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: AVERAGE CONTAINMENT AIR TEMPERATURE TECHNICAL SPECIFICATION

REVISION, SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2

(TAC NOS. M97936 AND M97937)

Dear Mr. Eliason:

The Commission has issued the enclosed Amendment Nos. 195 and 178 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 January 31, 1997.

These amendments revise TS 3/4.6.1.5, and its associated Bases section, to ensure that a representative average containment air temperature is measured.

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

Sincerely.

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

Docket Nos. 50-272/311

Enclosures: 1. Amendment No. 195 to

License No. DPR-70

Amendment No. 178 to License No. DPR-75

Safety Evaluation 3.

cc w/encls: See next page

DISTRIBUTION

Docket File **PUBLIC**

PDI-2 Reading

JStolz

GHill(4)

JLinville, RGN-I

SDembek

MO'Brien CBerlinger 12 CGrimes L01shan

OGC

ACRS

SVarga OFFICE SPO-L/PM ₽DI-2/PM SCSB/BC OGC PD! (march NAME L01shan JSto1z **CBerlinger** 6 14 197 DATE 615797 6/6 /97

OFFICIAL RECORD COPY

DOCUMENT NAME: SA97936.AMD



WASHINGTON, D.C. 20555-0001 June 13, 1997

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: AVERAGE CONTAINMENT AIR TEMPERATURE TECHNICAL SPECIFICATION

REVISION, SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2

(TAC NOS. M97936 AND M97937)

Dear Mr. Eliason:

The Commission has issued the enclosed Amendment Nos. 195and 178 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 January 31, 1997.

These amendments revise TS 3/4.6.1.5, and its associated Bases section, to ensure that a representative average containment air temperature is measured.

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.

Sincerely.

Leonard N. Olshan, Senior Project Manager

Project Directorate I-2

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

Docket Nos. 50-272/311

Enclosures: 1. Amendment No. 195 to

License No. DPR-70

2. Amendment No. 178 to License No. DPR-75

3. Safety Evaluation

cc w/encls: See next page

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

cc:

Mark J. Wetterhahn, Esquire Winston & Strawn 1400 L Street NW Washington, DC 20005-3502

Richard Fryling, Jr., Esquire Law Department - Tower 5E 80 Park Place Newark, NJ 07101

Mr. D. F. Garchow General Manager - Salem Operations Salem Generating Station P.O. Box 236 Hancocks Bridge, NJ. 08038

Mr. Louis Storz Sr. Vice President - Nuclear Operations Nuclear Department P.O. Box 236 Hancocks Bridge, New Jersey 08038

Mr. Charles S. Marschall, Senior Resident Inspector Salem Generating Station U.S. Nuclear Regulatory Commission Drawer 0509 Hancocks Bridge, NJ 08038

Dr. Jill Lipoti, Asst. Director Radiation Protection Programs NJ Department of Environmental Protection and Energy CN 415 Trenton, NJ 08625-0415

Maryland Office of People's Counsel 6 St. Paul Street, 21st Floor Suite 2102 Baltimore, Maryland 21202

Ms. R. A. Kankus Joint Owner Affairs PECO Energy Company 965 Chesterbrook Blvd., 63C-5 Wayne, PA 19087

Mr. Elbert Simpson Senior Vice President - Nuclear Engineering Nuclear Department P.O. Box 236 Hancocks Bridge, New Jersey 08038

Salem Nuclea enerating Station, Units 1 and 2

Richard Hartung Electric Service Evaluation Board of Regulatory Commissioners 2 Gateway Center, Tenth Floor Newark, NJ 07102

Regional Administrator, Region I U. S. Nuclear Regulatory Commission 475 Allendale Road King of Prussia, PA 19406

Lower Alloways Creek Township c/o Mary O. Henderson, Clerk Municipal Building, P.O. Box 157 Hancocks Bridge, NJ 08038

Mr. David R. Powell, Manager Licensing and Regulation Nuclear Business Unit P.O. Box 236 Hancocks Bridge, NJ 08038

