October 31 1995

Mr. Leon R. Eliason
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 (TAC NO. M91574)

Dear Mr. Eliason:

The Commission has issued the enclosed Amendment No. 86 to Facility Operating License No. NPF-57 for the Hope Creek Generating Station. This amendment consists of changes to the Technical Specifications (TSs) in partial response to your application dated November 28, 1994.

This amendment revises the TS for the Reactor Coolant System recirculation flow upscale trip function to change the trip setpoint and allowable value to reflect 105% of rated core flow, Item one of the above application.

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/
David H. Jaffe, Senior 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. 86 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

October 31, 1995

Mr. Leon R. Eliason
Chief Nuclear Officer & President-
Nuclear Business Unit
Public Service Electric & Gas
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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. 86
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 November 28, 1994, 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.

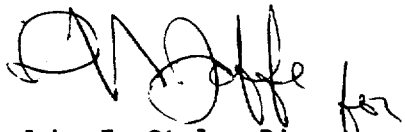
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-57 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 86 , 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



John F. Stolz, 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: October 31, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 86

FACILITY OPERATING LICENSE NO. NPF-57

DOCKET NO. 50-354

Replace the following page of the Appendix "A" Technical Specifications with the attached page. The revised page is identified by Amendment number and contains vertical lines indicating the area of change.

Remove	Insert
3/4 3-59	3/4 3-59

TABLE 3.3.6-2

CONTROL ROD BLOCK INSTRUMENTATION SETPOINTS

TRIP FUNCTION	TRIP SETPOINT	ALLOWABLE VALUE
1. ROD BLOCK MONITOR		
a. Upscale		
i. Flow Biased	$\leq 0.66\ (w-\Delta w) + 40\%^{*}$	$\leq 0.66\ (w-\Delta w) + 43\%^{*}$
ii. High Flow Clamped	$\leq 106\%$	$\leq 109\%$
b. Inoperative	NA	NA
c. Downscale	$\geq$ 5% of RATED THERMAL POWER	$\geq$ 3% of RATED THERMAL POWER
2. APRM		
a. Flow Biased Neutron Flux - Upscale	$\leq 0.66(w-\Delta w) + 42\%^{*}$	$\leq 0.66(w-\Delta w) + 45\%^{*}$
b. Inoperative	NA	NA
c. Downscale	$\geq$ 4% of RATED THERMAL POWER	$\geq$ 3% of RATED THERMAL POWER
d. Neutron Flux - Upscale, Startup	$\leq$ 12% of RATED THERMAL POWER	$\leq$ 14% of RATED THERMAL POWER
3. SOURCE RANGE MONITORS		
a. Detector not full in	NA	NA
b. Upscale	$\leq 1.0 \times 10^5$ cps	$\leq 1.6 \times 10^5$ cps
c. Inoperative	NA	NA
d. Downscale	$\geq$ 3 cps	$\geq$ 1.8 cps
4. INTERMEDIATE RANGE MONITORS		
a. Detector not full in	NA	NA
b. Upscale	$\leq$ 108/125 divisions of full scale	$\leq$ 110/125 divisions of full scale
c. Inoperative	NA	NA
d. Downscale	$\geq$ 5/125 divisions of full scale	$\geq$ 3/125 divisions of full scale
5. SCRAM DISCHARGE VOLUME		
a. Water Level-High (Float Switch)	109'1" (North Volume) 108'11.5" (South Volume)	109'3" (North Volume) 109'1.5" (South Volume)
6. REACTOR COOLANT SYSTEM RECIRCULATION FLOW		
a. Upscale	$\leq$ 111% of rated flow	$\leq$ 114% of rated flow
b. Inoperative	NA	NA
c. Comparator	$\leq$ 10% flow deviation	$\leq$ 11% flow deviation
7. REACTOR MODE SWITCH SHUTDOWN POSITION	NA	NA

