

September 19, 2001

Mr. Harold W. Keiser
Chief Nuclear Officer & President
PSEG Nuclear LLC - X04
Post Office Box 236
Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2, ISSUANCE OF AMENDMENT RE: REACTOR COOLANT SYSTEM SAFETY VALVES AND PLANT SYSTEMS, MAIN STEAM SAFETY VALVES (TAC NOS. MB0087 AND MB0088)

Dear Mr. Keiser:

The Commission has issued the enclosed Amendment Nos. 244 and 225 to Facility Operating License Nos. DPR-70 and DPR-75 for the Salem Nuclear Generating Station (Salem), Unit Nos. 1 and 2. These amendments consist of changes to the Technical Specifications (TSs) in response to your application dated September 26, 2000, as supplemented by letters dated October 6, 2000, and May 21, 2001.

These amendments modify the Salem TSs by increasing the as-found setpoint tolerance for the Pressurizer Safety Valves from $\pm 1\%$ to $\pm 3\%$; increasing the as-found setpoint tolerance for the Main Steam Safety Valves (MSSV) from $\pm 1\%$ to $\pm 3\%$; changing the required actions for inoperable MSSVs; and removing specifications and references related to plant operation with three Reactor Coolant System loops.

A copy of our safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

/RA/

Robert J. Fretz, Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-272 and 50-311

Enclosures: 1. Amendment No. 244 to
License No. DPR-70
2. Amendment No. 225 to
License No. DPR-75
3. Safety Evaluation

cc w/encls: See next page

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PSEG NUCLEAR LLC

EXELON GENERATION COMPANY, LLC

ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-272

SALEM NUCLEAR GENERATING STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 244
License No. DPR-70

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for amendment filed by the PSEG Nuclear LLC, Exelon Generation Company, LLC, and Atlantic City Electric Company (the licensees) dated September 26, 2000, as supplemented on October 6, 2000, and May 21, 2001, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-70 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 244 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

James W. Clifford, Chief, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: September 19, 2001

ATTACHMENT TO LICENSE AMENDMENT NO. 244

FACILITY OPERATING LICENSE NO. DPR-70

DOCKET NO. 50-272

Replace the following pages of the Appendix A, Technical Specifications, with the attached revised pages as indicated. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages

3/4 4-4
3/4 4-4a

3/4 7-1
3/4 7-2
3/4 7-3
3/4 7-4

B 3/4 4-1a
B 3/4 7-1
B 3/4 7-2

Insert Pages

3/4 4-4
3/4 4-4a

3/4 7-1
3/4 7-2
3/4 7-3
3/4 7-4

B 3/4 4-1a
B 3/4 7-1
B 3/4 7-2

PSEG NUCLEAR LLC

EXELON GENERATION COMPANY, LLC

ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-311

SALEM NUCLEAR GENERATING STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 225
License No. DPR-75

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
 - A. The application for amendment filed by the PSEG Nuclear LLC, Exelon Generation Company, LLC, and Atlantic City Electric Company (the licensees) dated September 26, 2000, as supplemented on October 6, 2000, and May 21, 2001, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-75 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 225 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

James W. Clifford, Chief, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: September 19, 2001

ATTACHMENT TO LICENSE AMENDMENT NO. 225

FACILITY OPERATING LICENSE NO. DPR-75

DOCKET NO. 50-311

Replace the following pages of the Appendix A, Technical Specifications, with the attached revised pages as indicated. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages

3/4 4-5

3/4 4-6

3/4 7-1

3/4 7-2

3/4 7-3

3/4 7-4

B 3/4 4-2

B 3/4 7-1

B 3/4 7-2

Insert Pages

3/4 4-5

3/4 4-6

3/4 7-1

3/4 7-2

3/4 7-3

3/4 7-4

B 3/4 4-2

B 3/4 7-1

B 3/4 7-2

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NOS. 244 AND 225 TO FACILITY OPERATING
LICENSE NOS. DPR-70 AND DPR-75
PSEG NUCLEAR LLC
EXELON GENERATION COMPANY, LLC
ATLANTIC CITY ELECTRIC COMPANY
SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2
DOCKET NOS. 50-272 AND 50-311

