

November 5, 1991

Docket No. 50-354

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: CHANGE TO SURVEILLANCE INTERVALS FOR ELECTRICAL PROTECTIVE  
ASSEMBLIES, HOPE CREEK GENERATING STATION (TAC NO. 81699)

The Commission has issued the enclosed Amendment No. 44 to Facility Operating License No. NPF-57 for the Hope Creek Generating Station. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated September 6, 1991.

This amendment changes the channel functional test surveillance intervals for the Reactor Protection System (RPS) Electrical Protective Assemblies (EPAs) and Power Range Neutron Monitoring System EPAs from "at least once per 6 months" to "each time the plant is in cold shutdown for a period of more than 24 hours, unless performed in the previous 6 months." This change to the surveillance intervals is in accordance with the guidance contained in Generic Letter 91-09.

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/

Stephen Dembek, Project Manager  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

- Amendment No. 44 to License No. NPF-57
- Safety Evaluation

cc w/enclosures:  
See next page

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

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Sincerely,

A handwritten signature in cursive script, appearing to read "Stephen Dembek".

Stephen Dembek, Project Manager  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 44 to License No. NPF-57
2. Safety Evaluation

cc w/enclosures:  
See next page

Mr. Steven E. Miltenberger  
Public Service Electric & Gas Co.

Hope Creek Generating Station

cc:

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

PUBLIC SERVICE ELECTRIC & GAS COMPANY

ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-354

HOPE CREEK GENERATING STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 44  
License No. NPF-57

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 (PSE&G) dated September 6, 1991, 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. NPF-57 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No.44 , and the Environmental Protection Plan contained in Appendix B, are hereby incorporated in the license. PSE&G shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

*Charles L. Miller*

Charles L. Miller, Director  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: November 5, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 44

FACILITY OPERATING LICENSE NO. NPF-57

DOCKET NO. 50-354

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. Overleaf pages provided to maintain document completeness.\*

Remove

3/4 8-39  
3/4 8-40

3/4 8-43  
3/4 8-44

Insert

3/4 8-39\*  
3/4 8-40

3/4 8-43\*  
3/4 8-44

TABLE 3.8.4.3-1

MOTOR OPERATED VALVES - THERMAL OVERLOAD PROTECTION (NOT BYPASSED)

<u>VALVE NUMBER</u>	<u>SYSTEM(S) AFFECTED</u>
1BC-HV-F003A	Residual Heat Removal
1BC-HV-F003B	Residual Heat Removal
1GS-HV-5741A	Containment Atmosphere Control
1GS-HV-5741B	Containment Atmosphere Control
1KC-HV-3408M	Fire Protection

## ELECTRICAL POWER SYSTEMS

### REACTOR PROTECTION SYSTEM ELECTRICAL POWER MONITORING

#### LIMITING CONDITION FOR OPERATION

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3.8.4.4 Two RPS electric power monitoring channels for each inservice RPS MG set or alternate power supply shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With one RPS electric power monitoring channel for an inservice RPS MG set or alternate power supply inoperable, restore the inoperable power monitoring channel to OPERABLE status within 72 hours or remove the associated RPS MG set or alternate power supply from service.
- b. With both RPS electric power monitoring channels for an inservice RPS MG set or alternate power supply inoperable, restore at least one electric power monitoring channel to OPERABLE status within 30 minutes or remove the associated RPS MG set or alternate power supply from service.

#### SURVEILLANCE REQUIREMENTS

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4.8.4.4 The above specified RPS electric power monitoring channels shall be determined OPERABLE:

- a. By performance of a CHANNEL FUNCTIONAL TEST each time the plant is in COLD SHUTDOWN for a period of more than 24 hours, unless performed in the previous 6 months.
- b. At least once per 18 months by demonstrating the OPERABILITY of over-voltage, under-voltage, and under-frequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints.
  1. Over-voltage  $\leq$  132 VAC, (Bus A), 132 VAC (Bus B)
  2. Under-voltage  $\geq$  108 VAC, (Bus A), 108 VAC (Bus B)
  3. Under-frequency  $\geq$  57 Hz. (Bus A and Bus B)



TABLE 3.8.4.5-1 (Continued)

480 VAC POWER CIRCUIT BREAKERS

1. Type AKR-5A-30 (Continued)

<u>Class 1E Circuit Breaker No.</u>	<u>Class 1E Bus</u>	<u>Non-Class 1E Load Description</u>
52-45034	10B450	Reactor Building Exhaust Fan 1CV301
52-46011	10B460	Reactor Area MCC 10B262
52-46014	10B460	Radwaste Area Exhaust Fan 0BV305
52-47011	10B470	Reactor Area MCC 10B272
52-47014	10B470	Radwaste Area Exhaust Fan 0CV305
52-47024	10B470	Radwaste Area Supply Fan 0AV316
52-47031	10B470	Technical Support Center MCC 00B474
52-48011	10B480	Reactor Area MCC 10B282
52-48024	10B480	Reactor Building Exhaust Fan 1AV301