* The rod block function is varied as a function of recirculation loop flow (w) and Δw which is defined as the difference in indicated drive flow (in percent of drive flow which produces rated core flow) between two loop and single loop operation at the same core flow. The trip setting of the Average Power Range Monitor Rod Block function must be maintained in accordance with Specification 3.2.2.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 86 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 November 28, 1994, the Public Service Electric & Gas Company (the licensee) submitted a request for changes to the Hope Creek Generating Station (HCGS), Technical Specifications (TS). The requested changes would revise the TS for the Reactor Coolant System (RCS) recirculation flow upscale trip function to change the trip setpoint and allowable value to reflect 105% of rated core flow, Item 1 of above application. The proposed changes to the TS, Items 2 and 3 of the above application, involving the Rod Block Monitor (RBM) trip function, which would transfer control of the setpoint and allowable value for the RBM - upscale rod block to the Core Operating Limits Report (COLR), and the setpoints and allowable values for the Average Power Range Monitor (APRM), flow-biased, upscale scram/control rod block in the Extended Load Line Limit Analysis (ELLLA) region are still under review at this time. It is the NRC staff's understanding that the licensee plans to withdraw these remaining parts of the application.

2.0 DISCUSSION

The licensee has requested changes to the TS associated with plant operation in the Increased Core Flow (ICF) region of the power/flow map. The ICF region extends from the 100% to 105% flow, over the full power range, on the power/flow map. The purpose of ICF is to compensate for reactivity reduction due to exposure during the operating cycle. The licensee has proposed to increase the RCS recirculation flow upscale trip and allowable value as specified in TS Table 3.3.6-2, "Control Rod Block Instrumentation Setpoints." The trip setpoint would increase from less-than-or-equal-to 108% of rated flow to less-than-or-equal-to 111% of rated core flow. The allowable value would increase from less-than-or-equal-to 111% of rated flow to less-than-or-equal-to 114% of rated core flow.

The licensee's analyses for operation in the ICF region of the power/flow map is provided in a General Electric Report, "Final Report, Increased Core Flow and Extended Load Line Limit Analysis for Hope Creek Generating Station, Unit 1 Cycle 2," NEDC-31487, dated November 1987. An additional report, "Supplemental Reload Licensing Report for Hope Creek Generating Station Unit 1, Reload 5 Cycle 6," Report No. 23A7219, dated November 1993, addresses ELLLA and ICF for the current operating cycle.

3.0 EVALUATION

On March 15, 1988, the NRC staff issued Amendment No. 15 to the HCGS Facility Operating License to address Cycle 2 operation. The safety evaluation in Amendment 15 approved the use of NEDC-31487 for HCGS and stated the following: "The licensee also submitted a report, NEDC-31487, 'Final Report, Increased Core Flow and Extended Load Limit Analysis for Hope Creek Nuclear Generating Station, Unit 1 Cycle 2,' in support of a request to include these features among the operating flexibility options. These options are among those that have been employed by several plants. The report provides analyses to support operation in these modes and to identify necessary changes to the TS. The analyses were performed with approved techniques and methods and the staff finds their use for HCGS acceptable." The TS that were needed to implement ICF for HCGS were not issued with Amendment No. 15. The staff is now considering the TS changes that should have been issued with Amendment No. 15.

As noted above, the licensee addressed operation in the ICF region for the current operating cycle in Report No. 23A7219 submitted with this application. A review of this report by the NRC staff indicated that the licensee assumes a core flow of 105%, reflecting operation in the ICF region. The results of analyses of transients and accidents were found to be acceptable.

Based upon previous review and acceptance of NEDC-31487 in Amendment No. 15, by the NRC staff, and the acceptability of the results of analyses of transients and accidents for the current operating cycle, the NRC staff concludes that operation of HCGS in the ICF is acceptable. Accordingly, the proposed increase in the RCS recirculation flow upscale trip and allowable value as specified in TS Table 3.3.6-2, "Control Rod Block Instrumentation Setpoints," 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 (60 FR 39450). 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 Contributor: D. Jaffe

Date: October 31, 1995