1.0 INTRODUCTION

In an application dated September 26, 2000, as supplemented by letters dated October 6, 2000, and May 21, 2001, PSEG Nuclear LLC (PSEG) submitted a request for changes to the Salem Nuclear Generating Station (Salem), Unit Nos. 1 and 2, Technical Specifications (TSs). The requested changes would amend the Salem TSs to increase the as-found setpoint tolerance for the Pressurizer Safety Valves (PSV) from $\pm 1\%$ to $\pm 3\%$; increase the as-found setpoint tolerance for the Main Steam Safety Valves (MSSV) from $\pm 1\%$ to $\pm 3\%$; change the required action for inoperable MSSVs; and remove specifications and references related to plant operation with three Reactor Coolant System loops. The associated TS Bases sections will also be amended to reflect the TS changes. The October 6, 2000, letter provided clarifying information that did not expand the scope of the original proposed no significant hazards consideration (NSHC) determination published on November 15, 2000 (65 FR 69065). The May 21, 2001, letter revised PSEG's proposed changes to the TSs concerning the required actions for inoperable MSSVs. Therefore, the Commission published a revised initial NSHC determination on August 8, 2001 (66 FR 41624).

2.0 BACKGROUND

2.1 Pressurizer and Main Steam Safety Valves

Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix A, General Design Criterion (GDC) 15, "Reactor Coolant System Design," requires that the reactor coolant pressure boundary be designed, constructed, and tested with sufficient margin to ensure that design conditions are not exceeded during normal operation or anticipated operational occurrences. The overpressure protection system is relied upon to maintain reactor coolant system (RCS) pressure within acceptable design limits during certain analyzed transients, and is required during Modes 1, 2, 3, 4, and 5. Overpressure protection for the reactor coolant pressure boundary (RCPB) is ensured by application of relief and safety valves and the reactor protection system.

Safety valves shall be designed with sufficient capacity to limit the pressure to less than 110% of the RCPB design pressure as specified by the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (the Code) during the most severe abnormal operational transient with reactor scram. Also, sufficient margin shall be available to account for uncertainties in the design and operation of the plant assuming:

- (1) The reactor is operating at a power level that will produce the most severe overpressurization transient;
- (2) All system and core parameters are at values within normal operating range, including uncertainties and TS limits that produce the highest anticipated pressure;
- (3) The reactor scram is initiated by the second safety-grade signal from the reactor protection system; and
- (4) The discharge flow is based on the rated capacities specified in the ASME Code, for each type of valve.

Full credit is allowed for spring-loaded safety valves designed in accordance with the requirements of the ASME Code. At Salem, RCS overpressure protection includes three PSVs that are connected to the top of the pressurizer. The PSVs are totally enclosed pop-type spring loaded, self-activated valves that are designed to prevent the primary system pressure from exceeding the system safety limit of 2,735 psig. Each of the PSVs are nominally set to lift at a pressure of 2,485 psig, and provide protection against pressure surges beyond the pressure limiting capacity of the pressurizer spray and Power Operated Relief Valves (PORVs).

In a similar manner, the chief purpose of the MSSVs is to provide overpressure protection for the secondary system. The MSSVs also provide protection against overpressurizing the RCPB by providing a heat sink for the removal of energy from the RCS if the preferred heat sink, provided by the Condenser and Circulating Water System, is not available. At Salem, five MSSVs are located on each main steam header, outside containment, upstream of the main steam isolation valves, and are described in the Salem Updated Final Safety Analysis Report (UFSAR), Section 10.3.2.1. The MSSVs are set at 1,070, 1,100, 1,110, 1,120, and 1,125 psig respectively, and have sufficient capacity to limit the secondary system pressure to 110% of the steam generator (SG) design pressure (1085 psig) in order to meet the requirements of the ASME Code.

2.2 Inoperable Main Steam Safety Valves

As a result of analysis performed to justify the PSV and MSSV setpoint tolerance change to $\pm 3\%$, the values currently provided in TS 3/4.7.1, Table 3.7-1, for maximum allowable reactor power levels with inoperable MSSVs, no longer would provide adequate overpressure protection. Therefore, PSEG has requested changes to the allowable power levels provided in TS 3/4.7.1 in order to support the proposed setpoint tolerance change. In addition, PSEG has proposed changes to permit continued operation, when one or more steam generators (SGs) have one or two MSSVs inoperable, by imposing limits on reactor thermal power (RTP) without simultaneously reducing the Power Range Neutron Flux High Trip setpoint. The Power Range Neutron Flux High Trip setpoint would be changed if one or more SGs have three MSSVs that were declared inoperable. PSEG would not be allowed to operate Salem with more than three

inoperable MSSVs in one or more SGs. The changes to place limits solely on RTP based on the number of inoperable MSSVs are similar to the standard specifications published in NUREG-1431, Revision 1, "Standard Technical Specifications, Westinghouse Plants." The required action for limiting condition for operation (LCO) 3.7.1, "Main Steam Safety Valves (MSSVs)," in NUREG-1431, Revision 1, reduces the Power Range Neutron Flux High Trip setpoint when one or more SGs have two or more inoperable MSSVs.

