October 21, 1988

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: CONTAINMENT AIR LOCK LEAKAGE TESTING (TAC NOS. 59527/59528)

RE: SALEM GENERATING STATION, UNIT NOS. 1 AND 2

The Commission has issued the enclosed Amendment Nos. 89 and 62 to Facility Operating License Nos. DPR-70 and DPR-75 for the Salem Generating Station, Unit Nos. 1 and 2. These amendments consist of changes to the Technical Specifications (TSs) in response to your application dated August 6, 1985 and supplemented on August 29, 1986 and August 16, 1988. The supplemental letters did not make technical changes to the original application.

These amendments change the Technical Specifications regarding containment air lock leakage testing.

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

Enclosures:
1. Amendment No. 89 to License No. DPR-70
2. Amendment No. 62 to License No. DPR-75
3. Safety Evaluation

cc w/enclosures:
See next page

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MO'Brien	JStone:tr	SH Lewis	WButler	JSW for JC
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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See next page

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P.O. Box 231
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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 GENERATING STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 89
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 August 6, 1985 and supplements dated August 29, 1986 and August 16, 1988 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. 89 , 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.

FOR THE NUCLEAR REGULATORY COMMISSION

/S/

Walter R. Butler, Director
Project Directorate I-2
Division of Reactor Projects I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 21, 1988

PDI-2/LA	PDI-2/PM	OGC	PDI-2/D
MO'Brien	JStone:tr	SH Lewis	WButler
10/21/88	10/13/88	10/12/88	10/21/88

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 89 , 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.

FOR THE NUCLEAR REGULATORY COMMISSION

Walter R. Butler

Walter R. Butler, Director
Project Directorate I-2
Division of Reactor Projects I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 21, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 89

FACILITY OPERATING LICENSE NO. DPR-70

DOCKET NO. 50-272

Revise Appendix A as follows:

Remove Page	Insert Pages
3/4 6-5	3/4 6-5
-	3/4 6-5a

CONTAINMENT SYSTEMS

CONTAINMENT AIR LOCKS

LIMITING CONDITON FOR OPERATION

3.6.1.3 Each containment air lock shall be OPERABLE with:

a. Both doors closed except when the air lock is being used for normal transit entry and exit through the containment, then at least one air lock door shall be closed, and

b. An overall air lock leakage rate of $\leq$ 0.05 L_a at design pressure (47.0 psig).

APPLICABILITY: MODES 1, 2, 3 and 4

ACTION:

With an air lock inoperable, restore the air lock to OPERABLE status within 24 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.1.3 Each containment air lock shall be demonstrated OPERABLE:

a. *By pressurizing the volume between the airlock door gaskets to $\geq$ 10.0 psig and checking for an extrapolated** seal leakage rate equal to or less than 0.01 L_a.

1. After each opening, except when used for multiple entries, then at least once per 72 hours.

2. After performing maintenance which could affect the airlock door gaskets sealing capability.

3. Prior to establishing containment integrity,

b. By conducting an overall air lock leakage test at design pressure (47.0 psig) and verifying the overall air leakage rate is within its limit:

1. At least once per six months #.

SURVEILLANCE REQUIREMENTS (Continued)

2. Prior to establishing containment integrity when maintenance that could affect the airlock sealing capability was performed and the maintenance affects components other than the door gaskets,* and

c. At least once per 6 months by verifying that only one door in each air lock can be opened at a time.

* Exemption to Appendix "J" of 10 CFR 50.
** The measured leakage at the test pressure (10 psig) shall be multiplied by an extrapolation factor of 9.1 to determine what the seal leakage flow rate would be if tested at design pressure (47.0 psig). This extrapolated seal leakage rate shall be less than or equal to 0.01 L_a.
# The provisions of Specification 4.0.2 are not applicable.

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 GENERATING STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 62
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 August 6, 1985 and supplements dated August 29, 1986 and August 16, 1988 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. 62, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

/s/

Walter R. Butler, Director
Project Directorate I-2
Division of Reactor Projects I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 21, 1988

*Previously Concurred

PDI-2/LA	PDI-2/PM*	OGC*	PDI-2/D*
MO'Brien	JStone:tr	SHLewis	WButler
10/24/88	10/13/88	10/20/88	10/21/88

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 62, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

Walter R. Butler

Walter R. Butler, Director
Project Directorate I-2
Division of Reactor Projects I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 21, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 62

FACILITY OPERATING LICENSE NO. DPR-75

DOCKET NO. 50-311

Revise Appendix A as follows:

Remove Page	Insert Page
3/4 6-5	3/4 6-5

SURVEILLANCE REQUIREMENTS (Continued)

a. *By pressurizing the volume between the airlock door gaskets to $\geq$ 10.0 psig and checking for an extrapolated** seal leakage rate equal to or less than 0.01 L_a.

