

June 24, 2003

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:
END-OF-CYCLE RECIRCULATION PUMP TRIP SYSTEM INSTRUMENTATION
(TAC NO. MB7809)

Dear Mr. Anderson:

The Commission has issued the enclosed Amendment No. 148 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 February 14, 2003.

The amendment revises TS 3/4.3.4.2 to extend the surveillance test intervals and allowed out-of-service times for the end-of-cycle recirculation pump trip system instrumentation. In addition, the TS Bases have been revised to address the proposed changes.

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/

Richard B. Ennis, 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. 148 to
License No. NPF-57
2. Safety Evaluation

cc w/encls: See next page

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DISTRIBUTION:

JClifford	OGC	GMeyer, RGN-I	ACRS	CRaynor
PUBLIC	GMiller	REnnis	GHill (2)	PDI-2 Reading
CHolden	SMagruder	DTift	EMarinos	
Package No.: ML031760436			TSs: ML031760428	
ADAMS Accession Nos.: Amendment: ML031550089				

OFFICE	PDI-2/PM	PDI-2/PM	PDI-2/LA	RORP/SC	EEIB/SC	OGC	PDI-2/SC
NAME	GMiller	REnnis	CRaynor	SMagruder	EMarinos	RHoeftling	RLaufer for JClifford
DATE	6/16/2003	6/16/03	06/04/03	6/17/03	6/17/03	6/20/03	6/24/03

OFFICIAL RECORD COPY

Hope Creek Generating Station

cc:

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PSEG NUCLEAR, LLC

DOCKET NO. 50-354

HOPE CREEK GENERATING STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 148
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 February 14, 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. 148, 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 by RLaufer for/

James W. Clifford, 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: June 24, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 148

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

3/4 3-45

3/4 3-47

3/4 3-50

B 3/4 3-3

Insert

3/4 3-45

3/4 3-47

3/4 3-50

B 3/4 3-3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 148 TO FACILITY OPERATING LICENSE NO. NPF-57
PSEG NUCLEAR, LLC
HOPE CREEK GENERATING STATION
DOCKET NO. 50-354

1.0 INTRODUCTION

By application dated February 14, 2003, PSEG Nuclear, LLC (PSEG or the licensee) submitted a request for changes to the Hope Creek Generating Station (Hope Creek) Technical Specifications (TSs). The proposed amendment would revise TS 3/4.3.4.2 to extend the surveillance test intervals (STIs) and allowed out-of-service times (AOTs) for the end-of-cycle recirculation pump trip (EOC-RPT) system instrumentation. Specifically, the proposed changes would revise TS 3.3.4.2, "End-of-Cycle Recirculation Pump Trip System Instrumentation," such that:

- A. The AOT for surveillance testing, as specified in Note (a) of Table 3.3.4.2-1, would be extended from 2 hours to 6 hours.
- B. The AOT for repair of inoperable channels, as specified in the action statements (b) and (c)(1) of TS 3.3.4.2, would be extended from 1 hour to 12 hours.
- C. The channel functional test STI, as specified in Table 4.3.4.2.1-1, would be extended from monthly to quarterly for the following trip functions:
 - 1. Turbine Stop Valve - Closure
 - 2. Turbine Control Valve - Fast Closure

In addition, the TS Bases would be revised to address the proposed changes.

2.0 REGULATORY EVALUATION

In 1983, the Boiling Water Reactor Owners' Group (BWROG) formed a Technical Specifications Improvement (TSI) Committee. This committee established a program to identify improvements to AOTs and STIs specified in the Boiling Water Reactor (BWR) Standard TSs. The primary objective was to minimize unnecessary testing and restrictive AOTs that could potentially degrade overall plant safety and availability.

