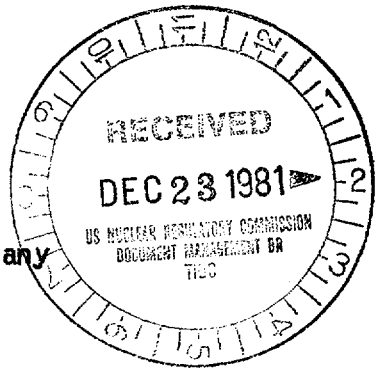
DEC 15 1981

Docket No. 50-311



Mr. F. W. Schneider, Vice President
Production
Public Service Electric and Gas Company
80 Park Plaza 15A
Newark, New Jersey 07101

Dear Mr. Schneider:

The Commission has issued the enclosed Amendment No. 3 to Facility Operating License No. DPR-75 for the Salem Nuclear Generating Station, Unit No. 2. The amendment consists of a temporary change to the Technical Specifications (TSs) in response to your telecopied request dated November 9, 1981, as confirmed by letters dated November 9, 1981 and November 18, 1981. This amendment was authorized by telephone on November 9, 1981 and was confirmed by letter of the same date.

This amendment changes an Action Statement for the Emergency Core Cooling Systems to permit an additional 48 hours to complete repairs to No. 22 Charging Pump and, upon satisfactory verification of pump characteristics, permits the required flow balance testing to be conducted during the next time the unit is in COLD SHUTDOWN.

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

Sincerely,

ORIGINAL SIGNED

Gary Meyer, Project Manager
Operating Reactors Branch #1,
Division of Licensing

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

cc w/enclosures:
See next page

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FR NOTICE + AMENDMENT

OFFICE	ORB#1:DL	ORB#1:DL	ORB#1:DL	AD/ORADL	OELD		
SURNAME	CParrish	GMeyer:ds	SVarga	TNovak	M.KARMAN		
DATE	12/2/81	12/2/81	12/3/81	12/3/81	12/9/81		

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY USGPO: 1981—335-960

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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. 50-311

SALEM NUCLEAR GENERATING STATION, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 3
License No. DPR-75

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The request for amendment by Public Service Electric and Gas Company, Philadelphia Electric Company, and Delmarva Power and Light Company and Atlantic City Electric Company, (the licensees) dated November 9, 1981 (as confirmed by letter dated November 18, 1981), 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. 3, 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 November 9, 1981.

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: December 15, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 3

FACILITY OPERATING LICENSE NO. DPR-75

DOCKET NO. 50-311

Revise Appendix A as follows:

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

EMERGENCY CORE COOLING SYSTEMS

ECCS SUBSYSTEMS - $T_{avg} \geq 350°F$

LIMITING CONDITION FOR OPERATION

3.5.2 Two independent ECCS subsystems shall be OPERABLE with each subsystem comprised of:

a. One OPERABLE centrifugal charging pump,

b. One OPERABLE safety injection pump,

c. One OPERABLE residual heat removal heat exchanger,

d. One OPERABLE residual heat removal pump, and

e. An OPERABLE flow path capable of taking suction from the refueling water storage tank on a safety injection signal and transferring suction to the containment sump during the recirculation phase of operation.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

a. With one ECCS subsystem inoperable, restore the inoperable subsystem to OPERABLE status within 72 hours or be in HOT SHUTDOWN within the next 12 hours.* 1

b. In the event the ECCS is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.

*

The time for completion of repairs to the No. 22 centrifugal charging pump shall be extended from 0527 hours on November 10, 1981 to 0527 hours on November 12, 1981. If repairs are not completed by that time, the unit shall be placed in HOT SHUTDOWN within the next 12 hours.

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.

SURVEILLANCE REQUIREMENTS (Continued)

* (footnote from page 3/4 5-6)

After completion of repairs to the No. 22 centrifugal charging pump on or about November 12, 1981, the pump shall be tested pursuant to specification 4.0.5 and system performance calculations be performed to verify that the pump characteristics are not significantly different. Flow balance testing pursuant to specification 4.5.2.h shall be performed the next time the unit is in COLD SHUTDOWN.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 3 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 GENERATING STATION, UNIT NO. 2

DOCKET NO. 50-311

1.0 Introduction

Public Service Electric and Gas Company has requested a modification to Technical Specification 3/4 5.2, ECCS Subsystem, to allow continued operation beyond the specified 72 hours with one centrifugal charging pump out-of-service. In addition, they have requested a modification to Section h of Technical Specification 3/4 5.2 to postpone the required flow balancing test until the next cold shutdown.

2.0 Discussion

The shaft of one of the centrifugal charging pumps experienced a shaft seizure during testing. Technical Specification 3/4 5.2 only allows 72 hours of operation under these circumstances. The intent of the Specification is to assure that the reliability of the ECCS remains high. The requirement for a flow balance test (5.2 h) also assures proper functioning of the system after modifications have been made. PSE&G has requested a 48 hour extension of the 72 hours requirement and a postponement of the flow balance test.

3.0 Evaluation

The staff has evaluated the effect of these modifications on the ECCS reliability. The probability of needing the centrifugal charging pumps during a 48 hour period is very small and the overall reduction in the centrifugal charging pump reliability over a one year period is also small (i.e., 2/365 = .5%). In addition, the following actions have been taken to mitigate the loss of one centrifugal charging pump: (1) the other centrifugal charging pump has been tested and demonstrated operable, and (2) the positive displacement charging pump has been tested and demonstrated operable.

In terms of the flow balancing test, the intent will be met by testing the replacement pump to demonstrate that the flow-head characteristics are similar to the original characteristics of the failed pump. Confirmatory testing will be required on the next cold shutdown.

4.0 Conclusions

Based on the low probability of an event requiring the centrifugal charging pumps and the mitigating actions taken, we conclude that the proposed modifications to Technical Specification 3/4 5.2 are acceptable.

Environmental Consideration

We have determined that the amendment does 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 amendment involves 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 this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does 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 this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: December 15, 1981

7590-01

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 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 AMENDMENT TO FACILITY
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 3 to Facility Operating License No. DPR-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 No. 2 (the facility) located in Salem County, New Jersey. The amendment is effective as of November 9, 1981.

The amendment was authorized by telephone on November 9, 1981 and was confirmed by letter on the same date. The amendment changes an Action Statement for the Emergency Core Cooling Systems to permit an additional 48 hours to complete repairs to No. 22 Charging Pump and, upon satisfactory verification of pump characteristics, permits the required flow balance testing to be conducted during the next time the unit is in COLD SHUTDOWN. The amendment was authorized on an expedited basis to maintain the plant at a steady-state condition and avoid a shutdown transient shown by our evaluation to be unnecessary but required by Technical Specifications unless amended.

The application for the amendment 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 amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment 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 this amendment.

For further details with respect to this action, see (1) the request for amendment dated November 9, 1981, as confirmed by letters dated November 9, 1981 and November 18, 1981, (2) the Commission's letter dated November 9, 1981, authorizing the Technical Specification change, (3) Amendment No. 3 to License No. DPR-75, and (4) 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), (3) and (4) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 15th day of December, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

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