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JUN 24 1982

Docket Nos. 50-272
and 50-311

Mr. R. A. Uderitz, Vice President
Nuclear
Public Service Electric and Gas Company
Mail Code T15A
Post Office Box 570
Newark, New Jersey 07101

Dear Mr. Uderitz:

By Amendment Nos. 40 and 5 respectively the licenses for Salem Units 1 and 2 were revised by modification of Technical Specifications pertaining to the surveillance of mechanical and hydraulic snubbers. Members of your staff have recently requested that the requirement for functional tests of snubbers be clarified, i.e., the footnote on Page 3/4 7-29 of the Salem Unit 1 Technical Specifications. This footnote does not appear in the Salem Unit 2 Technical Specifications.

It is the staff's intent that all types of snubbers be included in your inservice surveillance program; however, only 10% of the total of each type of snubber need be taken as a representative sample at least one per 18 months during shutdown. The referenced footnote does not mean that every mechanical snubber and every hydraulic snubber with a rated capacity of greater than 50,000 lbs. must be tested every 18 months.

I hope that these explanations provide you with the desired clarification.

Sincerely,

ORIGINAL SIGNED

William J. Ross, Project Manager
Operating Reactors Branch #1
Division of Licensing

cc: See next page



| OFFICE | ORB#1:DL | ORAB | ORB#1:DL | | | | |
|---|---|---|---|---|---|---|---|
| SURNAME | WRoss | HShaw | SVArga | | | | |
| DATE | 06/22/82 | 06/22/82 | 06/24/82 | | | | |

Mr. R. A. Uderitz
Public Service Electric and Gas Company

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Ronald C. Haynes
Regional Administrator - Region I
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

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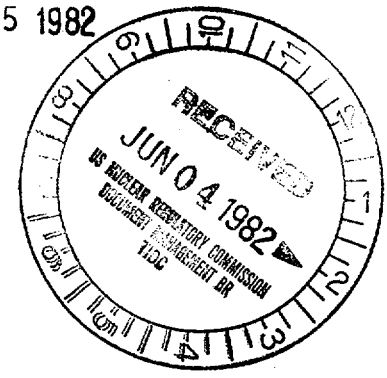


Docket Nos. 50-272
and 50-311

Mr. R. A. Uderitz, Vice President
Nuclear
Public Service Electric and Gas Company
Mail Code T15A - P.O. Box 570
Newark, New Jersey 07101

Dear Mr. Uderitz:

The Commission has issued the enclosed Amendment No. 44 to Facility Operating License No. DPR-70 and Amendment No. 8 to Facility Operating License No. DPR-75 for the Salem Nuclear Generating Station, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications in response to your application transmitted by letter dated May 17, 1982.

These amendments revise the Technical Specifications related to surveillance of the automatic isolation and interlock action of the RHR system from the Reactor Coolant System.

Copies of the Safety Evaluation and the Notice of Issuance are also enclosed.

Sincerely,

ORIGINAL SIGNED

William J. Ross, Project Manager
Operating Reactors Branch #1
Division of Licensing

Enclosures:
1. Amendment No. 44 to DPR-70
2. Amendment No. 8 to DPR-75
3. Safety Evaluation
4. Notice of Issuance

cc w/enclosures:
See next page

5/25/82 5:55 PM called IE (Konklan) Resident Inspector to advise of Amendment signed today. Left message. 4:00 PM advised PSE&G (Liden) of same. E. Reeves

FR Notice + Amendment

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| SURNAME | CParrish | WRoss:ds | DBrinkman | DSkovolt | SVarga | TNovak | HWarman |
| DATE | 05/24/82 | 05/24/82 | 05/24/82 | 05/24/82 | 05/24/82 | 05/24/82 | 05/25/82 |

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Mr. R. A. Uderitz
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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. 44
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 May 17, 1982, 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.

