October 13, 1992

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: KEEP FILLED ALARM INSTRUMENTATION, HOPE CREEK GENERATING STATION (TAC NO. M83961)

The Commission has issued the enclosed Amendment No. 55 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 June 15, 1992.

This amendment provides an allowable-out-of-service time (AOT) for the discharge line "keep filled" alarm instrumentation associated with the Low Pressure Coolant Injection (LPCI) system and the Core Spray System (CSS).

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 notify the NRC, in writing, when this is implemented.

Sincerely,

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

Enclosures:
1. Amendment No. 55 to License No. NPF-57
2. 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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See next page

cc:

M. J. Wetterhahn, Esquire
Winston & Strawn
1400 L Street, N.W.
Washington, DC 20005-3502

R. Fryling, Jr., Esquire
Law Department - Tower 5E
80 Park Place
Newark, New Jersey 07101

Resident Inspector
U.S. Nuclear Regulatory Commission
P.O. Box 241
Hancocks Bridge, New Jersey 08038

Mr. S. LaBruna
Vice President - Nuclear Operations
Nuclear Department
P.O. Box 236
Hancocks Bridge, New Jersey 08038

Mr. J. J. Hagan
General Manager - Hope Creek Operations
Hope Creek Generating Station
P.O. Box 236
Hancocks Bridge, New Jersey 08038

Mr. Frank X. Thomson, Jr., Manager
Licensing and Regulation
Nuclear Department
P.O. Box 236
Hancocks Bridge, New Jersey 08038

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, Pennsylvania 19406

Dr. Jill Lipoti, Asst. Director
Radiation Protection Programs
NJ Department of Environmental
Protection
CN 415
Trenton, New Jersey 08625-0415

Mr. J. A. Isabella
MGR. - Generation Department
Atlantic Electric Company
Post Office Box 1500
1199 Black Horse Pike
Pleasantville, New Jersey 08232

Richard Hartung
Electric Service Evaluation
Board of Regulatory Commissioners
2 Gateway Center, Tenth Floor
Newark, NJ 07102

Lower Alloways Creek Township
c/o Mary O. Henderson, Clerk
Municipal Building, P.O. Box 157
Hancocks Bridge, NJ 08038

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. 55
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 June 15, 1992, 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. 55 , 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 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: October 13, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 55

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 page is provided to maintain document completeness.*

Remove	Insert
3/4 5-3	3/4 5-3
3/4 5-4	3/4 5-4*

ACTION: (Continued)

1. With the HPCI system inoperable, restore the HPCI system to OPERABLE status within 14 days or be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to $\leq$ 200 psig within the following 24 hours.

d. For the ADS:

1. With one of the above required ADS valves inoperable, provided the HPCI system, the core spray system and the LPCI system are OPERABLE, restore the inoperable ADS valve to OPERABLE status within 14 days or be in at least HOT SHUTDOWN within the next 12 hours and reduce reactor steam dome pressure to $\leq$ 100 psig within the next 24 hours.

2. With two or more of the above required ADS valves inoperable, be in at least HOT SHUTDOWN within 12 hours and reduce reactor steam dome pressure to $\leq$ 100 psig within the next 24 hours.

e. With a CSS and/or LPCI header ΔP instrumentation channel inoperable, restore the inoperable channel to OPERABLE status within 7 days or determine the ECCS header ΔP locally at least once per 12 hours; otherwise, declare the associated ECCS subsystem inoperable.

f. The discharge line "keep filled" alarm instrumentation associated with a LPCI and/or CSS subsystem(s) may be in an inoperable status for up to 6 hours for required surveillance testing* provided that the "keep filled" alarm instrumentation associated with at least one LPCI or CSS subsystem serviced by the affected "keep filled" system remains OPERABLE; otherwise, perform Surveillance Requirement 4.5.1.a.1.a.

g. In the event an ECCS system is actuated and injects water into the Reactor Coolant System, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.

*This includes testing of the "Reactor Coolant System Interface Valves Leakage Pressure Monitors" associated with LPCI and CSS in accordance with Surveillance 4.4.3.2.3

SURVEILLANCE REQUIREMENTS

4.5.1 The emergency core cooling systems shall be demonstrated OPERABLE by:

a. At least once per 31 days:

1. For the core spray system, the LPCI system, and the HPCI system:

a) Verifying by venting at the high point vents that the system piping from the pump discharge valve to the system isolation valve is filled with water.

b) Verifying that each valve, manual, power operated or automatic, in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct* position.

2. For the HPCI system, verifying that the HPCI pump flow controller is in the correct position.

b. Verifying that, when tested pursuant to Specification 4.0.5:

1. The two core spray system pumps in each subsystem together develop a flow of at least 6350 gpm against a test line pressure corresponding to a reactor vessel pressure of $\geq$ 105 psi above suppression pool pressure.