   1. After each opening, except when used for multiple entries, then at least once per 72 hours.

   2. After performing maintenance which could affect the airlock door gaskets sealing capability.

   3. Prior to establishing containment integrity,

b. By conducting an overall air lock leakage test at design pressure (47.0 psig) and verifying the overall air leakage rate is within its limit:

   1. At least once per six months #.

   2. Prior to establishing containment integrity when maintenance that could affect the airlock sealing capability was performed and the maintenance affects components other than the door gaskets,* and

c. At least once per 6 months by verifying that only one door in each air lock can be opened at a time.

* Exemption to Appendix "J" of 10 CFR 50.
** The measured leakage at the test pressure ($\geq$ 10 psig) shall be multiplied by an extrapolation factor of 9.1 to determine what the seal leakage flow rate would be if tested at design pressure (47.0 psig). This extrapolated seal leakage rate shall be less than or equal to 0.01 L_a.
\# The provisions of Specification 4.0.2 are not applicable.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NOS. 89 AND 62 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 GENERATING STATION, UNIT NOS. 1 AND 2

DOCKET NOS. 50-272 AND 50-311

1.0 INTRODUCTION

By letters dated August 6, 1985 and supplemented on August 29, 1986 and August 16, 1988, Public Service Electric & Gas Company (PSE&G) requested an amendment to Facility Operating License Nos. DPR-70 and DPR-75 for the Salem Generating Station, Unit Nos. 1 and 2. The supplemental letters did not make technical changes to the original application. The proposed amendments would change Technical Specifications (TS) 4.6.1.3 to relieve the Salem units from conducting full pressure containment air lock leakage tests whenever air locks are opened during periods when containment integrity is not required or following maintenance on the door seals only. Under the existing containment air lock surveillance requirements, the licensee is required to perform an overall air lock leakage rate test at not less than Pa (47psig) prior to plant heatup and startup (i.e. prior to entering Mode 4) if an air lock is opened during Modes 5 or 6.

This test is in accordance with the requirements of Paragraph III.D.2(b)(ii) of Appendix J to 10 CFR Part 50. A partial exemption to Paragraph III.D.2(b)(ii) of Appendix J to 10 CFR Part 50 allowing the substitution under specified conditions, of the air lock door seal leakage test, described in Paragraph III.D.2(b)(iii), was granted the licensee on June 16, 1986 and September 4, 1987.

The air lock door seal leakage test involves pressurizing the volume between the airlock door seals to $\geq$ 10.0 psig and checking for an extrapolated seal leakage rate equal to or less than 0.01 La (La is defined as leakage equal to 0.1 percent by weight of the containment air per 24 hours at design pressure).

This amendment would bring the facility TS into conformance with the exemption previously granted.

2.0 EVALUATION

The basis for this amendment is that the air lock is so designed that a full pressure test of the entire air lock requires the installation of holding devices (strongbacks) on the inner door to prevent it from being unseated. The air lock test is an imposition during startup activities since it is relatively time consuming and comes at a time when frequent containment entries are required for equipment checks.

If the periodic 6-month test of paragraph 4.6.1.3.b. of the TS and the test required by paragraph 4.6.1.3.a. of the proposed amendment are current, no maintenance (other than to door gaskets) has been performed on the air lock that could affect its sealing capability, and the air lock is properly sealed, there should be no reason to expect the air lock to leak excessively just because it has been opened in Mode 5 or Mode 6.

Accordingly, the staff concludes that PSE&G's proposed approach of substituting the containment air lock seal leakage test for the full pressure test is acceptable following door gasket maintenance and/or prior to entering Mode 4. Furthermore, the TS requires a full pressure test of the air lock whenever other maintenance that could affect sealing capability has been performed on the air lock. The TS change is consistent with the previously approved exemptions to Paragraph III.D.2.(b)(ii) of Appendix J to 10 CFR Part 50.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change to a requirement with respect to the 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 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. 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.

4.0 CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register (50 FR 38921) on September 25, 1985 and consulted with the State of New Jersey. No public comments were received and the State of New Jersey did not have any comments.

The staff 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, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendments will not be inimical to the common defense and security nor to the health and safety of the public.

Principal Contributors: J. Pulsipher and J. Stone

Dated: October 21, 1988