February 4, 1999

Mr. Harold W. Keiser
Chief Nuclear Officer & President
Nuclear Business Unit
Public Service Electric & Gas
Company
Post Office Box 236
Hancocks Bridge, NJ 08038

SUBJECT: HOPE CREEK GENERATING STATION, ISSUANCE OF AMENDMENT, ELIMINATION OF TECHNICAL SPECIFICATION 3.0.4 RESTRICTIONS FOR THE FILTRATION, RECIRCULATION AND VENTILATION SYSTEM DURING FUEL MOVEMENT AND CORE ALTERATION ACTIVITIES (TAC NO. MA3851)

Dear Mr. Keiser:

The Commission has issued the enclosed Amendment No. 113 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 October 19, 1998.

This amendment eliminates restrictions imposed by TS 3.0.4 for the Filtration, Recirculation and Ventilation System during fuel movement and CORE ALTERATION activities. Specifically, TS Limiting Conditions for Operation 3.6.5.3.1 and 3.6.5.3.2 are each being revised to add a note stating that the provisions of TS 3.0.4 are not applicable for initiation of handling of irradiated fuel in the secondary containment and CORE ALTERATIONS provided that the plant is in OPERATIONAL CONDITION 5, with reactor water level equal to or greater than 22 feet 2 inches.

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/
Richard B. Ennis, Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-354

Enclosures: 1. Amendment No. 113 to License No. NPF-57
2. Safety Evaluation

cc w/encls: See next page

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

February 4, 1999

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Nuclear Business Unit
Public Service Electric & Gas
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Sincerely,

RB Ennis

Richard B. Ennis, Project Manager
Project Directorate I-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-354

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cc w/encls: See next page

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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. 113
License No. NPF-57

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

   A. The application for amendment filed by the Public Service Electric & Gas Company (PSE&G) dated October 19, 1998, 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. 113, 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, to be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

William M. Dean, 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 4, 1999

ATTACHMENT TO LICENSE AMENDMENT NO.113

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.

Remove	Insert
3/4 6-51	3/4 6-51
3/4 6-52a	3/4 6-52a

3.6.5.3 FILTRATION, RECIRCULATION AND VENTILATION SYSTEM (FRVS)
FRVS VENTILATION SUBSYSTEM

LIMITING CONDITION FOR OPERATION

3.6.5.3.1 Two FRVS ventilation units shall be OPERABLE.

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

ACTION:

a. With one of the above required FRVS ventilation units inoperable, restore the inoperable unit to OPERABLE status within 7 days, or:

1. In OPERATIONAL CONDITION 1, 2 or 3, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

2. In Operational Condition *, suspend handling of irradiated fuel in the secondary containment, CORE ALTERATIONS and operations with a potential for draining the reactor vessel.** The provisions of Specification 3.0.3 are not applicable.

b. With both ventilation units inoperable in Operational Condition *, suspend handling of irradiated fuel in the secondary containment, CORE ALTERATIONS or operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3. are not applicable.

SURVEILLANCE REQUIREMENTS

4.6.5.3.1 Each of the two ventilation units shall be demonstrated OPERABLE:

a. At least once per 14 days by verifying that the water seal bucket traps have a water seal and making up any evaporative losses by filling the traps to the overflow.

b. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the subsystem operates for at least 10 hours with the heaters on in order to reduce the buildup of moisture on the carbon adsorbers and HEPA filters.

*When irradiated fuel is being handled in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

**The provisions of Specification 3.0.4 are not applicable for initiation of handling of irradiated fuel in the secondary containment and CORE ALTERATIONS provided the plant is in OPERATIONAL CONDITION 5, with reactor water level equal to or greater than 22 feet 2 inches.

3.6.5.3 FILTRATION, RECIRCULATION AND VENTILATION SYSTEM (FRVS) FRVS RECIRCULATION SUBSYSTEM

LIMITING CONDITION FOR OPERATION

3.6.5.3.2 Six FRVS recirculation units shall be OPERABLE.

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

ACTION:

a. With one or two of the above required FRVS recirculation units inoperable, restore all the inoperable unit(s) to OPERABLE status within 7 days, or:

   1. In OPERATIONAL CONDITION 1, 2, or 3, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

   2. In Operational Condition *, suspend handling of irradiated fuel in the secondary containment, CORE ALTERATIONS and operations with a potential for draining the reactor vessel.** The provisions of Specification 3.0.3 are not applicable.

b. With three or more of the above required FRVS recirculation units inoperable in Operational Condition *, suspend handling of irradiated fuel in the secondary containment, CORE ALTERATIONS or operations with a potential for draining the reactor vessel. The provisions of Specification 3.0.3 are not applicable.

c. With three or more of the above required FRVS recirculation units inoperable in OPERATIONAL CONDITION 1, 2, or 3, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.5.3.2 Each of the six FRVS recirculation units shall be demonstrated OPERABLE:

a. At least once per 14 days by verifying that the water seal bucket traps have a water seal and making up any evaporative losses by filling the traps to the overflow.

b. At least once per 31 days by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the subsystem operates for at least 10 hours with the heaters on in order to reduce the buildup of moisture on the carbon adsorbers and HEPA filters.

---

*When irradiated fuel is being handled in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel.

