

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

September 5, 1991

Docket Nos. 50-272/311

Mr. Steven E. Miltenberger Vice President and Chief Nuclear Officer Public Service Electric & Gas Company Post Office Box 236 Hancocks Bridge, New Jersey 08038

Dear Mr. Miltenberger:

SUBJECT: ECCS ACCUMULATOR ISOLATION VALVE POWER LOCKOUT SWITCHES, SALEM

NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2 (TAC NOS.

80665 AND 80666)

The Commission has issued the enclosed Amendment Nos.130 and 109 to Facility Operating License Nos. DPR-70 and DPR-75 for the Salem Nuclear Generating Station, Unit Nos. 1 and 2. These amendments consist of changes to the Technical Specifications (TSs) in response to your application dated June 20, 1991.

These amendments modify Technical Specification Section 3.5.1, Surveillance Requirement 4.5.1.c. The current surveillance requires verification that power to the safety injection accumulator isolation valves is disconnected by removal of the breaker from the circuit. The control power lockout switches were recently modified to provide the necessary protection against a single active failure, thus removal of the breaker from the circuit is unnecessary.

The proposed amendment also modifies the applicability of Surveillance Requirement 4.5.1.c to agree with the applicability of the specification. The specification is applicable when plant pressure is above 1000 psig and the surveillance requirement is applicable whenever plant pressure is above 2000 psig. This change will make the surveillance requirement applicable whenever plant pressure is above 1000 psig.

NRC FILE CENTER CUPY

A copy of our safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly Federal Register notice. You are requested to notify the NRC, in writing, when the amendments have been implemented at Salem 1 and 2.

Sincerely.

/S/

James C. Stone, Project Manager Project Directorate I-2 Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Enclosures:

- Amendment No. 130 to License No. DPR-70
- Amendment No. 109 to 2. License No. DPR-75
- Safety Evaluation

cc w/enclosures: See next page

DISTRIBUTION Docket File MO'Brien(2) Wanda Jones, 7103 FRosa, 7E-4 CGrimes, 13H-15 ACRS(10) NRC & Local PDRs JStone RBlough, RGN-I PDI-2 Reading DNguyen JWhite, RGN-I SVarga OGC GPA/PA DHagan, 3206 GHill(8), P1-37 JCalvo OC/LFMB WButler LPhillips, 8E-23

*Previously Concurred

:PDI-2/PM :SRXB* **OFC** :DNquyen:rb :JStone/ NAME :FRosa :WButler :08/12/91 : **9** /**1**/91 DATE :08/15/91 TAL RECORD COPY

Document Name: TACS 80665/6

A copy of our safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly <u>Federal Register</u> notice. You are requested to notify the NRC, in writing, when the amendments have been implemented at Salem 1 and 2.

Sincerely,

James C. Stone, Project Manager

Project Directorate I-2

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No.130 to License No. DPR-70

2. Amendment No.109 to License No. DPR-75

3. Safety Evaluation

cc w/enclosures:
See next page

Mr. Steven E. Miltenberger Public Service Electric & Gas Company

Salem Nuclear Generating Station

cc:

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UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

PUBLIC SERVICE ELECTRIC & GAS COMPANY

PHILADELPHIA ELECTRIC COMPANY

DELMARVA POWER AND LIGHT COMPANY

ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-272

SALEM NUCLEAR GENERATING STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 130 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 Public Service Electric & Gas Company, Philadelphia Electric Company, Delmarva Power and Light Company and Atlantic City Electric Company (the licensees) dated June 20, 1991, 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. 130, 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 of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Walter R. Butler, Director Project Directorate I-2

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: September 5, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 130 FACILITY OPERATING LICENSE NO. DPR-70 DCCKET NO. 50-272

Revise Appendix A as follows:

Remove Page

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Insert Page

3/4 5-2

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

b. At least once per 31 days and within 6 hours after each solution volume increase of \geq 1% of tank volume by verifying the boron concentration of the accumulator solution.

- c. At least once per 31 days when the RCS pressure is greater than 1000 psig by verifying that the power lockout switch is in lockout.
- d. At least once per 18 months by verifying that each accumulator isolation valve opens automatically upon receipt of a safety injection test signal.