2.3 Removal of References to 3-Loop Operation

Salem Unit Nos. 1 and 2 are Westinghouse pressurized water reactor plants designed with four SGs (four "loops"). Salem TSs once allowed three-loop operation; however, three-loop operation was removed from TS 2.1, Table 2.2-1, and Bases 2.2.1, as part of License Amendment Nos. 201 (Unit No. 1) and 197 (Unit No. 2). Consequently, PSEG has concluded that removal of actions associated with three-loop operation covered under TS 3.7.1.1, along with removal of Table 3.7-2, is appropriate.

3.0 EVALUATION

The staff evaluated the proposed TS changes by reviewing: (1) the licensee's application dated September 26, 2000, as supplemented on October 6, 2000, and May 21, 2001, including the inputs and results from PSEG's LOFTRAN computer analysis; (2) applicable sections of the Salem UFSAR; (3) NUREG-1431, Revision 2, "Standard Technical Specifications for Westinghouse Plants;" (4) Technical Specifications Task Force (TSTF) TSTF-235, Revision 1; and (5) NRC Information Notice (IN) 94-60, "Potential Overpressurization of Main Steam System."

3.1 PSV and MSSV Setpoint Tolerance Change

PSEG's proposed changes will revise the Salem TS to allow a setpoint tolerance of $\pm 3\%$ for the PSVs and MSSVs, for operability purposes, as well as acceptance criteria for ASME Code, Section XI, testing. The $\pm 3\%$ setpoint tolerance will apply to the as-found lift point, and the proposed changes will continue to require that the valves' lift point be restored to within $\pm 1\%$ of the specified setpoint following testing. The proposed changes affect the following TSs:

- TS 3/4.4.2.1, Reactor Coolant Systems - Safety Valves - Shutdown (Unit No. 1)
- TS 3/4.4.2.2, Reactor Coolant Systems - Safety Valves - Operating (Unit No. 1)
- TS 3/4.4.2, Reactor Coolant Systems - Safety Valves - Shutdown (Unit No. 2)
- TS 3/4.4.3, Reactor Coolant Systems - Safety Valves - Operating (Unit No. 2)
- TS 3/4.7.1, Plant Systems - Turbine Cycle - Safety Valves (Unit Nos. 1 and 2)

PSEG evaluated the impact on relaxing the PSVs and MSSVs setpoint tolerance for the following events that require PSV actuation to ensure that primary system pressure limits are not exceeded:

- Loss of Electrical Load and/or Turbine Trip
- Single Reactor Coolant Pump (RCP) Locked Rotor

PSEG stated that analysis for the Loss of Electrical Load and/or Turbine Trip (LOEL/TT) event did not credit the use of pressurizer spray, pressurizer PORVs, or steam dumps in its calculations. The RCP Locked Rotor event did not credit pressurizer spray or the PORVs.

Similarly, PSEG also evaluated the following events that require actuation of the MSSVs to ensure that the primary and/or secondary piping design limits are not exceeded:

- Loss of Electrical Load and/or Turbine Trip
- Loss of AC Power to Station Auxiliaries
- SG Tube Rupture
- Loss of Normal Feedwater

The LOEL/TT is the most limiting event for the PSVs and MSSVs with regard to primary and secondary side overpressure protection. The LOEL/TT event is initiated by a loss of load or a turbine trip. According to the Salem UFSAR, electrical power to plant components continue to be available during the event and RCPs continue to operate. A subsequent reactor trip, turbine trip and turbine valve closure results in a loss of the heat sink for the plant, which further causes an overheating of the primary (RCS) system. As a result, the LOEL/TT event will cause the primary and secondary systems to increase in pressure. PSEG's analysis showed that the maximum peak pressure in the primary and secondary systems following a LOEL/TT event, assuming a +3% PSV and MSSV tolerance, would be:

Salem Unit No.	Peak Primary Pressure (psia) [Design limit = 2748.5 psia]	Peak Secondary Pressure (psia) [Design limit = 1208.5 psia]
1	2659.5	1204.2
2	2662.1	1197.2

In all cases, PSEG's analysis showed that the ASME Code allowable (110% of the design pressure) limit for the primary and secondary system piping will be maintained with the proposed setpoint tolerance.

