November 21, 199(

Docket No. 50-272

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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: RADIATION MONITORING SYSTEM, CHANNEL FUNCTIONAL TESTS, SALEM GENERATING STATION, UNIT NO. 1 (TAC NO. 75851)

The Commission has issued the enclosed Amendment No. 116 to Facility Operating License No. DPR-70 for the Salem Generating Station, Unit No. 1. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated January 22, 1990.

This amendment adds a clarifying statement to the Surveillance Requirements specified in Table 4.3-13 of Technical Specification 3.3.3.9 to Table Notation item (1) 3. The clarifying statement changes the CHANNEL FUNCTIONAL TEST response requirements associated with radiation monitor 1-R12A to match its actual design.

Your original license amendment request also proposed adding clarifying statements to Table Notation items (2) 3, and (2) 4, of Table 4.3-13. These proposed clarifying statements were inadvertently removed during issuance of license Amendment No. 79. Therefore, these statements were restored to the Salem Unit 1 TSs by staff correction letter dated March 12, 1990.

You are requested to notify the Commission in writing, when the enclosed amendment is implemented at Salem Unit No. 1.

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. 116to License No. DPR-70
2. Safety Evaluation

cc w/enclosures:
See next page
[TAC NO. 75851 SALEM]
*Previously Concurred

PDI-2/LA	PDI-2/PM	*OGC	PDI-2/D	*PRPB
MO'Brien	JStone:tlc	EHoller	WButler	LCunningham
11/21/90	11/20/90	11/07/90	11/21/90	11/02/90

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

November 21, 1990

Docket No. 50-272

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

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

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1. Amendment No. 116 to
License No. DPR-70
2. Safety Evaluation

cc w/enclosures:
See next page

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Baltimore, MD 21202-3486

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. 116
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 January 22, 1990, 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. 116 , 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 is to be implemented within 60 days of the 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: November 21, 1990

PDI-2/LA MO'Brien 11/21/90	PDI-2/PM JStone 10/31/90	OGC EHoller 11/7/90	PDI-2/D WButler 11/21/90

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 116 , 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 is to be implemented within 60 days of the 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: November 21, 1990

ATTACHMENT TO LICENSE AMENDMENT NO. 116

FACILITY OPERATING LICENSE NO. DPR-70

DOCKET NO. 50-272

Revise Appendix A as follows:

Remove Page	Insert Page
3/4 3-69	3/4 3-69

TABLE 4.3-13 (Continued)

TABLE NOTATION

(1) The CHANNEL FUNCTIONAL TEST shall also demonstrate that automatic isolation of this pathway and control room alarm annunciation occurs if any of the following conditions exist:

1. Instrument indicates measured levels at or above the alarm/trip setpoint.

2. Circuit failure. (Loss of Power)

3. Instrument indicates a downscale failure. (Alarm Only) (Indication on instrument drawer in Control Equipment Room only for 1-R12A)

(2) The CHANNEL FUNCTIONAL TEST shall also demonstrate that control room alarm annunciation occurs if any of the following conditions exist:

1. Instrument indicates measured levels at or above the alarm/trip setpoint.

2. Circuit failure. (Loss of Power)

3. Instrument indicates a downscale failure. (Indication on instrument drawer in Control Equipment Room only for 1-R16).

4. Instrument controls not set in operate mode. (Applicable to 1-R16 only)

(3) The initial CHANNEL CALIBRATION was performed using appropriate liquid or gaseous calibration sources obtained from reputable suppliers. The activity of the calibration sources were reconfirmed using a multi-channel analyzer which was calibrated using one or more NBS standards.

(4) The CHANNEL CALIBRATION shall include the use of standard gas samples containing a nominal:

1. One volume percent oxygen, balance nitrogen, and

2. Four volume percent oxygen, balance nitrogen.

* At all times
** During waste gas holdup system operation.
*** During containment purge or containment pressure - vacuum relief.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 116 TO FACILITY OPERATING LICENSE NO. DPR-70

PUBLIC SERVICE ELECTRIC & GAS COMPANY

PHILADELPHIA ELECTRIC COMPANY

DELMARVA POWER AND LIGHT COMPANY

ATLANTIC CITY ELECTRIC COMPANY

SALEM GENERATING STATION, UNIT NO. 1

DOCKET NO. 50-272

1.0 INTRODUCTION

By letter dated January 22, 1990 (Ref. 1), Public Service Electric & Gas Company requested an amendment to Facility Operating License No. DPR-70 for the Salem Generating Station, Unit No. 1. The proposed amendment would revise Salem Unit No. 1 Technical Specification (TS) Table 4.3-13, Table Notation, by adding clarification statements that would permit surveillances to be conducted according to the actual design of the 1-R12A and 1-R16 radiation monitor systems

2.0 EVALUATION

The proposed amendment would change the TSs by adding clarifying statements to the Surveillance Requirements specified in Table 4.3-13, Table Notation, of Technical Specification 3.3.3.9. These changes consist of adding statements to Table 4.3.13, Table Notation, as follows: item (1) 3. "(Indication on the instrument drawer in Control Equipment Room only for 1-R12A)";item (2) 3. "(Indication on the instrument drawer in Control Equipment Room only for 1-R16)"; and item (2) 4. "(Applicable to 1-R16 only)". The clarifying statements change the CHANNEL FUNCTIONAL TEST response requirements associated with radiation monitors 1-R12A and 1-R16 to match their actual design.

