

February 28, 1994

Mr. Steven E. Miltenberger  
 Vice President and Chief Nuclear  
 Officer  
 Public Service Electric and Gas  
 Company  
 Post Office Box 236  
 Hancocks Bridge, New Jersey 08038

Dear Mr. Miltenberger:

SUBJECT: CHANGES TO RADIOACTIVE EFFLUENTS - MAIN CONDENSER SECTION AND  
 DELETION OF CIRCUIT BREAKER FROM ELECTRICAL POWER SYSTEMS SECTION,  
 HOPE CREEK GENERATING STATION (TAC NO. M87660)

The Commission has issued the enclosed Amendment No. 66 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 August 30, 1993.

This amendment revises TS Table 3.8.4.1-1 to delete Breaker No. 52-263022 which was disconnected and converted to spare status by a plant design change, revises TS 3.11.2.7 to change radioactivity rate units and the associated action statement reference from HOT STANDBY to read HOT SHUTDOWN, and changes the reference name of the Offgas Radioactivity Monitor.

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

You are requested to inform the NRC, in writing, when this amendment has been implemented.

Sincerely,

/s/

James C. Stone, Senior Project Manager  
 Project Directorate I-2  
 Division of Reactor Projects - I/II  
 Office of Nuclear Reactor Regulation

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 P PDR

Enclosures:

1. Amendment No. 66 to License No. NPF-57
2. Safety Evaluation

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

February 28, 1994

Docket No. 50-354

Mr. Steven E. Miltenberger  
Vice President and Chief Nuclear  
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Public Service Electric and Gas  
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Hancocks Bridge, New Jersey 08038

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Sincerely,

A handwritten signature in cursive script, reading "James C. Stone", is written over the typed name.

James C. Stone, Senior Project Manager  
Project Directorate I-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

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1. Amendment No.66 to  
License No. NPF-57
2. Safety Evaluation

cc w/enclosures:  
See next page

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

Hope Creek Generating Station

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

PUBLIC SERVICE ELECTRIC & GAS COMPANY

ATLANTIC CITY ELECTRIC COMPANY

DOCKET NO. 50-354

HOPE CREEK GENERATING STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 66  
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 August 30, 1993, 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. 66, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into the license. PSE&G shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance and shall be implemented within 60 day 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: February 28, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 66

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 8-29

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3/4 11-17

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Insert

3/4 8-29

3/4 8-30\*

3/4 11-17

3/4 11-18\*

TABLE 3.8.4.1-1 (Continued)

PRIMARY CONTAINMENT PENETRATION CONDUCTOR  
OVERCURRENT PROTECTIVE DEVICES

## 2. 480-VOLT MOLDED CASE CIRCUIT BREAKERS (Continued)

CIRCUIT BREAKER NO.	LOCATION	TYPES	SYSTEMS OR EQUIPMENT POWERED
52-253064	10B253	IM HFB150 TM HFB150	Reactor Vessel Head Vent to Steam Line 1BB-HV-F005
52-263011	10B263	IM HFB150 TM HFB150	Reactor Vessel Head Vent Outboard Isolation 1BB-HV-F002
52-263012*	10B263	IM HFB150 TM HFB150	Recirc Pump Motor Hoist 1BH201 Disconnect Switch 1BS204
52-263042*	10B263	IM HFB150 TM HFB150	Main Steam Relief Valve Hoist 10H202 Disconnect Switch 10S207
52-263054	10B263	IM HFB150 TM HFB150	RWCU Suction from Recirc Loop A 1BG-HV-F100
52-263081	10B263	IM HFB150 TM HFB150	RWCU Suction from RPV Drain Valve 1BG-HV-F101
52-263082	10B263	IM HFB150 TM HFB150	RWCU Suction Valve 1BG-HV-F102
52-263083	10B263	IM HFB150 TM HFB150	RWCU Suction from Recirc Loop B Valve 1BG-HV-F106
52-264053	10B264	IM HFB150 TM HFB150	Recirc Pump A Discharge Valve 1BB-HV-F031A
52-264062	10B264	IM HFB150 TM HFB150	Feedwater Inlet B Shutoff Valve 1AE-HV-F011B
52-264071	10B264	IM HFB150 TM HFB150	Reactor Recirc Pump 1AP201 Space Heater 1AS220
52-264072	10B264	IM HFB150 TM HFB150	Reactor Recirc Pump 1BP201 Space Heater 1BS220
52-264083	10B264	IM HFB150 TM HFB150	Recirc Pump A Suction Valve 1BB-HV-F023A