PSEG also analyzed the impact of increasing the PSV and MSSV setpoint tolerance to $\pm 3\%$ for other events. In its September 26, 2000, letter, PSEG stated that the Salem UFSAR credits operator action to unblock a PORV, in the event of a spurious Safety Injection System actuation, in order to prevent a water-solid pressurizer which threatens the PSVs. PSEG determined that there was sufficient time to prevent this condition from occurring even if a PSV lift point drifted to the -3% of setpoint condition, and that its current UFSAR analysis remained valid. In addition, PSEG stated that it evaluated: (1) the thermal-hydraulic effects on pipe stresses due to a possible +3% increase in the PSV and/or MSSV lift point; (2) motor-operated valve (MOV) operation; and (3) Auxiliary Feedwater (AFW) System operation with a degraded AFW pump. PSEG concluded that the proposed $\pm 3\%$ tolerance remained within the associated limits and was satisfactory.

In the case of an SG tube rupture (SGTR) coincident with a loss of offsite power or loss of the condenser steam dump, the MSSVs are needed provide overpressure protection to the

secondary side piping system. This event would result in a steam discharge to the atmosphere through the MSSVs or Atmospheric Relief Valves. PSEG stated that a PSV tolerance of $\pm 3\%$ is used in its current design basis offsite dose calculations for an SGTR. Therefore, since there are no changes to Salem's current licensing basis analyses, the staff finds this acceptable.

Based on its review, the NRC staff concludes that, since: (1) the peak pressure following the worst-case transient is limited to the ASME Code allowable (110% of the design pressure); (2) PSEG's current design basis dose calculations are unchanged; and (3) that the primary and secondary systems' overpressure protection continues to meet the relevant requirements of General Design Criteria (GDC) 15, the proposed setpoint tolerance change from $\pm 1\%$ to $\pm 3\%$ is acceptable.

3.2 Allowable Power Levels With Inoperable MSSVs

The MSSVs are designed to limit the secondary side pressure to $< 110\%$ of the Code-allowable pressure for any design basis accident or abnormal occurrence. Five MSSVs provide overpressure protection for each of the four SGs at Salem by relieving pressure in their associated main steam piping prior to reaching the allowable design pressure. Salem TS LCO 3.7.1.1, Table 3.7-1, specifies the maximum allowable power level based on the number of inoperable MSSVs per SG. Table 3.7-1 currently requires that Salem be operated at $< 87\%$ power based on the power range neutron flux scram setpoint if one MSSV is inoperable. The completion time for this required action is 4 hours. With two MSSVs inoperable on one or more SGs, the current maximum allowed power is 64%, and for three inoperable MSSVs per SG, the current maximum power is 42%. Salem's TSs do not allow plant operation with more than three inoperable MSSV per SG.

Limits Based On Rated Thermal Power

In its May 21, 2001, letter, PSEG proposed changes to Table 3.7-1 to prescribe different allowable power levels based on Rated Thermal Power (RTP) when one or two MSSVs are inoperable. The changes also remove the current requirement to concurrently reduce the power range neutron flux scram setpoint. These new requirements are similar to, but not exactly the same as, the required actions provided in the Westinghouse improved standard TSs, NUREG-1431, Revision 2.

NUREG-1431 addresses the possibility for plants to be licensed to operate at partial power with a positive moderator temperature coefficient (MTC). The staff's position is that whenever MTC is positive and there are inoperable MSSVs, power levels must be reduced and the Power Range Neutron Flux High Trip setpoint be decreased within 36 hours. If MTC is positive, the reactor power may increase above the initial value during a LOEL/TT event. Thus, for any number of inoperable MSSVs it is necessary to reduce the trip setpoint if a positive MTC may exist at partial power conditions, unless the licensee demonstrates by analysis that a specified reactor power reduction alone is sufficient to prevent overpressurization of the steam system. Salem TS LCO 3.1.1.4 states that "[t]he maximum [MTC] upper limit shall be less positive than or equal to $0 \Delta k/k/^\circ F$." PSEG's proposed changes to the TSs do not include references to a positive MTC. Therefore, since Salem is not allowed to operate with a positive MTC, the staff finds the lack of reference to a positive MTC condition acceptable.