**The provisions of Specification 3.0.4 are not applicable for initiation of handling of irradiated fuel in the secondary containment and CORE ALTERATIONS provided the plant is in OPERATIONAL CONDITION 5, with reactor water level equal to or greater than 22 feet 2 inches.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 113TO 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 October 19, 1998, Public Service Electric & Gas Company (the licensee) submitted a request for changes to the Hope Creek Generating Station (HCGS) Technical Specifications (TSs). The requested changes would eliminate restrictions imposed by TS 3.0.4 for the Filtration, Recirculation and Ventilation System (FRVS) during fuel movement and CORE ALTERATION activities. Specifically, TS Limiting Conditions for Operation (LCOs) 3.6.5.3.1 and 3.6.5.3.2 would each be revised to add a note stating that the provisions of TS 3.0.4 are not applicable for initiation of handling of irradiated fuel in the secondary containment and CORE ALTERATIONS provided that the plant is in OPERATIONAL CONDITION 5, with reactor water level equal to or greater than 22 feet 2 inches.

2.0 BACKGROUND

As described in Section 6.8 of the HCGS Updated Final Safety Analysis Report (UFSAR), the FRVS consists of two subsystems that are required to perform post-accident, safety-related functions simultaneously. These subsystems are the recirculation system and the ventilation system.

The FRVS recirculation subsystem consists of six 25% capacity units, each consisting of a fan and filter train located inside the Reactor Building. The recirculation subsystem recirculates and filters the air in the Reactor Building following a loss-of-coolant accident, refueling accident, or high radioactivity in the Reactor Building in order to reduce offsite doses significantly below 10 CFR Part 100 guidelines. Following a Reactor Building isolation, all six of the recirculation units automatically start (two of the units are subsequently manually stopped and placed in the "Auto" mode) and the Reactor Building air is recirculated through the filter trains for cleanup. This subsystem is the initial cleanup system before discharge is made via the FRVS ventilation subsystem to the outdoors.

The FRVS ventilation subsystem consists of two 100% capacity units, each consisting of a fan and filter train located inside the Reactor Building. The ventilation subsystem maintains the Reactor Building at a negative pressure with respect to the outdoors. The subsystem takes

suction from the discharge duct of the FRVS recirculation subsystem and discharges the air through the filter trains to the outdoors via a vent at the top of the Reactor Building. Following a Reactor Building isolation, one of the ventilation units automatically starts while the other is in standby.

HCGS TS LCOs 3.6.5.3.1 and 3.6.5.3.2 provide the operational limitations for the FRVS ventilation and recirculation subsystems respectively. ACTION a.2 of each of these LCOs pertains to OPERATIONAL CONDITION * which is defined in these LCOs as plant operation "when irradiated fuel is being handled in the secondary containment and during CORE ALTERATIONS and operations with a potential for draining the reactor vessel." In OPERATIONAL CONDITION *, TSs 3.6.5.3.1 and 3.6.5.3.2 permit one FRVS ventilation unit and one to two recirculation units to be inoperable for up to 7 days prior to suspension of the OPERATIONAL CONDITION * activities.

The provisions of TS 3.0.4 are currently applicable to ACTION a.2 of TSs 3.6.5.3.1 and 3.6.5.3.2. As described in the HCGS TS Bases, TS 3.0.4 establishes limitations on a change in OPERATIONAL CONDITION when an LCO is not met. TS 3.0.4 prohibits entry into an OPERATIONAL CONDITION when the conditions for the LCO are not met and the associated ACTION requires a shutdown if they are not met within a specified time interval. The purpose of this specification is to ensure that facility operation is not initiated or that higher conditions of operation are not entered when corrective action is being taken to obtain compliance with a specification by restoring equipment to operable status.

In order to comply with the TS 3.0.4 requirements, HCGS cannot initiate handling of irradiated fuel in the secondary containment, perform CORE ALTERATIONS or start operations with a potential to drain the reactor vessel unless all FRVS ventilation units and recirculation units are operable. The licensee has stated that these restrictions have imposed significant scheduling restrictions during refueling outages, since the majority of OPERATIONAL CONDITION * activities take place in outages when FRVS subsystems and their support systems also need to be taken out of service for 18-month maintenance and surveillance activities. Delays in the restoration of any FRVS components and their support systems adversely impact outage critical path schedules when OPERATIONAL CONDITION * activities are required to be performed. Therefore, the licensee has requested that a note be added to TSs 3.6.5.3.1 and 3.6.5.3.2 stating that the provisions of TS 3.0.4 are not applicable for initiation of handling of irradiated fuel in the secondary containment and CORE ALTERATIONS provided that the plant is in OPERATIONAL CONDITION 5, with reactor water level equal to or greater than 22 feet 2 inches.

3.0 EVALUATION

The staff has reviewed the supporting documents provided with the proposed amendment. The staff finds that the licensee's proposed change to TS 3.6.5.3.1 and 3.6.5.3.2 is more restrictive than the revised language of 3.0.4 in the improved Standard Technical Specifications. The staff also reviewed the licensee's UFSAR analyses to determine whether or not the proposed changes will affect the Design Basis Accident dose analyses. Following a fuel handling accident,

the licensee credits the iodine removal capability of one FRVS ventilation unit only. No credit is taken for the iodine removal capability of the FRVS recirculation units. The proposed TS change requires that one ventilation unit and four recirculation units be operable when entering into OPERATIONAL CONDITION *. Therefore, since one FRVS ventilation unit will be operable, the proposed change does not impact the previously analyzed fuel handling accident. The licensee has committed to provide administrative controls that will: (1) limit activities that can be initiated with FRVS in degraded configurations and (2) retain the 7-day limitation on operation within the FRVS LCO Action Statement. Based on the above, the staff concludes that the proposed amendment is acceptable.

4.0 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.

5.0 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 (63 FR 64121). 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.

6.0 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: R. Tadessa
R. Ennis

Date: February 4, 1999