

January 2, 1996

Mr. Leon R. Eliason  
Chief Nuclear Officer & President-  
Nuclear Business Unit  
Public Service Electric & Gas  
Company  
Post Office Box 236  
Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2 (TAC NOS. M90675 AND M90676)

Dear Mr. Eliason:

The Commission has issued the enclosed Amendment Nos. 179 and 160 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 October 11, 1994, as supplemented December 13, 1994, September 6, 1995, and December 28, 1995.

These amendments make two changes concerning the pressurizer heaters in TS 3/4.4.4. The first change adds the phrase "capable of being powered from an emergency power supply" to the Limiting Condition for Operation. The second change alters the frequency of surveillance requirement 4.4.4.2 from 92 days to every refueling outage.

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

Sincerely,

Leonard N. Olshan, Senior Project Manager  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

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PDR ADOCK 05000272  
P PDR

Docket Nos. 50-272/50-311

- Enclosures: 1. Amendment No. 179 to License No. DPR-70
- 2. Amendment No. 160 to License No. DPR-75
- 3. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION:

Docket File	MO'Brien	CGrimes	RJones
PUBLIC	LOlshan	JWhite, RGN-I	
PDI-2 Reading	OGC	ACRS(4)	
SVarga	JStolz	GHill(4)	*See previous concurrence

IN RE: SALEM NUCLEAR GENERATING STATION

SLL FOR 9/12/95

OFC	: PDI-2/LA	: PDI-2/PM	: SRXB/BC*	: OGC*	: PDI-2/D	:
NAME	: MO'Brien	: LOlshan	: rb:RJones	:	: JStolz	:
DATE	: 1/28/96	: 1/22/96	: 9/13/95	: 9/19/95	: 1/23/96	:

OFFICIAL RECORD COPY

FILENAME: A:\SA90675.AMD

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

January 24, 1996

Mr. Leon R. Eliason  
Chief Nuclear Officer & President-  
Nuclear Business Unit  
Public Service Electric & Gas  
Company  
Post Office Box 236  
Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2 (TAC NOS. M90675  
AND M90676)

Dear Mr. Eliason:

The Commission has issued the enclosed Amendment Nos. 179 and 160 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 October 11, 1994, as supplemented December 13, 1994, September 6, 1995, and December 28, 1995.

These amendments make two changes concerning the pressurizer heaters in TS 3/4.4.4. The first change adds the phrase "capable of being powered from an emergency power supply" to the Limiting Condition for Operation. The second change alters the frequency of surveillance requirement 4.4.4.2 from 92 days to every refueling outage.

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Leonard N. Olshan, Senior Project Manager  
Project Directorate I-2  
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Office of Nuclear Reactor Regulation

Docket Nos. 50-272/50-311

Enclosures: 1. Amendment No. 179 to  
License No. DPR-70  
2. Amendment No. 160 to  
License No. DPR-75  
3. Safety Evaluation

cc w/encls: See next page

Mr. Leon R. Eliason  
Public Service Electric & Gas  
Company

Salem Nuclear Generating Station,  
Units 1 and 2

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

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. 179  
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 October 11, 1994, as supplemented December 13, 1994, September 6, 1995, and December 28, 1995, 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. 179, 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, to be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, 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: January 24, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 179

FACILITY OPERATING LICENSE NO. DPR-70

DOCKET NO. 50-272

Revise Appendix A as follows:

Remove Pages

3/4 4-6

Insert Pages

3/4 4-6

REACTOR COOLANT SYSTEM

3/4.4.4 PRESSURIZER

LIMITING CONDITION FOR OPERATION

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3.4.4 The pressurizer shall be OPERABLE with a water volume of less than or equal to 1650 cubic feet (92% indicated level), and at least two groups of pressurizer heaters each having a capacity of  $\geq$  150 kw and capable of being powered from an emergency power supply.

APPLICABILITY: MODES 1, 2, and 3.

ACTION:

- a. With the pressurizer inoperable due to an inoperable emergency power supply to the pressurizer heaters either restore the inoperable emergency power supply within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With the pressurizer otherwise inoperable, be in at least HOT STANDBY with the reactor trip breakers open within 6 hours and in HOT SHUTDOWN within the following 6 hours.

SURVEILLANCE REQUIREMENTS

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4.4.4.1 The pressurizer water volume shall be determined to be within its limit at least once per 12 hours.

4.4.4.2 The capacity of each of the above required groups of pressurizer heaters shall be verified by measuring circuit current at least once each refueling outage.