Mr. David Wersan Assistant Consumer Advocate Office of Consumer Advocate 1425 Strawberry Square Harrisburg, PA 17120

P. M. Goetz MGR. Joint Generation Atlantic Energy 6801 Black Horse Pike Egg Harbor Twp., NJ 08234-4130

Carl D. Schaefer External Operations - Nuclear Delmarva Power & Light Company P.O. Box 231 Wilmington, DE 19899

Public Service Commission of Maryland Engineering Division Chief Engineer 6 St. Paul Centre Baltimore, MD 21202-6806



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. 195 License No. DPR-70

- 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 January 31, 1997, 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) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No.195, 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 issuance.

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: June 13, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 195 FACILITY OPERATING LICENSE NO. DPR-70 DOCKET NO. 50-272

Revise Appendix A as follows:

| Remove Pages | <u>Insert Pages</u> |
|--------------|---------------------|
| 3/4 6-7 | 3/4 6-7 |
| B 3/4 6-2 | B 3/4 6-2 |

AIR TEMPERATURE

LIMITING CONDITION FOR OPERATION

3.6.1.5 Primary containment average air temperature shall not exceed 120°F.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the containment average air temperature $> 120\,^{\circ}\text{F}$, reduce the average air temperature to within the limit within 8 hours, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.5 Verify the Containment Average Air Temperature is within limit at least once per twenty four hours.

BASES

3/4.6.1.4 INTERNAL PRESSURE

The limitations on containment internal pressure ensure that: 1) the containment structure is prevented from exceeding its design negative pressure differential with respect to the outside atmosphere of 3.5 psig and 2) the containment peak pressure does not exceed the design pressure of 47 psig during the limiting pipe break conditions. The pipe breaks considered are LOCA and steam line breaks.

The limit of 0.3 psig for initial positive containment pressure is consistent with the accident analyses initial conditions.

The maximum peak pressure expected to be obtained from a LOCA or steam line break event is \leq 47 psig.

3/4.6.1.5 AIR TEMPERATURE

The limitations on containment average air temperature ensure that the overall containment average air temperature does not exceed the initial temperature condition assumed in the accident analysis for a LOCA or steam line break. In order to determine the containment average air temperature, an average is calculated using measurements taken at locations within containment selected to provide a representative sample of the overall containment atmosphere.

3/4.6.1.6 CONTAINMENT STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that the containment will withstand the design pressure. The visual inspections of the concrete and liner and the Type A leakage test are sufficient to demonstrate this capability.



WASHINGTON, D.C. 20555-0001

PHILADELPHIA 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. 178 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 January 31, 1997, 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.
- 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) <u>Technical Specifications and Environmental Protection Plan</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 178, 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 issuance.

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: June 13, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 178 FACILITY OPERATING LICENSE NO. DPR-75 DOCKET NO. 50-311

Revise Appendix A as follows:

| Remove Pages | <u>Insert Pages</u> |
|--------------|---------------------|
| 3/4 6-7 | 3/4 6-7 |
| B 3/4 6-2 | B 3/4 6-2 |

AIR TEMPERATURE

LIMITING CONDITION FOR OPERATION

3.6.1.5 Primary containment average air temperature shall not exceed 120°F.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

With the containment average air temperature greater than 120°F, reduce the average air temperature to within the limit within 8 hours, or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.5 Verify containment average air temperature is within limit at least once per twenty four hours.

BASES

3/4.6.1.4 INTERNAL PRESSURE

The limitations on containment internal pressure ensure that: 1) the containment structure is prevented from exceeding its design negative pressure differential with respect to the outside atmosphere of 3.5 psig, and 2) the containment peak pressure does not exceed the design pressure of 47 psig during the limiting pipe break conditions. The pipe breaks considered are LOCA and steam line breaks.

The limit of 0.3 psig for initial positive containment pressure is consistent with the accident analyses initial conditions.

