

January 30, 2004

Mr. Roy A. Anderson
President & Chief Nuclear Officer
PSEG Nuclear LLC-X04
Post Office Box 236
Hancocks Bridge, NJ 08038

SUBJECT: HOPE CREEK GENERATING STATION - ISSUANCE OF AMENDMENT RE:
REVISIONS TO THE SUPPRESSION CHAMBER WATER TEMPERATURE
TECHNICAL SPECIFICATIONS (TAC NO. MB9658)

Dear Mr. Anderson:

The Commission has issued the enclosed Amendment No. 150 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 17, 2003. The amendment corrects typographical errors in the TS Index and deletes TS 4.6.2.1.b.2.b, verification that thermal power is less than or equal to 1% of rated thermal power at least once per hour when the suppression chamber temperature exceeds 95 °F. The proposed TS change is consistent with the standard TSs for General Electric Plants, Boiling Water Reactor/4 (NUREG-1433, Revision 2).

A copy of our safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

John P. Boska, Senior Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-354

Enclosures: 1. Amendment No. 150 to
License No. NPF-57
2. Safety Evaluation

cc w/encls: See next page

Hope Creek Generating Station

cc:

Mr. A. Christopher Bakken, III
Senior Vice President - Site Operations
PSEG Nuclear - X15
P.O. Box 236
Hancocks Bridge, NJ 08038

Mr. John T. Carlin
Vice President - Nuclear Assessment
PSEG Nuclear - N10
P.O. Box 236
Hancocks Bridge, NJ 08038

Mr. David F. Garchow
Vice President - Eng/Tech Support
PSEG Nuclear - N28
P.O. Box 236
Hancocks Bridge, NJ 08038

Mr. James A. Hutton
Plant Manager
PSEG Nuclear - X15
P.O. Box 236
Hancocks Bridge, NJ 08038

Mr. Steven Mannon
Acting Manager - Nuclear Safety and
Licensing
PSEG Nuclear - N21
P.O. Box 236
Hancocks Bridge, NJ 08038

Jeffrie J. Keenan, Esquire
PSEG Nuclear - N21
P.O. Box 236
Hancocks Bridge, NJ 08038

Ms. R. A. Kankus
Joint Owner Affairs
Exelon Generation Company, LLC
Nuclear Group Headquarters KSA1-E
200 Exelon Way
Kennett Square, PA 19348

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

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

Brian Beam
Board of Public Utilities
2 Gateway Center, Tenth Floor
Newark, NJ 07102

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

Senior Resident Inspector
Hope Creek Generating Station
U.S. Nuclear Regulatory Commission
Drawer 0509
Hancocks Bridge, NJ 08038

January 30, 2004

Mr. Roy A. Anderson
President & Chief Nuclear Officer
PSEG Nuclear LLC-X04
Post Office Box 236
Hancocks Bridge, NJ 08038

SUBJECT: HOPE CREEK GENERATING STATION - ISSUANCE OF AMENDMENT RE:
REVISIONS TO THE SUPPRESSION CHAMBER WATER TEMPERATURE
TECHNICAL SPECIFICATIONS (TAC NO. MB9658)

Dear Mr. Anderson:

The Commission has issued the enclosed Amendment No. 150 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 17, 2003. The amendment corrects typographical errors in the TS Index and deletes TS 4.6.2.1.b.2.b, verification that thermal power is less than or equal to 1% of rated thermal power at least once per hour when the suppression chamber temperature exceeds 95 °F. The proposed TS change is consistent with the standard TSs for General Electric Plants, Boiling Water Reactor/4 (NUREG-1433, Revision 2).

A copy of our safety evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

John P. Boska, Senior Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-354

- Enclosures: 1. Amendment No. 150 to
License No. NPF-57
2. Safety Evaluation

cc w/encls: See next page

DISTRIBUTION

PUBLIC	OGC	GMeyer, RGN-I
DRoberts	JBoska	ACRS
PDI-2 Reading	CRaynor	TBoyce
GHill (2)	RJGiardina	

ADAMS ACCESSION NUMBER: ML033390029, TS(s): ML
Package: ML040300033 *SE input provided

OFFICE	PDI-2/PM	PDI-2/LA	IROB*	OGC	PDI-2/SC(A)
NAME	JBoska	CRaynor	TBoyce	SUttal	DRoberts
DATE	01/08/04	01/07/04	11/03/03	01/24/04	01/29/04

OFFICIAL RECORD COPY

PSEG NUCLEAR LLC

DOCKET NO. 50-354

HOPE CREEK GENERATING STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 150
License No. NPF-57

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by PSEG Nuclear LLC dated June 17, 2003, 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. 150, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into the license. PSEG Nuclear LLC 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.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Darrell Roberts, Acting Chief, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: January 30, 2004

ATTACHMENT TO LICENSE AMENDMENT NO. 150

FACILITY OPERATING LICENSE NO. NPF-57

DOCKET NO. 50-354

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

x

3/4 6-13

Insert

x

3/4 6-13

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 150 TO FACILITY OPERATING LICENSE NO. NPF-57

PSEG NUCLEAR LLC

HOPE CREEK GENERATING STATION

DOCKET NO. 50-354

1.0 INTRODUCTION

By application dated June 17, 2003, PSEG Nuclear LLC (the licensee) requested changes to the Technical Specifications (TSs) for the Hope Creek Generating Station (Hope Creek). The Nuclear Regulatory Commission (NRC or the Commission) staff's original proposed no significant hazards determination was published in the *Federal Register* on July 8, 2003 (68 FR 40717).