\* These breakers shall be administratively maintained open in OPERATIONAL CONDITIONS 1, 2 and 3 and are not required to be tested.

## ELECTRICAL POWER SYSTEMS

### MOTOR OPERATED VALVES - THERMAL OVERLOAD PROTECTION (BYPASSED)

#### LIMITING CONDITION FOR OPERATION

---

3.8.4.2 The thermal overload protection bypass circuit of each motor operated valve (MOV) shown in Table 3.8.4.2-1 shall be OPERABLE.

APPLICABILITY: Whenever the MOV is required to be OPERABLE.

#### ACTION:

With the thermal overload protection bypass circuit for one or more of the above required MOVs inoperable, restore the inoperable thermal overload protection bypass circuit(s) to OPERABLE status within 8 hours or declare the affected MOV(s) inoperable and apply the appropriate ACTION statement(s) for the affected system(s).

#### SURVEILLANCE REQUIREMENTS

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4.8.4.2.1 The thermal overload protection bypass circuit for each of the above required MOVs shall be demonstrated OPERABLE:

- a. At least once per 18 months by the performance of a CHANNEL FUNCTIONAL TEST for:
  1. Those thermal overload protection devices which are normally in force during plant operation and bypassed only under accident conditions.
  2. A representative sample of at least 25% of those thermal overload protection devices which are bypassed continuously and temporarily placed in force only when the MOVs are undergoing periodic or maintenance testing, such that the bypass circuitry for each thermal overload protection device of this type is tested at least once per 6 years.
  3. A representative sample of at least 25% of those thermal overload protection devices which are in force during normal manual (momentary push button contact) MOV operation and bypassed during remote manual (push button held depressed) MOV operation, such that the bypass circuitry for each thermal overload protection device of this type is tested at least once per 6 years.
- b. Following maintenance on the motor starter.

4.8.4.2.2 The thermal overload protection for the above required MOVs which are continuously bypassed and temporarily placed in force only when the MOV is undergoing periodic or maintenance testing shall be verified to be continuously bypassed following such testing.



## RADIOACTIVE EFFLUENTS

### MAIN CONDENSER

#### LIMITING CONDITION FOR OPERATION

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3.11.2.7 The radioactivity rate of noble gases measured at the recombiner after-condenser discharge shall be limited to less than or equal to  $3.30 \text{ E}+5$  microcuries/sec after 30 minute decay.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2\* and 3\*.

#### ACTION:

With the radioactivity rate of noble gases at the recombiner after-condenser discharge exceeding  $3.30 \text{ E}+5$  microcuries/sec after 30 minute decay, restore the radioactivity rate to within its limit within 72 hours or be in at least HOT SHUTDOWN within the next 12 hours.

#### SURVEILLANCE REQUIREMENTS

=====

4.11.2.7.1 The radioactivity rate of noble gases at the recombiner after-condenser discharge shall be continuously monitored in accordance with Specification 3.3.7.1.

4.11.2.7.2 The radioactivity rate of noble gases from the recombiner after-condenser discharge shall be determined to be within the limits of Specification 3.11.2.7 at the following frequencies by performing an isotopic analysis of a representative sample of gases taken near the discharge of the main condenser air ejector:

- a. At least once per 31 days.
- b. Within 4 hours following an increase, as indicated by the Offgas Pretreatment Radiation Monitor, of greater than 50%, after factoring out increases due to changes in THERMAL POWER level, in the nominal steady-state fission gas release from the primary coolant.
- c. The provisions of Specification 4.0.4 are not applicable.

