

June 17, 1987

Mr. Corbin A. McNeill, Jr.
Senior Vice President - Nuclear
Public Service Electric & Gas Company
P.O. Box 236
Hancocks Bridge, New Jersey 08038

Dear Mr. McNeill:

SUBJECT: EMERGENCY TECHNICAL SPECIFICATION CHANGE (TAC NO. 65451)

Re: HOPE CREEK GENERATING STATION

The Commission has issued the enclosed Amendment No. 5 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 1, 1987, as supplemented June 2 and 4, 1987. It was prepared and issued on an emergency basis to avoid the necessity of shutting down the plant.

This amendment consists of a change to the Technical Specifications to allow the plant to operate with one SRV acoustic monitor inoperable until September 21, 1987 or until the first forced outage of sufficient duration to repair the monitor whichever occurs first.

The staff reviewed the circumstances associated with your request and concluded that you provided a sufficient basis for finding that the situation could not have been avoided by prior application. Therefore, in accordance with 10 CFR 50.91(a)(5), a valid emergency existed.

This amendment was authorized by telephone on June 4, 1987, and confirmed by letter on June 4, 1987.

A copy of our safety evaluation is also enclosed. Notice of Issuance and Final Determination of No Significant Hazards Consideration and Opportunity for Hearing will be included in the Commissions biweekly Federal Register notice.

Sincerely,

/s/

George Rivenbark, Project Manager
Project Directorate I-2
Division of Reactor Projects I/II

8706250042 870617
PDR ADOCK 05000354
P PDR

Enclosures:

- 1. Amendment No. 5 to License No. NPF-57
- 2. Safety Evaluation

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Local PDR
PDI-2
WButler
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TBarnhart (4)

RGallo
BClayton
Wanda Jones
EButcher
LPhillips
ACRS (10)
CMiles, GPA/PA
RDiggs, ARM/LFMB

cc w/enclosures:
See next page

Previously concurred*:

LA: PDR
MAD: ten
6/5/87

PM: PDI-2: DRPI/II*
GRivenbark:ca
06/03/87

RSB*
LPhillips
06/03/87

RSB*
WHodges
06/03/87

OGC
1/87

D: PDI-2: DRPI/II
WButler
6/17/87 WB

Docket No. 50-354

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George Rivenbark, Project Manager
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GRivenbark:ca
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RSB
LPhillips
6/3/87

RSB
WHodges
6/13/87

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WButler
/ 187

X
X



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

June 17, 1987

Docket No. 50-354

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Sincerely,

A handwritten signature in cursive script that reads "George Rivenbark".

George Rivenbark, Project Manager
Project Directorate I-2
Division of Reactor Projects I/II

Enclosures:

1. Amendment No. 5 to License No. NPF-57
2. Safety Evaluation

cc w/enclosures:
See next page

Mr. C. A. McNeill
Public Service Electric & Gas Co.

Hope Creek Generating Station

cc:

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Hancocks Bridge, New Jersey 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. 5
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 1, 1987, as supplemented June 2 and 4, 1987, 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. 5, and the Environmental Protection Plan contained in 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 became effective June 4, 1987.

FOR THE NUCLEAR REGULATORY COMMISSION

/s/

Walter R. Butler, Director
Project Directorate I-2
Division of Reactor Projects I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 17, 1987

Previously concurred*:

LA: PDI-2:DRPI/II
M. Brien
6/5/87

PM: PDI-2:DRPI/II*
GRivenbark:ca
06/03/87

OGC
D: PDI-2:DRPI/II
WButler
6/11/87
6/17/87
WB

3. This license amendment became effective June 4, 1987.

FOR THE NUCLEAR REGULATORY COMMISSION



Walter R. Butler, Director
Project Directorate I-2
Division of Reactor Projects I/II

Attachment:
Changes to the Technical
Specifications

Date of Issuance: **June 17, 1987**

ATTACHMENT TO LICENSE AMENDMENT NO. 5

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 provided to maintain document completeness.*

Remove

3/4 3-85
3/4 3-86

Insert

3/4 3-85
3/4 3-86*

HOPE CREEK

3/4 3-85

TABLE 3.3.7.5-1

ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>REQUIRED NUMBER OF CHANNELS</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE OPERATIONAL CONDITIONS</u>	<u>ACTION</u>
1. Reactor Vessel Pressure	2	1	1,2,3	80
2. Reactor Vessel Water Level	2	1	1,2,3	80
3. Suppression Chamber Water Level	2	1	1,2,3	80
4. Suppression Chamber Water Temperature*	2	2	1,2,3	80(a)
5. Suppression Chamber Pressure	2	1	1,2,3	80
6. Drywell Pressure	2	1	1,2,3	80
7. Drywell Air Temperature	2	1	1,2,3	80
8. Primary Containment Hydrogen/Oxygen Concentration Analyzer and Monitor	2	1	1,2,3	80
9. Safety/Relief Valve Position Indicators ^(c)	2/valve**	1/valve**	1,2,3	80
10. Drywell Atmosphere Post-Accident Radiation Monitor	2	1	1,2,3	81
11. North Plant Vent Radiation Monitor#	1	1	1,2,3	81
12. South Plant Vent Radiation Monitor#	1	1	1,2,3	81
13. FRVS Vent Radiation Monitor#	1	1	1,2,3	81
14. Primary Containment Isolation Valve Position Indication ^(b)	2/valve	1/valve	1,2,3	82

#High range noble gas monitors.