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

PUBLIC SERVICE ELECTRIC & GAS COMPANY

PHILADELPHIA ELECTRIC COMPANY

DELMARVA POWER AND LIGHT COMPANY

ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-311

SALEM NUCLEAR GENERATING STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 109 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 Public Service Electric & Gas Company, Philadelphia Electric Company, Delmarva Power and Light Company and Atlantic City Electric Company (the licensees) dated June 20, 1991, 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;
 - E. 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. 109, 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 of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

alle R. Butler

Walter R. Butler, Director Project Directorate I-2

Division of Reactor Projects - I/II

Office of Nuclear Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: September 5, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 109 FACILITY OPERATING LICENSE NO. DPR-75 DOCKET NO. 50-311

Pevise Appendix A as follows:

Remove Page 3/4 5-2

Insert Page
3/4 5-2

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 31 days and within 6 hours after each solution volume increase of greater than or equal to 1% of tank volume by verifying the boron concentration of the accumulator solution.
- c. At least once per 31 days when the RCS pressure is greater than 1000 psig by verifying that the power lockout switch is in lockout.
- d. At least once per 18 months by verifying that each accumulator isolation valve opens automatically upon receipt of a safety injection test signal.



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555

RELATED TO AMENDMENT NOS. 130 AND 109TO FACILITY OPERATING

LICENSE NOS. DRP-70 AND DRP-75

PUBLIC SERVICE ELECTRIC & GAS COMPANY

PHILADELPHIA ELECTRIC COMPANY

DELMARVA POWER AND LIGHT COMPANY

ATLANTIC CITY ELECTRIC COMPANY

SALEM NUCLEAR OPERATING STATION, UNITS 1 AND 2

DOCKET NOS. 50-272 AND 50-311

1.0 INTRODUCTION

By letter dated June 20, 1991, the Public Service Electric & Gas Company, Philadelphia Electric Company, Delmarva Power and Light Company, and Atlantic City Electric Company (the licensees) submitted a request for changes to the Salem Nuclear Power Generating Station, Units 1 and 2, Technical Specifications (TS). The requested changes would modify Technical Specification Section 3.5.1, Surveillance Requirement 4.5.1.c. The current surveillance requires verification that power to the safety injection accumulator isolation valves is disconnected by removal of the breaker from the circuit. The control power lockout switches were recently modified to provide the necessary protection against a single active failure, thus removal of the breaker from the circuit is unnecessary.

The proposed amendment also modifies the applicability of Surveillance Requirement 4.5.1.c to agree with the applicability of the specification. The specification is applicable when plant pressure is above 1000 psig and the surveillance requirement is applicable whenever plant pressure is above 2000 psig. This change will make the surveillance requirement applicable whenever plant pressure is above 1000 psig.

2.0 EVALUATION

To protect against inadvertent closure of the accumulator isolation valves, Surveillance Requirement 4.5.1.c, requires the valves to be open and power to the motor operators removed by racking out the circuit breakers for the four valves. The circuit breakers are physically located in the Auxiliary Building which is remote from the control room. An equipment operator would have to be sent to the Auxiliary Building to rack in the circuit breakers and then operation of the push button switches on the control console, if closure of the valves becomes necessary.

PSE&G has completed a modification that protects against a single active failure, to the installed power lockout switches (rotary snap switches) in the control power circuits for each of the accumulator isolation valves. These lockout switches will allow the breakers to remain installed, but will remove control power from the valves. With these switches installed, two positive operator actions are required to close the valves; the power lockout switches must be operated (located on the backpanel in the control room) and the push button switches on the control console must be operated. These provisions prevent the inadvertent operation of the valves by a single operator action. Also, the design of the power lockout switches meets the single failure criteria as described in the Updated Final Safety Analysis Report (UFSAR), Section 7.3.2.6, and does not alter the interlock functions as described in the USFAR, Section 7.3.2.7. The staff finds the proposed change to be acceptable.

Technical Specification 3.5.1 is applicable whenever reactor coolant system pressure is above 1000 psig. However, Surveillance Requirement 4.5.1.c is applicable whenever reactor coolant system pressure is above 2000 psig. The 2000 psig in the surveillance requirement would be changed to 1000 psig. Because this increases the pressure range over which the surveillance requirement is applicable, the staff finds the proposed change to be acceptable.

3.0 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.

4.0 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 to the 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 (56 FR 33960). 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.

5.0 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 Contributors: D. Nguyen J. Stone

Date: September 5, 1991