The 1-R12A (Containment Radioactive Noble Gas Monitor) Radiation Monitoring System (RMS) channel monitors the radioactive noble gas content of the containment atmosphere via an LFE model MC12C Geiger-Muller tube (Ref. 2). The channel is used in the identification of Reactor Coolant System (RCS) leakage in conjunction with the containment sump level monitoring system, the containment fan cooler condensate flow rate monitors, and the containment radioactive particulate (1-R11A) radiation monitoring system. Containment atmosphere samples are passed through a filter paper where the air flow continuously moves past the 1-R11A detector (Ref. 2). The air sample then passes through a charcoal cartridge (monitored by the 1-R12B monitor) and is then mixed into a fixed shielded volume where it is viewed by the 1-R12A monitor. The air sample is then returned to the containment.

Salem Unit 1 Amendment No. 79 approved the use of 1-R12A as an additional Noble Gas Activity Monitor under the CONTAINMENT PURGE AND PRESSURE - VACUUM RELIEF (CP/P-VR) section of Tables 3.3-13 and 4.3-13. Although radiation monitor 1-R12A already has Surveillance Requirements specified in Technical Specification 3.3.3.1, Table 4.3-3, these requirements were added to the Surveillance Requirements of Table 4.3-13. This change was made in order to ensure a channel check was performed prior to each release through its associated pathway and to ensure that the alarm/trip setpoint of the 1-R12A, when functioning as an effluent monitor, was established per Technical Specification 3.3.3.9 requirements.

Radiation monitor 1-R12A serves as an alternate monitor to radiation monitor 1-R41C (Plant Vent Radiation Noble Gas monitor) during CP/P-VR operations. The 1-R41C corroborates the 1-R12A channel indications when the CP/P-VR valves are open and has the capability of automatic isolation of the CP/P-VR System (as well as the closure of the WG41 valve, "Gas Decay Tank Vent Control Valve") (Ref. 2). When the 1-R12A monitor serves as an alternate to 1-R41C, an alarm signal from the 1-R12A channel will cause the automatic isolation of CP/P-VR System. However, the system is designed such that a downscale failure of radiation monitor 1-R12A will not signal an alarm in the control room (Ref. 1). 1-R12A failure indication is provided only on the instrument drawer. Similar to radiation monitor 1-R41C, a downscale failure on radiation monitor 1-R12A will not actuate automatic termination of the release path.

The 1-R12A Radiation Monitor will still be functionally tested to assure that it is OPERABLE per design and according to the Technical Specifications, the proposed change does not change the requirements to maintain the 1-R12A Radiation Monitor OPERABLE in accordance with the associated Limiting Condition for Operation. The additional statement clarifies the method of verifying the performance of the CHANNEL FUNCTIONAL TEST and does not affect the capability of the 1-R12A instrumentation to isolate the release path on the appropriate high radiation signal. Based on the above discussion, the staff has determined that the additional statement to the Table 4.3-13 Table Notation, item (1) 3. of Technical Specification 3.3.3.9 is acceptable.

Radiation monitor 1-R16 functions as a redundant monitor to 1-R41C when the Plant Vent Header System (PVHS) is in operation. The proposed clarifying statements for Table Notation items (2) 3. and 4. were inadvertently removed during issuance of license Amendment No. 79. The statements were restored to the Salem Unit 1 TSs by a staff correction letter dated March 12, 1990.

In addition, the staff, with the consent of the licensee, made an administrative change to the revised technical specification page. The radiation monitor designated 1R16 in item (2)3. was changed to 1-R16.

3.0 ENVIRONMENTAL CONSIDERATION

The amendment involves 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 amendment involves no significant increase in the amounts, and no significant change in the type, 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 amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Part 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with issuance of the amendment.

4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (55 FR 8236) on March 7, 1990 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 amendment will not be inimical to the common defense and security nor to the health and the safety of the public.

5.0 REFERENCES

1. Letter (LCR-89-14) from S. LaBruna (PSE&G) to USNRC, dated January 22, 1990.

2. "ESF Signal Actuation: Containment Vent Isolation on 1R12A Channel Spike", License Event Report, LER Number 90-013-00, Salem Generating Station - Unit 1, May 9, 1990.

Principal Contributor: M. Franovich

Dated: November 21, 1990