4.4.4.3 The emergency power supply for the pressurizer heaters shall be demonstrated OPERABLE at least once per 18 months by manually transferring power from the normal to the emergency power supply and energizing the heaters.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

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. 160  
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 October 11, 1994, as supplemented December 13, 1994, September 6, 1995, and December 28, 1995, 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:

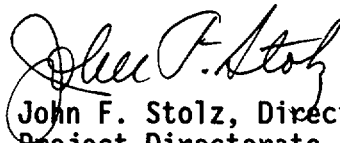


(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 160, 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, to be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION



John F. Stolz, 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: January 24, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 160

FACILITY OPERATING LICENSE NO. DPR-75

DOCKET NO. 50-311

Revise Appendix A as follows:

Remove Pages

3/4 4-7

Insert Pages

3/4 4-7

## REACTOR COOLANT SYSTEM

### 3/4.4.4 PRESSURIZER

#### LIMITING CONDITION FOR OPERATION

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3.4.4 The pressurizer shall be OPERABLE with a water volume of less than or equal to 1650 cubic feet (92% indicated level), and at least two groups of pressurizer heaters each having a capacity of  $\geq 150$  kw and capable of being powered from an emergency power supply.

APPLICABILITY: MODES 1, 2, and 3.

#### ACTION:

- a. With the pressurizer inoperable due to an inoperable emergency power supply to the pressurizer heaters either restore the inoperable emergency power supply within 72 hours or be in at least HOT STANDBY within the next 6 hours and in HOT SHUTDOWN within the following 6 hours.
- b. With the pressurizer otherwise inoperable, be in at least HOT STANDBY with the reactor trip breakers open within 6 hours and in HOT SHUTDOWN within the following 6 hours.

#### SURVEILLANCE REQUIREMENTS

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4.4.4.1 The pressurizer water volume shall be determined to be within its limit at least once per 12 hours.

4.4.4.2 The capacity of each of the above required groups of pressurizer heaters shall be verified by measuring circuit current at least once each refueling outage.

4.4.4.3 The emergency power supply for the pressurizer heaters shall be demonstrated OPERABLE at least once per 18 months by manually transferring power from the normal to the emergency power supply and energizing the heaters.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NOS. 179 AND 160 TO FACILITY OPERATING

LICENSE NOS. DPR-70 AND DPR-75

PUBLIC SERVICE ELECTRIC & GAS COMPANY

PHILADELPHIA ELECTRIC COMPANY

DELMARVA POWER AND LIGHT COMPANY

ATLANTIC CITY ELECTRIC COMPANY

SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2

DOCKET NOS. 50-272 AND 50-311

1.0 INTRODUCTION

By letter dated October 11, 1994, as supplemented December 13, 1994, and September 6, 1995, the Public Service Electric & Gas Company (the licensee) submitted a request for changes to the Salem Nuclear Generating Station, Unit Nos. 1 and 2, Technical Specifications (TSs). The requested changes would make two changes concerning pressurizer heaters in TS 3/4.4.4. The first change would add the phrase "capable of being powered from an emergency power supply" to the Limiting Condition for Operation (LCO). The second change would alter the frequency of surveillance requirement 4.4.4.2 from 92 days to every refueling outage. The December 13, 1994, September 6, 1995, and December 28, 1995, letters provided clarifying information that did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

Currently, ACTION 3.4.4.a states that operation may continue for only 72 hours with an inoperable emergency power supply, but the requirement that the pressurizer heater group be capable of being powered from an emergency power supply is not in the LCO. The first proposed change adds this requirement to the LCO and is consistent with NUREG-1431, "Standard Technical Specifications Westinghouse Plants," and is therefore acceptable.

The second proposed changes alters the frequency of surveillance requirement 4.4.4.2 which requires that the capacity of the pressurizer heater groups be verified at least once per 92 days. This requirement is discussed in Section 6.6 of NUREG-1366, "Improvements to Technical Specifications Surveillance Requirements." NUREG-1366 states that most pressurizer heaters are in constant use and, therefore, operators should be aware of problems that may arise with the heaters. Furthermore, NUREG-1366 states that pressurizer

heaters are fairly reliable. The NUREG concludes that 92-day testing appears to be too frequent and recommends that the test be done once each refueling interval.

Generic Letter (GL) 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation," enclosed guidance to assist licensees in preparing a license amendment request to implement the recommendations in NUREG-1366. Item 6.6 of GL 93-05 recommended that plants without dedicated safety-related heaters should test the capacity of the pressurizer heaters once each refueling interval.

The licensee stated that its pressurizer heaters are in constant use, are reliable, and are of the identical design to those described in NUREG-1366. The licensee, in its letter of September 6, 1995, provided information to support its statement that the pressurizer heaters are reliable.

Therefore, since the proposed change is consistent with NUREG-1366 and GL 93-05, and since the Salem pressurizer heaters are identical to those discussed in the NUREG and the GL and are reliable, the NRC staff finds the change to require testing at each refueling outage, rather than every 92 days, 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. By letter dated November 21, 1994, the State submitted four comments. Three of the comments were editorial in nature and were corrected by the licensee's letter dated December 13, 1994. The other comment stated that no basis was provided to support the statement that the pressurizer heaters were reliable. The licensee provided the supporting basis regarding pressurizer heater reliability in its letter of September 6, 1995.

### 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 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 (59 FR 60386). 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 Contributor: L. Olshan

Date: January 24, 1996