The required limitations on reactor thermal power necessary to prevent secondary system overpressurization may be determined by system transient analysis or by a heat balance calculation. As previously described, it may be necessary in certain circumstances to reduce the setpoint of the Power Range Neutron Flux - High reactor trip function in order to limit the generation of heat within the primary system during an abnormal operational occurrence (AOO). NUREG-1431, Revision 2, allows continued operation at a reduced power level with one inoperable MSSV without requiring the Power Range Neutron Flux High Trip setpoint to be reduced. This is allowed because, in certain cases when the MTC is zero or negative at all power levels, an increase in primary (moderator) temperature would add sufficient negative reactivity to cause reactor power to decrease to levels that would further allow the RCS and main steam system pressure to remain below their respective Code-allowable limits.

In its letter dated May 21, 2001, PSEG proposed changes to permit continued operation when one or two MSSVs are inoperable by imposing limits on reactor thermal power (RTP) without simultaneously reducing the Power Range Neutron Flux High Trip setpoint. The Power Range Neutron Flux High Trip setpoint would, however, be reduced within 36 hours if one or more SGs have three MSSVs that were declared inoperable. PSEG performed an analysis using the LOFTRAN computer code for the uncontrolled rod cluster control assembly (RCCA) bank withdrawal at power (RWAP) event. The analysis demonstrated that, during a RWAP event, the MSSVs may lift to ensure that the secondary side pressure remains below the Code allowable limits. Table 1 below provides the results of PSEG's analysis with zero, one, and two MSSVs inoperable per SG.

Table 1, Results of RWAP Analysis

Salem Unit No.	No. of Inoperable MSSVs/SG	Percent Initial Power Level* (3,459 MWt = 100%)	Peak Primary Pressure (psia) [Design limit = 2748.5 psia]	Peak Secondary Pressure (psia) [Design limit = 1208.5 psia]
1	0	100.6	2659.5	1192.7
	1	87	2498.4	1194.6
	2	59	2418.4	1204.2
2	0	100.6	2662.1	1192.1
	1	87	2501.7	1194.3
	2	59	2375.9	1197.2

* NOTE: Percent power level shown does not account for instrument uncertainties. PSEG would be required to further reduce power to account for these uncertainties.

When the number of inoperable MSSVs is between zero and two, a reactor trip will occur as a result of an Overtemperature ΔT (OTDT) trip signal, as opposed to a Power Range Neutron Flux - High trip signal. As shown in Table 1, peak primary and secondary pressures remain below allowable design limits for zero, one or two inoperable MSSVs/SG. These results indicate that Salem has sufficient safety valve relief capacity for the initial power levels and corresponding number of inoperable MSSVs per SG, and that the Power Range Neutron

Flux - High trip function is not necessary to maintain system pressures below the Code allowable limits. PSEG's analysis is consistent with guidance provided in NRC IN 94-60. IN 94-60 alerted licensees to consider recommendations provided in Westinghouse Nuclear Safety Advisory Letter (NSAL) 94-001, "Operation at Reduced Power Levels With Inoperable MSSVs," dated January 20, 1994. NSAL 94-001 recommended the use of more conservative methods to determine power range high neutron flux trip setpoints.

In the case of one or more SGs having three MSSVs declared inoperable, PSEG would be required to reduce power to 38.4% (39% minus 0.6% for uncertainties), and decrease the Power Range Neutron Flux High Trip setpoint within 36 hours. The completion time of 36 hours is consistent with the improved Standard Technical Specifications and TSTF-235, Revision 1, provides a reasonable time to correct the MSSV inoperability, and is based on: (1) time to perform the power reduction, (2) operating experience in resetting all channels of a protective function, and (3) the low probability of the occurrence of a transient that could result in steam generator overpressure during this period.

Based on the proposed allowable values for Table 3.7-1 which were calculated using plant-specific analyses for Salem that: (1) consider an allowance for calorimetric error and/or the uncertainty associated with the power range neutron flux high setpoint, and (2) reduced the current values in the TSs to levels that would preclude SG overpressurization, the staff concludes that the proposed values are acceptable.

3.3 Removal of References to Three-Loop Operation

As stated by PSEG in its September 26, 2000, application, three-loop operation was removed from the Salem TSs in License Amendment Nos. 201 (Unit No. 1) and 197 (Unit No. 2). PSEG proposed to remove the remaining references to three-loop operation contained in TS 3.7.1.1, including Table 3.7-2. The staff considers this change to be administrative, and finds removal of these references to be acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New Jersey State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20, and changes surveillance requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (66 FR 41624). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) 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) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: R. Fretz

Date: September 19, 2001

PSEG Nuclear LLC

Salem Nuclear Generating Station,
Unit Nos. 1 and 2

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