In February of 1991, General Electric Company (GE) published Topical Report GENE-770-06-1, "Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times for Selected Instrumentation Technical Specifications." This report was issued by the BWROG to support proposed extensions of selected AOTs and STIs. Specifically, it provided a

basis for extending STIs from 31 days (i.e., monthly) to 92 days (i.e., quarterly); AOTs for surveillance testing from 2 hours to 6 hours; and AOTs for repair from 1 or 2 hours to 12 hours. The Nuclear Regulatory Commission (NRC) staff approved Topical Report GENE-770-06-1 in a safety evaluation (SE) dated July 21, 1992. Table 1 of the SE lists the following plant-specific conditions that licensees must meet to make any proposed STI or AOT changes fully acceptable:

1. Confirm the applicability of the generic analyses to the plant.
2. Confirm that any increase in instrument drift due to the extended STIs is properly accounted for in the setpoint calculation methodology.

3.0 TECHNICAL EVALUATION

The staff has reviewed the licensee's regulatory and technical analyses in support of its proposed license amendment which are described in Attachment 1 of its submittal. The detailed evaluation below will support the conclusion 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.

The licensee's application states that the proposed AOT and STI changes are based on GE Licensing Topical Report GENE-770-06-1-A, dated December 1992. To verify the acceptability of the proposed changes, the NRC staff verified that the licensee has satisfied the two conditions set forth in the staffs' SE dated July 21, 1992, as discussed in Sections 3.1 and 3.2 of this SE, respectively.

3.1 Condition 1: Generic Applicability

The first condition states that the licensee must confirm the applicability of the generic analyses of GENE-770-06-1 to the plant. PSEG's application stated that it had reviewed the applicable portions of the Topical Report and, based on that review, concluded that the generic analysis was applicable to Hope Creek. Table 2 of the NRC's SE dated July 21, 1992, lists the approved STI and AOT changes by system and plant type. For the EOC-RPT system and BWR4 or BWR6 plants, the approved changes are identical to the changes proposed by the licensee. Since Hope Creek is a BWR4 plant, and since the generically-approved changes are identical to the proposed changes, the staff finds that the first condition is satisfied.

3.2 Condition 2: Instrument Drift

The second condition states that the licensee must confirm that any increase in instrument drift due to the extended STIs is properly accounted for in the setpoint methodology. Additional information on accounting for instrument drift in setpoint methodology was provided by letter from C. E. Rossi (NRC) to R. F. Janecek (BWROG), dated April 27, 1988. The letter stated, in part, "licensees need only confirm that the setpoint drift which could be expected under the extended STIs has been studied and either (1) has been shown to remain within the existing

allowance in the RPS [reactor protection system] and ESFAS [engineered safety features actuation system] instrument setpoint calculation or (2) that the allowance and setpoint have been adjusted to account for the additional expected drift.”

In its application, PSEG stated that the current calibration interval for the EOC-RPT system actuation instrumentation is 18 months. The licensee further stated that instrument drift would, therefore, be unaffected by the proposed change in STI from monthly to quarterly. Additionally, PSEG confirmed that a review of its most recent as-found calibration data for the EOC-RPT system actuation instrumentation drift is within acceptable limits.

Based upon the licensee's analysis of calibration data, and given that the existing calibration interval for the EOC-RPT is greater than the proposed STI, the staff finds the second condition to be satisfied, since the setpoint drift allowances for a quarterly STI would remain within the existing drift allowances for the existing 18-month calibration interval.

3.3 Technical Evaluation Conclusion

The staff finds that the two plant-specific conditions set forth in the Safety Evaluation of Topical Report GENE-770-06-1 are satisfied, and use of the Topical Report as a basis for the TS changes is acceptable. Therefore, given the previous acceptance of the Topical Report, the staff finds the proposed changes to the TSs acceptable.

The licensee has also proposed to revise the TS Bases to reference the Topical Report as the basis for the STIs and AOTs. The staff has no objections to these Bases changes.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New Jersey State officials were notified of the proposed issuance of the amendment. The State officials had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 20 and changes surveillance requirements. 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 18284). 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 Contributors: D. Tifft
R. Ennis
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Date: June 24, 2003