*Average bulk pool temperature.

**Acoustic monitoring and tail pipe temperature.

(a)Suppression chamber water temperature instrumentation must satisfy the availability requirements specified in Specification 3.6.2.1.

(b)One channel consists of the open limit switch, and the other channel consists of the closed limit switch.

(c)The acoustic monitor for F013H SRV may be inoperable until September 21, 1987 or until the first forced outage of sufficient duration to effect repair prior to that date without applying the shutdown requirement of ACTION 80(a).

Amendment No. 5
Effective Date: June 4, 1987

Table 3.3.7.5-1 (Continued)

ACCIDENT MONITORING INSTRUMENTATION
ACTION STATEMENTS

ACTION 80 -

- a. With the number of OPERABLE accident monitoring instrumentation channels less than the Required Number of Channels shown in Table 3.3.7.5-1, restore the inoperable channel(s) to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With the number of OPERABLE accident monitoring instrumentation channels less than the Minimum Channels OPERABLE requirements of Table 3.3.7.5-1, restore the inoperable channel(s) to OPERABLE status within 48 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

ACTION 81 - With the number of OPERABLE accident monitoring instrumentation channels less than required by the Minimum Channels OPERABLE requirement, either restore the inoperable channel(s) to OPERABLE status within 72 hours, or:

- a. Initiate the preplanned alternate method of monitoring the appropriate parameter(s), and
- b. Prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within 14 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.

The provisions of Specification 3.0.4 are not applicable.

ACTION 82 -

- a. With the number of OPERABLE accident monitoring instrumentation channels less than the Required Number of Channels shown in Table 3.3.7.5-1, verify the valve(s) position by use of alternate indication methods; restore the inoperable channel(s) to OPERABLE status within 30 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With the number of OPERABLE accident monitoring instrumentation channels less than the Minimum Channels OPERABLE requirements of Table 3.3.7.5-1, verify the valve(s) position by use of alternate indication methods; restore the inoperable channel(s) to OPERABLE status within 7 days or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 5 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

The Public Service Electric and Gas Company (the licensee), in its submittal of June 1, 1987, requested an emergency Technical Specification change to provide relief from the operability requirement for the Safety Relief Value (SRV) Position Indicator for SRV No. F013H. Action 80(a) for Technical Specification Table 3.3.7.5-1, Accident Monitoring Instrumentation, requires that the plant be shut down if an inoperable indicator channel is not restored to operable status within 7 days. The requested emergency change would add a footnote (C) to Instrument No. 9 of the subject Table to permit the Acoustic Monitor Position Indicator for SRV No. F013H to remain inoperable until September 21, 1987 without applying the shutdown requirement of Action 80(a). Without this change, a plant shutdown will be required to commence at 1845 hours on Thursday, June 4, 1987.

On May 28, 1987, at 1845 hours, the licensee declared the Acoustic Monitor Channel for the F013H SRV inoperable due to an upward shift in the baseline acoustical output and significantly larger oscillations in the signal. Investigation revealed the source of the problem to be a faulty transmitter which will require a plant cooldown and drywell entry for repair operations.

The licensee in its hazards evaluation for continued operation without the inoperable SRV Position Indicator, states that (1) the capability of the SRV to perform its intended function is not impaired by the loss of position indication, and (2) the loss of acoustic monitoring indication does not prevent accurate determination of the position of its associated SRV. The latter consideration is based on the argument that the position of any SRV can be determined by its relief tailpipe temperature monitor and by several other methods making use of operable plant parameters which include:

- (1) changes in main steam flow to the turbine,
- (2) changes in gross generator (electrical/output),

- (3) changes in suppression pool temperature as monitored by eight temperature elements spaced around the suppression chamber, and
- (4) observation of perturbations in suppression pool level indication.

Based on its hazards evaluation, the licensee concluded that no interim compensatory measures were required.

2.0 EVALUATION

TMI Action Plan Item II.D.3 requires that the operator be provided with unambiguous indication of valve position (open or closed) in the control room for reactor coolant system relief and safety valves. For Hope Creek, this requirement is satisfied by the Acoustic Monitor Position Indicators for the 14 Safety Relief Valves. The staff, in its review of the licensee hazards evaluation, considered the basis for this action plan requirement and the continued capability of the plant to satisfy the requirement with the inoperable acoustic monitor position indicator.

The staff agrees with the licensee conclusion that the capability of the SRV to perform its intended function is not impaired by loss of position indication. However, the staff does not agree that loss of acoustic monitoring indication has no impact on accurate determination of the associated SRV position. All of the cited alternate monitoring means are unacceptable to satisfy the TMI action requirement for unambiguous indication of valve position. The relief tailpipe temperature monitor is the only cited monitor which relates the valve open indication to the specific valve. However, failure of this monitor to provide accurate information at TMI due to valve leakage prior to opening was part of the basis for the II.D.3 requirement. Thus, the staff concluded that the TMI requirement is not satisfied when an acoustic monitor is inoperable, and that acceptable interim compensatory measures are needed to permit continued plant operation. The licensee was notified of this finding in a telecon on June 1.

