June 12, 1989

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: INCREASE TECHNICAL SPECIFICATION FUEL STORAGE CAPACITY LIMITATION PRESENTLY IN THE DESIGN FEATURES SECTION TO 1290 FUEL ASSEMBLIES (TAC NO. 71116)

Re: HOPE CREEK GENERATING STATION

The Commission has issued the enclosed Amendment No. 27 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 26, 1988.

This amendment increases the spent fuel storage capacity limitation presently in the Technical Specification Design Features Section 5.6.3 to 1290 fuel assemblies.

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/

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

Enclosures:
1. Amendment No. 27 to
License No. NPF-57
2. Safety Evaluation

cc w/enclosures:
See next page

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DISTRIBUTION w/enclosures:

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[HC AMEND]

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

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2. Safety Evaluation

cc w/enclosures:
See next page

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. 27
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 October 26, 1988 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. 27 , and the Environmental Protection Plan contained in

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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.

FOR THE NUCLEAR REGULATORY COMMISSION

Mohan C. Thadani for
Walter R. Butler, 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: June 12, 1989

PDI-2/LA
NO'Brien
5/17/89

PDI-2/PM
CShiraki
5/31/89

PDI-2/D
WButler
6/5/89

OGC NLO
J. Lieberman
6/2/89

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.

FOR THE NUCLEAR REGULATORY COMMISSION

for Walter R. Butler, 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: June 12, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 27

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 page is identified by Amendment number and contains vertical lines indicating the area of change. Overleaf pages provided to maintain document completeness.*

| Remove | Insert |
|---|---|
| 5-5 | 5-5 |
| 5-6* | 5-6* |

## 5.6 FUEL STORAGE

### CRITICALITY

5.6.1 The spent fuel storage racks are designed and shall be maintained with:

a. A $k_{eff}$ equivalent to less than or equal to 0.95 when flooded with unborated water, including all calculational uncertainties and biases as described in Section 9.1.2 of the FSAR.

b. A nominal 6.308 inch center-to-center distance between fuel assemblies placed in the storage racks.

5.6.1.2 The $k_{eff}$ for new fuel for the first core loading stored dry in the spent fuel storage racks shall not exceed 0.98 when aqueous foam moderation is assumed.

### DRAINAGE

5.6.2 The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 199' 4".

### CAPACITY

5.6.3 The spent fuel storage pool shall be limited to a storage capacity of no more than 1290 fuel assemblies.

## 5.7 COMPONENT CYCLIC OR TRANSIENT LIMIT

5.7.1 The components identified in Table 5.7.1-1 are designed and shall be maintained within the cyclic or transient limits of Table 5.7.1-1.

TABLE 5.7.1-1

COMPONENT CYCLIC OR TRANSIENT LIMITS

| COMPONENT | CYCLIC OR TRANSIENT LIMIT | DESIGN CYCLE OR TRANSIENT |
|---|---|---|
| Reactor | 120 heatup and cooldown cycles | 70°F to 546°F to 70°F |
| | 80 step change cycles | Loss of feedwater heaters |
| | 180 reactor trip cycles | 100% to 0% of RATED THERMAL POWER |
| | 130 hydrostatic pressure and leak tests | Pressurized to $\geq$ 930 and $\leq$1250 psig |

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

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

## SUPPORTING AMENDMENT NO. 27 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 October 26, 1988, Public Service Electric & Gas Company requested an amendment to Facility Operating License No. NPF-57 for the Hope Creek Generating Station. The proposed amendment would change Technical Specifications Section 5.6.3 to increase the installed storage capacity from 1108 fuel assemblies to 1290 fuel assemblies to accommodate the third fuel cycle.

## 2.0 EVALUATION

The expansion consists of the installation of an additional storage rack of the original single failure proof equipment design as reviewed by the staff in the Hope Creek Safety Evaluation Report, NUREG 1048. No modification to the spent fuel pool cooling system is proposed. The licensee stated that the above change does not involve rod consolidation or double tiering and does not result in the Keff of the pool exceeding 0.95. The Hope Creek spent fuel pool cooling capacity was evaluated and found acceptable for a storage of 3668 fuel assemblies in the Hope Creek Safety Evaluation Report, NUREG 1048. The Technical Specifications limit of 1108 fuel assemblies was based on the installed storage capacity at the time when the operating license and technical specifications were issued. As the proposed expansion from 1108 to 1290 fuel assemblies is below the analyzed and evaluated limit of 3668 fuel assemblies and no other change is proposed, the staff finds the proposed Technical Specification Section 5.6.3 change for a storage limit of 1290 fuel assemblies acceptable.

## 3.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32 and 51.35, an environmental assessment and finding of no significant impact have been prepared and published (54 FR 24610) in the Federal Register on June 8, 1989. Based upon the environmental assessment, the Commission has determined that the issuance of this amendment will not have significant effect on the quality of the human environment.

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## 4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (53 FR 49945) on December 12, 1988 and consulted with the State of New Jersey. No public comments were received and the State of New Jersey did not have any comments.

The staff 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, and (2) 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 nor to the health and safety of the public.

Principal Contributor: R. P. Goel

Dated: June 12, 1989