480 VAC MOLDED CASE CIRCUIT BREAKERS

1. Type HFB150

<u>Class 1E Circuit Breaker No.</u>	<u>Class 1E Bus</u>	<u>Non-Class 1E Load Description</u>
52-441043	10B441	NSSS Computer Inverter 10D485
52-451023	10B451	Public Address System Inverter 10D496
52-471023	10B471	Security System Inverter 0AD495

## ELECTRICAL POWER SYSTEM

### POWER RANGE NEUTRON MONITORING SYSTEM ELECTRICAL POWER MONITORING

#### LIMITING CONDITION FOR OPERATION

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3.8.4.6 The power range neutron monitoring system (NMS) electric power monitoring channels for each inservice power range NMS power supply shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With one power range NMS electric power monitoring channel for an inservice power range NMS power supply inoperable, restore the inoperable power monitoring channel to OPERABLE status within 72 hours or deenergize the associated power range NMS power supply feeder circuit.
- b. With both power range NMS electric power monitoring channels for an inservice power range NMS power supply inoperable, restore at least one electric power monitoring channel to OPERABLE status within 30 minutes or deenergize the associated power range NMS power supply feeder circuit.

#### SURVEILLANCE REQUIREMENTS

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4.8.4.6 The above specified power range NMS electric power monitoring channels shall be determined OPERABLE:

- a. By performance of a CHANNEL FUNCTIONAL TEST each time the plant is in COLD SHUTDOWN for a period of more than 24 hours, unless performed in the previous 6 months.
- b. At least once per 18 months by demonstrating the OPERABILITY of over-voltage, under-voltage, and under-frequency protective instrumentation by performance of a CHANNEL CALIBRATION including simulated automatic actuation of the protective relays, tripping logic and output circuit breakers and verifying the following setpoints.
  1. Over-voltage  $\leq$  132 VAC (BUS A), 132 VAC (BUS B)
  2. Under-voltage  $\geq$  108 VAC (BUS A), 108 VAC (BUS B)
  3. Under-frequency  $\geq$  57 Hz. -0, +2%



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. NPF-57

PUBLIC SERVICE ELECTRIC & GAS COMPANY

ATLANTIC CITY ELECTRIC COMPANY

HOPE CREEK GENERATING STATION

DOCKET NO. 50-354

1.0 INTRODUCTION

By letter of September 6, 1991, Public Service Electric and Gas Company and Atlantic City Electric Company (the licensees) submitted a request for changes to the Hope Creek Generating Station, Technical Specifications (TS). The requested change modifies the requirements for performing a channel functional test of electrical protective assemblies (EPAs) that are currently specified with a 6-month surveillance interval. Guidance on this proposed change was provided to all boiling-water reactor (BWR) licensees by Generic Letter 91-09, of June 27, 1991.

2.0 EVALUATION

The licensee has proposed to modify the 6-month surveillance intervals for performing channel functional tests of EPAs as specified in Technical Specifications (TS) 4.8.4.4.a and 4.8.4.6.a to state that they are to be performed "each time the plant is in COLD SHUTDOWN for a period of more than 24 hours, unless performed in the previous 6 months." Hope Creek differs from the typical plant in that the Power Range Neutron Monitoring System (PRNMS) is not powered from the Reactor Protection System (RPS) power supplies; instead, the PRNMS is equipped with separate power supplies and separate EPAs. The EPAs used for the PRNMS are identical to the EPAs used for the RPS. Like the RPS EPAs, the PRNMS EPAs place the plant in a half scram condition while being tested. Therefore, this change is consistent with the guidance provided in Generic Letter 91-09.

The Niagara Mohawk Power Corporation provided an analysis in a proposal submitted on December 15, 1988, that calculated the safety risks and benefits of a similar TS change. The U.S. Nuclear Regulatory Commission (NRC) staff reviewed and concurred with the conclusions of this analysis that this TS change will produce a net safety benefit. Because the EPAs for all BWRs are primarily the same, the staff finds that this analysis applies generically to all BWRs. In addition, it is the staff's qualitative judgment that the proposed increase in the surveillance interval is not safety significant because of the diverse protection that exists, the number of failures that have to occur to have an adverse impact on safety, and the potential for detecting a degraded condition of the RPS and PRNMS through on-line testing. Therefore, the staff finds that the licensee's proposed TS change is acceptable.

### 3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New Jersey State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a surveillance requirement. The NRC staff has determined that the amendment involves 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 amendment involves no significant hazards consideration, and there has been no public comment on such finding (56 FR 49925). Accordingly, the amendment meets 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 amendment.

### 5.0 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 amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: Thomas G. Dunning  
Stephen Dembek

Date: November 5, 1991