\*When the main condenser air ejector is in operation.

## **RADIOACTIVE EFFLUENTS**

### **VENTING OR PURGING**

#### **LIMITING CONDITION FOR OPERATION**

---

3.11.2.8 VENTING or PURGING of the Mark I containment drywell shall be through either the reactor building ventilation system or the filtration, recirculation and ventilation system.\*

**APPLICABILITY:** Whenever the containment is vented or purged.

**ACTION:**

- a. With the requirements of the above specification not satisfied, suspend all VENTING and PURGING of the drywell.
- b. The provisions of Specification 3.0.3 are not applicable.

#### **SURVEILLANCE REQUIREMENTS**

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4.11.2.8 The containment shall be determined to be aligned for VENTING or PURGING through the reactor building ventilation system, the filtration, recirculation and ventilation system, or the hardened torus vent within 4 hours prior to start of and at least once per 12 hours during VENTING or PURGING of the drywell.

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\* Following Type A Integrated Leakage Rate Testing, the Mark I containment drywell may be vented through the hardened torus vent.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 66 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 dated August 30, 1993, the Public Service Electric & Gas Company (the licensee) submitted a request for changes to the Hope Creek Generating Station, Technical Specification (TS). The requested changes would revise TS Table 3.8.4.1-1 to delete Breaker No. 52-263022, TS 3.11.2.7 to change the radioactivity rate units and the associated action statement, and change the name of the Offgas Radioactivity Monitor.

2.0 EVALUATION

TS Table 3.8.4.1-1, "Primary Containment Penetration Conductor Overcurrent Protective Devices," contains Breaker No. 52-263022 associated with the control rod drive (CRD) Equipment Handling Platform. This breaker has been disconnected and converted to spare status by a plant design change. Currently, station operating procedure HC.OP-IO.ZZ-0002 requires this breaker to be tagged open until the TSs are revised. The proposed change will delete the breaker from TS Table 3.8.4.1-1, and therefore, the requirements of TS 3.8.4.1 will no longer apply. The staff finds this change acceptable.

Currently, TS 3.11.2.7, "Radioactive Effluents - Main Condenser," Limiting Condition for Operation (LCO) requires that the radioactivity rate of noble gases measured at the recombiner after-condenser discharge shall be limited to less than or equal to 330 millicuries per second after 30 minute decay. The associated action statement requires the licensee to restore the radioactivity rate to within its limit within 72 hours or be in at least HOT STANDBY within the next 12 hours when the rate exceeds 330 millicuries per second after a 30 minute decay. The reference to Offgas Radioactivity Monitor in Surveillance Requirement 4.11.2.7.2.b is renamed the Offgas Pretreatment Radiation Monitor.

The proposed change to the LCO will convert the units of radioactivity rate from 330 millicuries per second to  $3.30 \text{ E}+5$  microcuries per second. The change makes the radioactivity rate of noble gases consistent with the station chemistry reports, plant Radiation Monitor System (RMS) data, and other TS and does not change the release limits. This is an editorial change and the staff finds it acceptable.

The change from HOT STANDBY to HOT SHUTDOWN requires a more conservative action in the event the recombiner after-condenser discharge exceeds the radioactivity rate for noble gases. HOT STANDBY is a mode switch position

which is part of Operational Condition 2 (Op Con 2), STARTUP. In Op Con 2, the reactor could be maintained critical. By changing to HOT SHUTDOWN, Op Con 3, the reactor would have to be shutdown to meet this requirement. Also, Op Con 3, HOT SHUTDOWN, is defined in the TS and this change will make the action statement terminology consistent with other Hope Creek TS Action statements that require placing the reactor in lower operational conditions. Based on the above discussion, the staff finds this change acceptable.

The change to TS 4.11.2.7.2.b, renaming the Offgas Radioactivity Monitor to Offgas Pretreatment Radiation Monitor is an editorial correction that more accurately identifies the subject monitor. The staff finds this change 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 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 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 (58 FR 50974). 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 Contributor: J. Zimmerman

Date: February 28, 1994