



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

March 31, 1987

Docket Nos. 50-272  
and 50-311

Mr. C. A. McNeill, Jr.  
Vice President - Nuclear  
Public Service Electric and Gas Company  
Post Office Box 236  
Hancocks Bridge, New Jersey 08038

Dear Mr. McNeill:

The Commission has issued the enclosed Amendment Nos. 77 and 51 to Facility Operating License Nos. DPR-70 and DPR-75 for Salem Nuclear Generating Station, Unit Nos. 1 and 2. These amendments consist of changes to the Technical Specifications in response to your application dated February 6, 1986.

The amendments would modify the technical specifications to derate the capacities of the manipulator crane and the fuel handling area crane.

A copy of the related Safety Evaluation is also enclosed. The notice of issuance will be included in the Commission's next bi-weekly Federal Register notice.

Sincerely,

A handwritten signature in cursive script that reads "Donald C. Fischer".

Donald C. Fischer, Senior Project Manager  
PWR Project Directorate #5  
Division of PWR Licensing-A

Enclosures:

1. Amendment No. 77 to DPR-70
2. Amendment No. 51 to DPR-75
3. Safety Evaluation

cc w/enclosures:  
See next page

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PDR ADOCK 05000272  
P PDR

Mr. C. A. McNeill  
Public Service Electric & Gas Company

Salem Nuclear Generating Station

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SUBJECT: AMENDMENT NOS. 77-51 TO FACILITY OPERATING LICENSES NOS. DPR-70 & DPR-75 -  
DISTRIBUTION: SALEM NUCLEAR GENERATING STATION, UNITS 1 & 2

Docket Files←

PDR

LPDR

SECY

PAD#5 Reading

M. Rushbrook - 5

P. Obrien - 3

D. Fischer - 2

OGC-Beth

ACRS - 10

N. Thompson

BGrimes

LFMB - R. Diggs

JPartlow

OPA

T. Barnhart - 8

EJordan

LHarmon

EButcher



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

PUBLIC SERVICE ELECTRIC AND 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. 77  
License No. DPR-70

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Public Service Electric and Gas Company, Philadelphia Electric Company, Delmarva Power and Light Company and Atlantic City Electric Company (the licensees) dated February 6, 1986 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;
  - 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.

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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

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 77, 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 the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Victor Nerses, Acting Director  
PWR Project Directorate #5  
Division of PWR Licensing-A

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 31, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 77

FACILITY OPERATING LICENSE NO. DPR-70

DOCKET NO. 50-272

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages.

Remove Pages

3/4 9-6

3/4 9-7

Insert Pages

3/4 9-6

3/4 9-7

## REFUELING OPERATIONS

### MANIPULATOR CRANE OPERABILITY

#### LIMITING CONDITION FOR OPERATION

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3.9.6 The manipulator crane and auxiliary hoist shall be used for movement of control rods or fuel assemblies and shall be OPERABLE with:

- a. The manipulator crane used for movement of fuel assemblies having:
  - 1. A minimum capacity of 3250 pounds, and
  - 2. An overload cut off limit less than or equal to 2850 pounds.
- b. The auxiliary hoist used for movement of control rods having:
  - 1. A minimum capacity of 700 pounds, and
  - 2. A load indicator which shall be used to prevent lifting loads in excess of 600 pounds.

APPLICABILITY: During movement of control rods or fuel assemblies within the reactor pressure vessel.

#### ACTION:

With the requirements for crane and/or hoist OPERABILITY not satisfied, suspend use of any inoperable manipulator crane and/or auxiliary hoist from operations involving the movement of control rods and fuel assemblies within the reactor pressure vessel. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.9.6.1 Each manipulator crane used for movement of fuel assemblies within the reactor pressure vessel shall be demonstrated OPERABLE within 100 hours prior to the start of such operations by performing a load test of at least 3250 pounds and demonstrating an automatic load cut off set at less than or equal to 2850 pounds; this includes the heavy load plus the weight of the crane mast and gripper.

4.9.6.2 Each auxiliary hoist and associated load indicator used for movement of control rods within the reactor pressure vessel shall be demonstrated OPERABLE within 100 hours prior to the start of such operations by performing a load test of at least 700 pounds.

## REFUELING OPERATIONS

### CRANE TRAVEL - FUEL HANDLING AREA

#### LIMITING CONDITION FOR OPERATION

3.9.7 Loads in excess of 2200 pounds shall be prohibited from travel over fuel assemblies in the storage pool.

APPLICABILITY: With fuel assemblies in the storage pool.

#### ACTION:

With the requirements of the above specification not satisfied, place the crane load in a safe condition. The provisions of Specification 3.0.3 are not applicable.

## SURVEILLANCE REQUIREMENTS

4.9.7 The overload cutoff which prevents crane travel with loads in excess of 2200 pounds over fuel assemblies shall be demonstrated OPERABLE within 7 days prior to crane use and at least one per 7 days thereafter during the crane operation.



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

PUBLIC SERVICE ELECTRIC AND 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. 51  
License No. DPR-75

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Public Service Electric and Gas Company, Philadelphia Electric Company, Delmarva Power and Light Company and Atlantic City Electric Company (the licensees) dated February 6, 1986 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;
  - 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

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 51, 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 the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Victor Nerses, Acting Director  
PWR Project Directorate #5  
Division of PWR Licensing-A

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: March 31, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 51

FACILITY OPERATING LICENSE NO. DPR-75

DOCKET NO. 50-311

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages.

Remove Pages

3/4 9-6

3/4 9-7

Insert Pages

3/4 9-6

3/4 9-7

## REFUELING OPERATIONS

### MANIPULATOR CRANE OPERABILITY

#### LIMITING CONDITION FOR OPERATION

---

3.9.6 The manipulator crane and auxiliary hoist shall be used for movement of control rods or fuel assemblies and shall be OPERABLE with:

- a. The manipulator crane used for movement of fuel assemblies having:
  - 1. A minimum capacity of 3250 pounds, and
  - 2. An overload cut off limit less than or equal to 2850 pounds.
- b. The auxiliary hoist used for movement of control rods having:
  - 1. A minimum capacity of 700 pounds, and
  - 2. A load indicator which shall be used to prevent lifting loads in excess of 600 pounds.

APPLICABILITY: During movement of control rods or fuel assemblies within the reactor pressure vessel.

#### ACTION:

With the requirements for crane and/or hoist OPERABILITY not satisfied, suspend use of any inoperable manipulator crane and/or auxiliary hoist from operations involving the movement of control rods and fuel assemblies within the reactor pressure vessel. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

4.9.6.1 Each manipulator crane used for movement of fuel assemblies within the reactor pressure vessel shall be demonstrated OPERABLE within 100 hours prior to the start of such operations by performing a load test of at least 3250 pounds and demonstrating an automatic load cut off set at less than or equal to 2850 pounds; this includes the heavy load plus the weight of the crane mast and gripper.

4.9.6.2 Each auxiliary hoist and associated load indicator used for movement of control rods within the reactor pressure vessel shall be demonstrated OPERABLE within 100 hours prior to the start of such operations by performing a load test of at least 700 pounds.

## REFUELING OPERATIONS

### CRANE TRAVEL - FUEL HANDLING AREA

#### LIMITING CONDITION FOR OPERATION

3.9.7 Loads in excess of 2200 pounds shall be prohibited from travel over fuel assemblies in the storage pool.

APPLICABILITY: With fuel assemblies in the storage pool.

#### ACTION:

With the requirements of the above specification not satisfied, place the crane load in a safe condition. The provisions of Specification 3.0.3 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.9.7 The overload cutoff which prevents crane travel with loads in excess of 2200 pounds over fuel assemblies shall be demonstrated OPERABLE within 7 days prior to crane use and at least one per 7 days thereafter during the crane operation.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NOS. 77 AND 51  
TO FACILITY OPERATING LICENSE NOS. DPR-70 AND DPR-75  
PUBLIC SERVICE ELECTRIC AND 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

INTRODUCTION

By letter dated February 6, 1986, the Public Service Electric and Gas Company of New Jersey (the licensee for the Salem Nuclear Plant, Units 1 and 2) proposed changing Technical Specifications 4.9.6.1, 3.9.7, and 4.9.7 to derate the manipulator crane and the fuel handling area crane such that loads of no more than 2200 lbs. (the weight of one fuel assembly and its handling tool) are carried over the spent fuel elements. The licensee committed to derate these cranes during the staff's evaluation of the heavy load handling systems to meet the guidance of NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants." The licensee's commitment is documented in their letter dated April 27, 1983.

Technical Specifications 3.9.7 and 4.9.7 would be revised to reflect the derating of the cranes from 2500 lbs. to 2200 lbs. Technical Specification 4.9.6.1 would be revised to clarify that the 2850-lb. load cut-off for the manipulator crane includes the weight of the load plus the weight of the crane mast and gripper.

EVALUATION AND SUMMARY

Since the allowable load for the manipulator crane and the fuel handling area crane, when traveling over the fuel assemblies, is being reduced and no new fuel handling procedures are being introduced, the derating of the cranes does not increase the safety hazards or create the possibility of a new or different kind of accident not previously evaluated.

Therefore, the staff concludes that the proposed changes to Technical Specifications 4.9.6.1, 3.9.7 and 4.9.7 are acceptable.

### ENVIRONMENTAL CONSIDERATION

These amendments involve a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. 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 published a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, these 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 these amendments.

### CONCLUSION

We have 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 or to the health and safety of the public.

Dated: March 31, 1987

Principal Contributor:  
R. Goel