On June 2, 1987, the licensee provided additional information in a submittal to the NRC. This submittal commits the licensee to interim compensatory measures by the Hope Creek operating personnel until the inoperable monitor is restored to operability. A copy of the operating procedures relative to a failed open safety relief valve was provided, and the licensee committed to a special in-plant structured training session focusing on using the procedure with an inoperable acoustic monitor. The training is to include discussions regarding the ability to differentiate between SRV openings, HPCI system inadvertent actuations, and small break LOCAs. In addition, the operator will be instructed on actions for the continued monitoring, trending, and analysis of tail-pipe temperature as indicator of valve position in event that the temperature rises to the alarm setpoint (indicative of valve leakage).

In addition, the licensee will test a group of operators undergoing requalification training on the simulator in the use of the operating procedure with simulator of the inoperable acoustic monitor. The results and operator reactions are to be factored into the training sessions. The licensee expects to complete the special training of all licensed personnel for the subject condition by midnight, June 4, 1987.

In response to discussions with the staff on June 4, 1987, the licensee committed (by letter dated June 4, 1987) to repair the acoustic monitor during the first forced outage of sufficient duration to effect repairs should such an outage occur before September 21, 1987. It also modified its requested Technical Specification change to reflect this commitment by stating in the proposed footnote (c) to Table 3.3.7.5-1 that the acoustic monitor may be inoperable until September 21, 1987 or until the first forced outage of sufficient duration to effect repair prior to that date.

The staff has reviewed the June 2 and 4, 1987 submittals and finds the proposed commitments and compensatory measures to be adequate for the interim period of operation with an inoperable acoustic monitor. The acceptability is based on the following considerations:

- (1) On indication of possible SRV OPEN conditions, the operator actions and diagnosis can be directed to the valve with an inoperable position indicator if all other valves are indicated to be closed.
- (2) With the special instructions to the operators, the importance of the tail pipe temperature as a position indicator for SRV No. F013H can be upgraded, and precautionary actions can be taken to assure its availability for this purpose.
- (3) Special training of the operators with attention to the single failed position indicator should provide diagnostic capability to recognize when the valve is open.

The licensee has requested Technical Specification changes for Hope Creek Generating Station to permit interim operation for up to about 3½ months with an inoperable acoustic monitor position indicator on one SRV. Interim compensatory measures, primarily special training and measures to assure diagnostic capability to recognize when the subject SRV is open have been committed to by the licensee. Based on the above discussions, the staff concludes that the requested change will not result in any significant degradation of the safety of plant operation, and is therefore acceptable.

3.0 EMERGENCY CIRCUMSTANCES

The licensee declared the acoustic monitor channel for the F013H SRV inoperable at 6:45 p.m. EST on May 28, 1987 due to an upward shift in the baseline acoustical output and significantly larger oscillations in

the signal as required by Technical Specification Action Statements. The licensee placed the plant in 7 day LCO. The licensee has determined that the source of the problem is at the transmitter and that a plant cooldown and drywell entry is required in order to repair the transmitter. The licensee has informed us that shutting the plant down at this time will severely impact the system interconnections during peak summer electrical demand. In order to avoid impacting the system interconnections during this peak demand period, the licensee has requested an emergency change to the Technical Specifications to allow it to continue operating the plant until September 21, 1987 which is the projected starting date for a fall outage which has been scheduled to complete required surveillances. Necessary maintenance to return the F013H SRV acoustic monitor to operable status will be performed during this outage.

4.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission's regulations in 10 CFR 50.92 state that the Commission may make a final determination that a license amendment involves no significant hazards consideration if operation of the facility in accordance with the amendment would not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or
- (2) Create the possibility of a new or different kind of accident from any accident previously evaluated or;
- (3) Involve a significant reduction in a margin of safety.

Based on the availability of alternate methods to determine if the F013H SRV is open or closed and the compensatory action being taken to provide special training to assure that plant operators, as discussed above, are capable of using these alternate systems and of taking appropriate action in response to this information, we have determined that the amendment meets the above criteria. Accordingly, we conclude that it involves no significant hazards considerations.

5.0 STATE CONSULTATION

The State of New Jersey was consulted on this matter and had no comments on the determination.

6.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The 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 cr

cumulative occupational radiation exposure. The Commission has made a final no significant hazards consideration finding with respect to this amendment. Accordingly, this 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 this amendment.

7.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) the amendment does not (a) significantly increase the probability or consequences of an accident previously evaluated, (b) increase the possibility of a new or different kind of accident from any previously evaluated or (c) significantly reduce a safety margin and, therefore, the amendment does not involve significant hazards consideration; (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) 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 Contributors: L. Phillips and G. Rivenbark

Dated: June 17, 1987