveillance requirements must be still capable of being met, but actual performance is not required during periods when the DG and offsite circuit are required to be operable.

This change is consistent with NUREG-1431, Standard Technical Specifications - Westinghouse Plants with a minor exception. NUREG-1431, in the Note, identifies surveillances that are not required to be performed in Modes 5 and 6. The surveillance requirement of NUREG-1431 identifies three additional surveillances as not applicable. These surveillances are Transfer of AC Sources, ESF Override, and Simultaneous Start of all DGs. For convenience, these three surveillances have been added to the Note proposed for the revised Salem Unit Nos. 1 and 2 surveillance requirements. These surveillances are maintained in the Salem requirements, but have been included in the Note as not required to be performed. Attachment 3 contains a cross-reference between the current Salem Surveillance Requirements and the corresponding NUREG-1431 requirements.

Surveillance requirement 4.8.1.1.2.d.4 (NUREG-1431 SR 3.8.1.12) has been added to the proposed Note for the Salem Technical Specifications. Surveillance requirement 4.8.1.1.2.d.4 tests the DG in response to a Safeguards Equipment Control (SEC) signal. The SEC is not required to be operable in Modes 5 and 6. Surveillance requirement 4.8.1.1.2.a tests the DG every 31 days and provides a basis for establishing DG operability and availability. This surveillance will be performed during startup, prior to entry into Mode 4.

IV. DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION

PSE&G has, pursuant to 10CFR50.92, reviewed the proposed amendment to determine whether our request involves a significant hazards consideration. PSE&G has determined that operation of Salem Generating Station, Unit Nos. 1 and 2, in accordance with the proposed changes:

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

No component modification, system realignment, or change in operations will occur which could affect the probability of any accident or transient. The proposed addition of a Note will provide guidance on which surveillances are required to be performed in Modes 5 and 6. The Note will preclude rendering operable DGs inoperable, and/or preclude de-energizing a required ESF bus or disconnecting a required offsite circuit during the performance of the surveillance requirement. Proposed changes do not eliminate any testing requirements, they simply clarify which tests will be performed in Modes 5 and 6, and which are required to be performed prior to entry into Mode 4. Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously analyzed.

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

No component modification, system realignment, or change in operating procedure is required to implement the proposed change. The proposed change reduces the possibility of a single event impacting the operability of an ESF bus or its DG simultaneously. Therefore, these changes will not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Will not involve a significant reduction in a margin of safety.

The proposed change will not alter any assumptions, initial conditions, or results of any accident analyses. The Class 1E equipment assumed available in the accident analyses and their designed capability to mitigate the consequences of any postulated accidents will not be changed. The addition of a Note to clarify the surveillance requirements will not involve a significant reduction in a margin of safety.

V. CONCLUSIONS

Based on the above, Public Service Electric & Gas has determined that the proposed changes do not involve a significant hazards consideration.

ATTACHMENT 2

INSERT 1

Note

The following surveillances are not required to be performed to maintain operability during Modes 5 and 6. These surveillance are: 4.8.1.1.1.b, 4.8.1.1.2.d.2, 4.8.1.1.2.d.3, 4.8.1.1.2.d.4, 4.8.1.1.2.d.6, 4.8.1.1.2.d.7, 4.8.1.1.2.d.9, 4.8.1.1.2.e, and 4.8.1.1.2.f.

INSERT 2

Surveillance requirement 4.8.1.2 is modified by a Note. The reason for the Note is to preclude requiring the OPERABLE DG(s) from being paralleled with the offsite power network or otherwise rendered inoperable during performance of the surveillance requirement, and to preclude de-energizing a required ESF bus or disconnecting a required offsite circuit during performance of surveillance requirements. With limited AC sources available, a single event could compromise both the required circuit and the DG. It is the intent that these surveillance requirements must still be capable of being met, but actual performance is not required during periods when the DG and offsite circuit are required to be OPERABLE. During Startup, prior to entering Mode 4, the surveillance requirements are required to be completed if the surveillance frequency has been exceeded or will be exceeded prior to the next scheduled shutdown.