

March 8, 2006

Mr. William Levis
Senior Vice 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:
TRAVERSING IN-CORE PROBE SYSTEM (TAC NO. MC5845)

Dear Mr. Levis:

The Commission has issued the enclosed Amendment No. 164 to Facility Operating License No. NPF-57 for the Hope Creek Generating Station (Hope Creek). This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated February 4, 2005. The amendment relocates the Transversing In-Core Probe (TIP) system TS to the Hope Creek Updated Final Safety Analysis Report and removes the note on the TIP system from the Reactor Protection System Instrumentation Surveillance Requirements table.

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/

Stewart N. Bailey, Senior Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-354

Enclosures: 1. Amendment No. 164 to
License No. NPF-57
2. Safety Evaluation

cc w/encls: See next page

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PSEG NUCLEAR LLC

DOCKET NO. 50-354

HOPE CREEK GENERATING STATION

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 164
License No. NPF-57

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by PSEG Nuclear LLC (the licensee) dated February 4, 2005, 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. 164, 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 J. Roberts, Chief
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical
Specifications

Date of Issuance: March 8, 2006

ATTACHMENT TO LICENSE AMENDMENT NO. 164

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

ix

xviii

3/4 3-8

3/4 3-89

B 3/4 3-5

Insert

ix

xviii

3/4 3-8

3/4 3-89

B 3/4 3-5

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 164 TO FACILITY OPERATING LICENSE NO. NPF-57

PSEG NUCLEAR LLC

HOPE CREEK GENERATING STATION

DOCKET NO. 50-354

1.0 INTRODUCTION

By letter dated February 4, 2005, PSEG Nuclear LLC (PSEG or the licensee) requested changes to the Hope Creek Generating Station (Hope Creek) Technical Specification (TSs). The application was noticed, and the Nuclear Regulatory Commission (NRC or the Commission) staff's proposed no significant hazards determination was published in the Federal Register on March 15, 2005 (70 FR 12750).

The amendment relocates the Transversing In-Core Probe (TIP) system TS to the Hope Creek Updated Final Safety Analysis Report (UFSAR) and removes the note on the TIP system from the Reactor Protection System Instrumentation Surveillance Requirements table.

2.0 REGULATORY EVALUATION

The licensee identified the applicable regulatory requirements in Section 3 of its February 4, 2005, submittal. The regulatory requirements that the NRC staff considered in its review of the application are in Title 10 of the *Code of Federal Regulations (10 CFR)*, Section 50.36, "Technical Specifications."

Section 50.36(c)(2)(ii) of 10 CFR contains the requirements for items that must be in TSs. This regulation provides four criteria that can be used to determine the requirements that must be included in the TSs. A TS limiting condition for operation (LCO) of a nuclear reactor must be established for each item meeting one or more of the following criteria:

Criterion 1: Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

Criterion 2: A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of, or presents a challenge to the integrity of a fission product barrier.

Criterion 3: A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of, or presents a challenge to the integrity of a fission product barrier.

Criterion 4: A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

Items not meeting any of these four criteria can be relocated from the TSs to a licensee-controlled document such as the UFSAR.

Generic Letter (GL) 95-10 addresses the relocation of selected TS requirements related to instrumentation, including incore detector equipment, as a result of applying the 10 CFR 50.36 criteria. The NRC staff determined that, in accordance with the 10 CFR 50.36 criteria, several specifications did not warrant inclusion in the TSs and may be moved out of existing TSs to documents and programs controlled by the licensee. The staff also concluded that the instrumentation addressed by these specifications are not related to dominant contributors of plant risk. The TSs for the TIP system were identified as being candidates for relocation to licensee-controlled documents, such as the UFSAR.

3.0 TECHNICAL EVALUATION

As discussed in GL 95-10, incore instrumentation is used periodically to calculate power peaking factors to verify nuclear design predictions, ensure operation within established fuel performance limits, and calibrate other nuclear instrumentation. The measurements are used in a confirmatory manner and do not provide direct input to reactor protection systems or engineered safety features actuation system functions.

In GL 95-10, the staff stated that incore detectors, which include TIPs, are neither used for, nor capable of, detecting a significant abnormal degradation of the reactor coolant pressure boundary before a design basis accident (DBA), nor do they function as a primary success path to mitigate events which assume a failure of, or a challenge to, the integrity of fission product barriers. The staff also concluded that the instrumentation addressed by the TSs on incore detectors is not related to a dominant contributor to plant risk. Therefore, the staff determined that the incore detector requirements do not meet the criteria of 10 CFR 50.36 for inclusion in TSs.

The licensee has addressed the criteria contained in 10 CFR 50.36 for removal and relocation of the TS requirements to a licensee-controlled document as follows:

Criterion 1: The licensee stated that the TIP system is not used for detecting and indicating significant abnormal degradation of the primary pressure boundary. Any leakage of the portion of the TIP tubing in the reactor pressure boundary would be indicated in the control room similar to any other primary boundary leak (e.g., drywell pressure increase, increased sump flow rates). The staff agrees that the TIP system is not used to prevent degradation of the reactor coolant system boundary.

Criterion 2: The licensee stated that the TIP system does not meet criterion 2 as it is used as a calibration tool for the local power range monitors (LPRMs). The uncertainty of its measurements is included in the core monitoring methods. The staff agrees that TIP system is not a condition of a DBA or transient analysis that assumes the failure of or presents a challenge to the integrity of the fission product barrier.

Criterion 3: The licensee stated that the TIP system's direct accident/transient function is the containment isolation function of the TIPs when they are penetrating primary containment. This system function is not related to the calibration function covered by the subject specification. The staff agrees that the TIP system is not a portion of the primary success path of a safety sequence and analysis.

Criterion 4: The licensee determined that the TIP system does not contribute any probabilistic risk assessment concerns, based on NEDO-31466, "Technical Specification Screening Criteria Application and Risk Assessment," dated November 1987. The NRC staff agrees that the calibration function of the TIP system is not significant to public health and safety, based on operating experience and risk considerations.

Further, the licensee has indicated that, as stated in the UFSAR, the TIP system is an operational system which has no safety function. The TIP system allows calibration of the LPRMs, but has no safety setpoints. All non-calibration TIP system functions, such as containment isolation, are unaffected by these changes. In addition, other TIP TS requirements would be unaffected by these changes.

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. As indicated by letter dated May 18, 2005, 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 (70 FR 12750). 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.

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Date: March 8, 2006

Hope Creek Generating Station

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