DESIGNATED ORIGINAL

Certified By _____

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. 44 , 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

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 25, 1982

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. 8
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 May 17, 1982, 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. 8 , 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

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: May 25, 1982

ATTACHMENT TO LICENSE AMENDMENT NO. 44

FACILITY OPERATING LICENSE NO. DPR-70

DOCKET NO. 50-272

Revise Appendix A as follows:

| Remove Page | Insert Page |
|---|---|
| 3/4 5-5 | 3/4 5-5 |
| | 3/4 5-5b |

SURVEILLANCE REQUIREMENTS (Continued)

c. By a visual inspection which verifies that no loose debris (rags, trash, clothing, etc.) is present in the containment which could be transported to the containment sump and cause restriction of the pump suctions during LOCA conditions. This visual inspection shall be performed:

1. For all accessible areas of the containment prior to establishing CONTAINMENT INTEGRITY, and

2. Of the areas affected within containment at the completion of each containment entry when CONTAINMENT INTEGRITY is established.

d. At least once per 18 months by:

1. A visual inspection of the containment sump and verifying that the subsystem suction inlets are not restricted by debris and that the sump components (trash racks, screens, etc.) show no evidence of structural distress or corrosion.

e. At least once per 18 months, during shutdown, by:

1. Verifying that each automatic valve in the flow path actuates to its correct position on a safety injection test signal.

2. Verifying that each of the following pumps start automatically upon receipt of a safety injection test signal:

a) Centrifugal charging pump

b) Safety injection pump

c) Residual heat removal pump

i. The automatic isolation and interlock function of the RHR System shall be verified within the seven (7) days prior to placing the RHR System in service for cooling of the Reactor Coolant System. This shall be done by verifying that valves RH1 and RH2 close upon insertion of a test signal corresponding to a reactor coolant pressure of 580 psig or less, and that, with a test signal corresponding to a reactor coolant pressure of 580 psig or greater, that the valves cannot be opened.

ATTACHMENT TO LICENSE AMENDMENT NO. 8

FACILITY OPERATING LICENSE NO. DPR-75

DOCKET NO. 50-311

Revise Appendix A as follows:

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

SURVEILLANCE REQUIREMENTS (Continued)

c. By a visual inspection which verifies that no loose debris (rags, trash, clothing, etc.) is present in the containment which could be transported to the containment sump and cause restriction of the pump suctions during LOCA conditions. This visual inspection shall be performed:

1. For all accessible areas of the containment prior to establishing CONTAINMENT INTEGRITY, and

2. Of the areas affected within containment at the completion of each containment entry when CONTAINMENT INTEGRITY is established.

d. At least once per 18 months by:

1. A visual inspection of the containment sump and verifying that the subsystem suction inlets are not restricted by debris and that the sump components (trash racks, screens, etc.) show no evidence of structural distress or corrosion.

e. At least once per 18 months, during shutdown, by:

1. Verifying that each automatic valve in the flow path actuates to its correct position on a safety injection test signal.

2. Verifying that each of the following pumps start automatically upon receipt of a safety injection test signal:

a) Centrifugal charging pump

b) Safety injection pump

c) Residual heat removal pump

SURVEILLANCE REQUIREMENTS (Continued)

f. By verifying that each of the following pumps develops the indicated discharge pressure on recirculation flow when tested pursuant to Specification 4.0.5:

1. Centrifugal charging pump ≥ 2400 psig
2. Safety Injection pump ≥ 1425 psig
3. Residual heat removal pump ≥ 165 psig

g. By verifying the correct position of each of the following ECCS throttle valves:

1. Within 4 hours following completion of each valve stroking operation or maintenance on the valve when the ECCS subsystems are required to be OPERABLE.
2. At least once per 18 months.

| HPSI System Valve Number | LPSI System Valve Number |
|---|---|
| 21 SJ 16 | 21 SJ 138 |
| 22 SJ 16 | 22 SJ 138 |
| 23 SJ 16 | 23 SJ 138 |
| 24 SJ 16 | 24 SJ 138 |
| | 21 SJ 143 |
| | 22 SJ 143 |
| | 23 SJ 143 |
| | 24 SJ 143 |

h. By performing a flow balance test, during shutdown, following completion of modifications to the ECCS subsystems that alter the subsystem flow characteristics and verifying that:

1. For safety injection lines, with a single pump running:
   a) The sum of the injection line flow rates, excluding the line with the highest flow rate, is ≥ 463 gpm, and
   b) The total pump flow rate is ≤ 650 gpm.
2. For centrifugal charging pump lines, with a single pump running:
   a) The sum of the injection line flow rates, excluding the line with the highest flow rate, is ≥ 346 gpm, and
   b) The total pump flow rate is ≤ 550 gpm.

i. The automatic isolation and interlock function of the RHR System shall be verified within the seven (7) days prior to placing the RHR System in service for cooling of the Reactor Coolant System. This shall be done by verifying that valves RH1 and RH2 close upon insertion of a test signal corresponding to a reactor coolant pressure of 580 psig or less, and that, with a test signal corresponding to a reactor coolant pressure of 580 psig or greater, that the valves cannot be opened.