2. Each LPCI pump in each subsystem develops a flow of at least 10,000 gpm against a test line pressure corresponding to a reactor vessel to primary containment differential pressure of $\geq$ 20 psid.

3. The HPCI pump develops a flow of at least 5600 gpm against a test line pressure corresponding to a reactor vessel pressure of 1000 psig when steam is being supplied to the turbine at 1000, +20, -80 psig.**

c. At least once per 18 months:

1. For the core spray system, the LPCI system, and the HPCI system, performing a system functional test which includes simulated automatic actuation of the system throughout its emergency operating sequence and verifying that each automatic valve in the flow path actuates to its correct position. Actual injection of coolant into the reactor vessel may be excluded from this test.

*Except that an automatic valve capable of automatic return to its ECCS position when an ECCS signal is present may be in position for another mode of operation.

**The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the test.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 55 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 June 15, 1992, the Public Service Electric & Gas Company and Atlantic City Electric Company (the licensees) submitted a request for changes to the Hope Creek Generating Station, Technical Specification (TS). The requested changes would provide an allowable-out-of-service time (AOT) for the discharge line "keep filled" alarm instrumentation associated with the Low Pressure Coolant Injection (LPCI) system and the Core Spray System (CSS).

Specifically, the licensee proposes to change TS Section 3.5.1 ACTION f to allow the discharge line "keep filled" alarm instrumentation associated with LPCI and/or CSS subsystems to be in an inoperable status for up to 6 hours for required surveillance testing. A note to 3.5.1 ACTION f would state that this surveillance testing includes testing of the "Reactor Coolant System Interface Valves Leakage Pressure Monitors" associated with LPCI and CSS in accordance with Surveillance 4.4.3.2.3. There would also be a provision written into TS 3.5.1 ACTION f stating that the "keep filled" alarm instrumentation associated with at least one LPCI or CSS subsystem serviced by the affected "keep filled" system must remain operable.

2.0 EVALUATION

Present Technical Specifications (TS) for Hope Creek Generating Station (HCGS) do not contain any allowable-out-of-service time (AOT) for the LPCI and CSS discharge line "keep filled" alarm instrumentation. TS 3.5.1 ACTION f currently requires that Surveillance Requirement 4.5.1.a.1.a, involving verification by venting at the high point vents that the associated system piping is filled with water, be performed whenever this "keep filled" alarm instrumentation is inoperable. This evolution requires personnel to enter high radiation areas in order to obtain access to the high-point vent valves.

The LPCI and CSS discharge line "keep filled" alarm instrumentation is encompassed by surveillance 4.5.1 which requires a channel calibration be performed at least once per 18 months. There are no monthly surveillance

requirements for the "keep filled" instrumentation. The Emergency Core Cooling System (ECCS) Surveillance Requirement 4.5.1.a.1.a, mentioned above, is required to be performed monthly.

The LPCI and CSS "keep filled" instrumentation is configured as slave trip units. In each LPCI and CSS injection line there is a pressure transmitter which provides a signal to a master trip unit and a slave trip unit in series. The master trip units are designated as the "reactor coolant interface valves leakage pressure monitors" and actuate upon sensing a high pressure condition to indicate potential back leakage from the reactor into the low pressure injection lines. The slave trip units (the "keep filled" instrumentation) actuate upon sensing a low pressure condition to indicate potential failure of the respective fill network. Both trip units within each master/slave pair provide input signals to a common control room overhead annunciator. The master trip units (the leakage pressure monitors) are required by TS 4.4.3.2.3 to have a channel functional test monthly and channel calibration once per 18 months. Because of the master/slave configuration, the "keep filled" instrumentation channel is rendered inoperable whenever its associated leakage pressure monitor channel is tested. Due to the absense of an AOT for the "keep filled" instrumentation, the respective ECCS high point vent evolution must then be performed. This evolution is unnecessary in this circumstance as the "keep filled" instrumentation has not experienced a failure but is inoperable only due to testing on associated equipment, and is not prudent due to personnel exposure concerns.

PSE&G is proposing a 6-hour AOT for the LPCI and CSS "keep filled" alarm instrumentation. This AOT would apply only if the affected "keep filled" instrumentation is inoperable due to the performance of required surveillance testing, and only if the "keep filled" instrumentation associated with at least one other LPCI or CCS subsystem serviced by the affected "keep filled " system remains operable. If the "keep filled" instrumentation becomes inoperable for reasons other than surveillance testing, or cannot be returned to operable status within 6 hours, or if the "keep filled" portion of the affected LPCI or CSS subsystem is isolated from the other subsystems serviced by the respective fill network so that a fill system failure would not be annunciated by a redundant channel, the requirement to vent the affected ECCS systems would still exist. The staff considers this TS change and the addition of the note to 3.5.1 ACTION f. 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 (57 FR 32576). 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: A. Keller

Date: October 13, 1992