The requested changes would correct typographical errors in the TS Index and delete TS 4.6.2.1.b.2.b, verification that thermal power is less than or equal to 1% of rated thermal power at least once per hour when the suppression chamber temperature exceeds 95 °F. The proposed TS change is consistent with the Standard TSs for General Electric Plants, Boiling Water Reactor (BWR)/4 (NUREG-1433, Revision 2).

2.0 REGULATORY EVALUATION

The applicable regulatory requirements and guidelines are Sections 50.36, 50.90, 50.91, 50.92, and 51.22 of Part 50 of Title 10 of the *Code of Federal Regulations* (10 CFR), and the model TSs contained in the Improved Standard Technical Specifications NUREG-1433, Revision 2, "Standard Technical Specifications General Electrical Plants, BWR/4," dated April 2001.

3.0 TECHNICAL EVALUATION

The NRC staff has reviewed the licensee's regulatory and technical analyses in support of its proposed license amendment, which are described in the licensee's application.

The licensee proposed modifications to the TSs by correcting typographical errors on Index page "x" and deleting TS 4.6.2.1.b.2.b.

The typographical corrections to Index page "x" consist of the addition of the letter "s" to the word "requirement" in the title to Table 4.3.9.1-1, and the addition of a "." between the "4s" in TS 3/4.4.3. These changes are administrative in nature and are acceptable.

Currently, TS 3/4.6.2.1 "Suppression Chamber" specifies the following action and Surveillance Requirement (SR) for the suppression chamber temperature limit of 95 °F:

TS 3.6.2.1

ACTION:

- b. With the suppression chamber average water temperature greater than 95 °F and the THERMAL POWER greater than 1% of RATED THERMAL POWER, restore the average temperature to less than or equal to 95 °F within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours, except, as permitted above:

SR TS 4.6.2.1

The suppression chamber shall be demonstrated OPERABLE:

- b. At least once per 24 hours in OPERATIONAL CONDITION 1 or 2 by verifying the suppression chamber average water temperature to be less than or equal to 95°F, except:
 2. At least once per hour when suppression chamber average water temperature is greater than 95 °F, by verifying:
 - a) Suppression chamber average water temperature to be less than or equal to 110 °F, and
 - b) THERMAL POWER to be less than or equal to 1% of RATED THERMAL POWER.

TS 3.6.2.1 provides limiting conditions for operation (LCOs) for the suppression chamber water temperature to ensure the ability of the Hope Creek plant to maintain containment pressure in an acceptable range following an accident. SRs 4.6.2.1.b and 4.6.2.1.c provide required surveillances to ensure that the suppression chamber water temperature remains below the value used in the safety analyses.

Limitations on suppression chamber average water temperature ensure that containment conditions assumed in the safety analyses are met. Specifically, the limitations ensure that the peak primary containment pressure and temperature do not exceed the maximum allowable values during a postulated design-basis accident (DBA) or any transient initiating a heatup of the suppression pool. The suppression pool provides the heat sink for the entire spectrum of postulated pipe breaks inside containment. Knowledge of the current power level is an inherent requirement for the operator at all times. Thus, when the suppression pool average water temperature is above 95 °F and the thermal power is greater than 1% RATED THERMAL POWER (RTP), TS 3.6.2.1, Action b requires that the temperature be restored to less than or equal to 95 °F within 24 hours or the plant be shut down. Under these conditions, verifying that the thermal power is less than or equal to 1% RTP at least once per hour, per TS 4.6.2.1.b.2.b, is inconsistent and unnecessary, since one is already in the action statement as a result of being in the known condition of greater than 1% RTP. When power is less than or equal to 1%

RTP, the plant is essentially shut down. Thus, if one is in TS 3.6.2.1, Action b shutting down the plant per the action statement would result in going from one known condition (greater than 1% RTP) to another known condition (less than or equal to 1% RTP). Again, under these conditions verifying the thermal power per TS 4.6.2.1.b.2.b is inconsistent and unnecessary.

For those other conditions in which the power is less than or equal to 1% RTP, the LCO is being met, the plant is in a known condition (power is less than or equal to 1% RTP); thus, verification of the temperature at the frequencies specified in TSs 4.6.2.1.b.2 and 4.6.2.1.c is sufficient. Therefore, there is minimal significance to the removal of TS 4.6.2.1.b.2.b.

The safety analyses were performed assuming a suppression chamber initial water temperature of 95 °F. Immediately following the DBA blowdown, the water temperature is approximately 135 °F, which is well below the Updated Final Safety Analysis Report, Section 5.4.7.1.1.3 limit of 170 °F. Thus, the proposed change does not affect the current safety analysis. Since the proposed revisions to the TSs meet the requirements of 10 CFR 50.36, "Technical Specifications," and do not result in changes to the design basis, the NRC staff concludes that these revisions are 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 (68 FR 40717). 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: R. Giardina

Date: January 30, 2004