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

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

# RELATED TO AMENDMENT NO. 44 TO FACILITY OPERATING LICENSE NO. DPR-70

# AND AMENDMENT NO. 8 TO FACILITY OPERATING LICENSE NO. DPR-75

PUBLIC SERVICE ELECTRIC AND GAS COMPANY,
PHILADELPHIA ELECTRIC COMPANY,
DELMARVA POWER AND LIGHT COMPANY, AND
ATLANTIC CITY ELECTRIC COMPANY

SALEM NUCLEAR GENERATION STATION, UNIT NOS. 1 AND 2

DOCKET NOS. 50-272 AND 50-311

## Introduction

The current Technical Specification 4.5.2.d for both Salem Unit 1 and Unit 2 requires that the automatic interlock and isolation action of the RHR System from the Reactor Coolant System be verfied once per 18 months when the Reactor Coolant System is above 580 psig. By letter dated May 17, 1982 Public Service Electric and Gas Company (the licensee) requested that the frequency of this verification action be revised to each time the RHR System is placed in service for cooling the Reactor Coolant System.

## Background

Technical Specification 4.5.2.d requires the testing of valves RH1 and RH2 on each unit to verify that these valves provide an acceptable pressure boundary between the high pressure Reactor Coolant System (RCS) and the low pressure Residual Heat Removal (RHR) System. Previously, 18 months has been considered an acceptable interval for verifying that these valves will remain closed when the RCS pressure is greater than 580 psig and can be opened when the RCS is less than 580 psig. The licensee prefers to test these valves each time the RHR system is placed in operation for two reasons. First, the change will provide increased assurance that the isolation and interlock functions associated with these valves will be operable during the modes of operation when RHR isolation could be required. Second, the change will prevent the plant from requiring a cold shutdown for only the purpose of meeting an 18 month scheduled surveillance.

Evaluation

The staff recognizes the undesirability of verifying the functions of isolation valves RH1 and RH2 when the RCS pressure is greater than 580 psig because of potential damage to the RHR system and a loss of reactor coolant event. The 18 months schedule was set to approximate one fuel cycle. The licensee's proposal will undoubtedly result in several verifications per fuel cycle. The proposal requires a test to be made within 7 days before the valves are to be opened to actuate the RHR system.

The potential for an overpressurization of the RHR system willbe minimized by verifying the two valves will close upon insertion of a test signal corresponding to a RCS pressure of $\leq$580 psig and cannot be opened upon insertion of a test signal corresponding to a RCS pressure of $\geq$580 psig.

Inasmuch as the proposed surveillance frequency provides a more frequent and an improved verification, it is acceptable.

Environmental Consideration

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: May 25, 1982

Principal Contributor:
W. Ross

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-272 AND 50-311

PUBLIC SERVICE ELECTRIC AND GAS COMPANY,
PHILADELPHIA ELECTRIC COMPANY,
DELMARVA POWER AND LIGHT COMPANY, AND
ATLANTIC CITY ELECTRIC COMPANY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 44 to Facility Operating License No. DPR-70 and Amendment No. 8 to Facility Operating License No. 75, issued to Public Service Electric and Gas Company, Philadelphia Electric Company, Delmarva Power and Light Company and Atlantic City Electric Company (the licensees), which revised Technical Specifications for operation of the Salem Nuclear Generating Station, Unit Nos. 1 and 2 (the facilities) located in Salem County, New Jersey. The amendments are effective as of the date of issuance.

The amendments revise the Technical Specification related to surveillance of the automatic isolation and interlock action of the RHR System from the Reactor Coolant System.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated May 17, 1982, (2) Amendment Nos. 44 and 8 to License Nos. DPR-70 and DPR-75, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. and at the Salem Free Public Library, 112 West Broadway, Salem, New Jersey. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commssion, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, this 25th day of May, 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing