

October 2, 2000

Mr. Harold W. Keiser  
Chief Nuclear Officer & President  
PSEG Nuclear LLC - X04  
Post Office Box 236  
Hancocks Bridge, NJ 08038

SUBJECT: SALEM NUCLEAR GENERATING STATION, UNIT NOS. 1 AND 2 - ISSUANCE  
OF AMENDMENT RE: RADIATION MONITORING INSTRUMENTATION (TAC  
NOS. MA8535 AND MA8536)

Dear Mr. Keiser:

The Commission has issued the enclosed Amendment Nos. 236 and 217 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 March 13, 2000.

These amendments revise TS Table 3.3-6, "Radiation Monitoring Instrumentation," by changing the Containment Gaseous Activity Monitor (R12A) alarm and trip setpoint for the containment purge and pressure relief system isolation for Mode 6 (Refueling) operations.

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

Sincerely,

**/RA/**

Robert J. Fretz, Project Manager, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-272 and 50-311

Enclosures: 1. Amendment No. 236 to  
License No. DPR-70  
2. Amendment No. 217 to  
License No. DPR-75  
3. Safety Evaluation

cc w/encls: See next page

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DISTRIBUTION

EAdensam	JClifford	OGC	GMeyer, RGN-I	PUBLIC
RFretz	ACRS	TClark	GHill(4)	PDI-2 Reading
SKlementowicz	KGibson	WBeckner		

ACCESSION NUMBER: ML003746404    TEMPLATE = NRR-058    \* SE input provided on 8/14/00.  
No major changes made

OFFICE	PDI-2/PM	PDI-2/LA	IOLB/SC*	OGC	PDI-2/SC
NAME	RFretz	TLClark	KGibson	RHoefling	JClifford
DATE	09/01/00	09/01/00	08/14/00	9/13/00	10/2/00

OFFICIAL RECORD COPY

PSEG NUCLEAR LLC  
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. 236  
License No. DPR-70

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
  - A. The application for amendment filed by PSEG Nuclear LLC, Philadelphia Electric Company, Delmarva Power and Light Company and Atlantic City Electric Company (the licensees) dated March 13, 2000, 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. 236 , 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.

FOR THE NUCLEAR REGULATORY COMMISSION

***/RA/***

James W. Clifford, Chief, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: October 2, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 236

FACILITY OPERATING LICENSE NO. DPR-70

DOCKET NO. 50-272

Replace the following pages of the Appendix A, Technical Specifications, with the attached revised pages as indicated. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages

3/4 3-36

B 3/4 3-1a

Insert Pages

3/4 3-36

B 3/4 3-1a

PSEG NUCLEAR LLC  
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. 217  
License No. DPR-75

1. The Nuclear Regulatory Commission (the Commission or the NRC) has found that:
  - A. The application for amendment filed by PSEG Nuclear LLC, Philadelphia Electric Company, Delmarva Power and Light Company and Atlantic City Electric Company (the licensees) dated March 13, 2000, 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. 217 , 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.

FOR THE NUCLEAR REGULATORY COMMISSION

***/RA/***

James W. Clifford, Chief, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: October 2, 2000

ATTACHMENT TO LICENSE AMENDMENT NO. 217

FACILITY OPERATING LICENSE NO. DPR-75

DOCKET NO. 50-311

Replace the following pages of the Appendix A, Technical Specifications, with the attached revised pages as indicated. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove Pages

3/4 3-39

B 3/4 3-1a

Insert Pages

3/4 3-39

B 3/4 3-1a



SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NOS. 236 AND 217 TO FACILITY OPERATING  
LICENSE NOS. DPR-70 AND DPR-75  
PSEG NUCLEAR LLC  
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 March 13, 2000, Public Service Electric and Gas Company (PSE&G) submitted a request for changes to the Salem Nuclear Generating Station, Unit Nos. 1 and 2, Technical Specifications (TSs). On August 21, 2000, the licenses for Salem, to the extent held by PSE&G, were transferred to PSEG Nuclear Limited Liability Company (PSEG Nuclear). By letter dated September 6, 2000, PSEG Nuclear stated that it has assumed responsibility, as of the date of the transfer, for the active items on the Salem dockets previously submitted by PSE&G, including the subject amendment request. The requested changes would modify the alarm/trip setpoint for the R12A Containment Gaseous Activity Monitor during Mode 6 (refueling) operation. Specifically, the existing setpoint of less than or equal to two times background would be changed to less than or equal to 50% of the concentration limits provided in Title 10 of the *Code of Federal Regulations* (10 CFR), Part 20 for gaseous effluents released to unrestricted areas.

## 2.0 BACKGROUND

During Mode 6 operation, the Containment Gaseous Activity Monitor R12A serves to monitor the gaseous activity concentration in the containment atmosphere, and provides an alarm and isolation of the Containment Purge and Pressure Relief system in response to high gaseous activity that would result from a fuel handling accident inside containment.

The current TS 3/4.3.3.1, "Radiation Monitoring Instrumentation," requires that while in Mode 6, the R12A setpoint for alarm and containment purge and pressure relief system isolation be set at two times background. The containment purge and pressure relief system isolation function in Mode 6 serves to limit the spread of gaseous radioactive material from the containment to the outside environment in the event of a fuel handling accident inside containment so that the dose to a member of the public remains within the values contained in 10 CFR Part 100.

The licensee has stated, however, that the two times background setpoint value is overly conservative with regard to mitigation of a fuel handling accident inside containment, and is low relative to expected spikes of noble gas activity in containment caused by routine refueling work. As a result, routine refueling activities have resulted in unnecessary containment ventilation isolations that were not needed to protect against unacceptable releases of gaseous effluent in the event of a fuel handling accident inside containment.

### 3.0 EVALUATION

The licensee has proposed to revise TS 3/4.3.3.1, "Radiation Monitoring Instrumentation" and its associated Table 3.3-6, to specify that the alarm/trip setpoint for the containment purge and pressure vacuum relief isolation valve be set to values that are less than or equal to 50% of the concentration limits specified in 10 CFR Part 20, Appendix B, Table 2, Column 1 (Table 2).

The columns in Table 2 captioned "Effluents," "Air," and "Water," are applicable to the assessment and control of dose to the public, particularly in the implementation of the provisions of 10 CFR 20.1302. The concentration values given in Columns 1 and 2 of Table 2 are equivalent to the radionuclide concentrations which, if inhaled or ingested continuously over the course of a year, would produce a total effective dose equivalent of 0.05 rem (50 millirem or 0.5 millisieverts).

The licensee's proposed TS change would allow an alarm/trip setpoint to be higher than current TS requirements. As a result, it could be assumed that the consequences of an accident previously evaluated would possibly increase. However, the proposed setpoint value would isolate the Containment Purge and Pressure Relief system prior to reaching 50% of the 10 CFR Part 20 concentration limits for gaseous effluents released to unrestricted areas. These restrictions are intended to minimize and limit the amount of dose received by individual members of the public during normal operations. Therefore, since the basis for the limits being used to establish the new setpoint values is considerably more restrictive than the 10 CFR Part 100 limits, (i.e., the 0.05 rem Part 20 limit is equivalent to 0.2% of the 25 rem whole body dose specified for evaluating a proposed site in 10 CFR 100.11), the staff finds the proposed change to be 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 a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 (65 FR 46013). 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. Klementowicz

Date: October 2, 2000

PSEG Nuclear LLC

Salem Nuclear Generating Station,  
Unit Nos. 1 and 2

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