The maximum peak pressure expected to be obtained from a LOCA or steam line break event is ≤ 47 psig.

3/4.6.1.5 AIR TEMPERATURE

The limitations on containment average air temperature ensure that the overall containment average air temperature does not exceed the initial temperature condition assumed in the accident analysis for a LOCA or steam line break. In order to determine the containment average air temperature, an average is calculated using measurements taken at locations within containment selected to provide a representative sample of the overall containment atmosphere.

3/4.6.1.6 CONTAINMENT STRUCTURAL INTEGRITY

This limitation ensures that the structural integrity of the containment will be maintained comparable to the original design standards for the life of the facility. Structural integrity is required to ensure that the containment will withstand the design pressure. The visual inspections of the concrete and liner and the Type A leakage test are sufficient to demonstrate this capability.

3/4.6.1.7 CONTAINMENT VENTILATION SYSTEM

The containment purge supply and exhaust isolation valves are required to be closed during plant operation since these valves have not been demonstrated capable of closing during a LOCA. Maintaining these valves closed during plant operations ensures that excessive quantities of radioactive materials will not be released via the containment purge system.

1



WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NOS. 195 AND 178 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 <u>INTRODUCTION</u>

By letter dated January 31, 1997, 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 replace the existing requirement to average the temperatures at any 5 of 10 listed locations within the containment with the requirement to verify that the average containment temperature is within the limit (i.e., $\leq 120^{\circ}F$).

2.0 BACKGROUND

The containment average air temperature is required to be taken daily (in Modes 1 through 4) to ensure it does not exceed the initial temperature condition assumed in the applicable design basis accident analyses. Currently, TS surveillance requirement 4.6.1.5 lists 10 sample locations and requires that the temperatures at any 5 of these locations be averaged once per 24 hours to verify the containment average temperature is acceptable. However, the licensee has determined that a representative average may not be obtained if "any" five samples are used as currently allowed by the TSs. This situation was discovered by the licensee and subsequently reported in Licensee Event Report 272/95-004-00 on May 18, 1995. To correct this TS weakness, the licensee specified (in a procedure) the acceptable sample locations that had to be used (thus ensuring a representative sample is obtained). However, the licensee has since reevaluated this issue and determined it would be more appropriate to revise the TSs to correct this shortcoming.

3.0 EVALUATION

Due to giving plant operators a choice of 5 out of 10 sample locations, verbatim compliance with current TS surveillance requirement 4.6.1.5 could lead to inaccurate containment average temperature determinations. To correct this problem, the licensee is proposing to revise TS surveillance 4.6.1.5 to state:

Verify containment average air temperature is within limit at least once per twenty four hours.

The staff's guidance for containment air temperature surveillance requirements for Westinghouse plants is contained in NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," Rev. 1, April 1995 (NUREG-1431). The recommended wording in NUREG-1431 is:

Verify containment average air temperature is within limit [every 24 hours].

The licensee's proposed TS surveillance requirement 4.6.1.5 is consistent with the staff's recommended applicable NUREG-1431 wording. Also, as discussed above, the purpose of this TS surveillance requirement is to maintain the validity of the applicable design basis accident analyses by ensuring the containment temperature assumptions used in the analyses are not exceeded. The licensee's proposed wording for TS surveillance requirement 4.6.1.5 provides more appropriate wording for ensuring that the applicable design basis accident analysis assumptions will not be exceeded (by ensuring the sample consistently represents the containment average temperature). Therefore, the licensee's proposal to revise the wording of TS surveillance requirement 4.6.1.5 is acceptable.

The licensee also proposed to revise the TS Bases by adding the following statement:

In order to determine the containment average air temperature an average is calculated using measurements taken at locations within containment selected to provide a representative sample of the overall containment atmosphere.

The licensee's proposed TS Bases wording is consistent with the staff's recommendations in bases section B 3.6.5A of NUREG-1431 and is therefore 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 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 (62 FR 11497). 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: S. Dembek

Date: June 13, 1997