

March 23, 2001

MEMORANDUM TO: James W. Clifford, Chief, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

FROM: Richard B. Ennis, Project Manager, Section 2 **/RA/**  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

SUBJECT: HOPE CREEK GENERATING STATION, FACSIMILE TRANSMISSION,  
ISSUES TO BE DISCUSSED IN AN UPCOMING CONFERENCE CALL  
(TAC NO. MB0644)

The attached information was transmitted by facsimile on March 23, 2001, to Mr. John Nagle of PSEG Nuclear LLC (the licensee). This information was transmitted to facilitate a upcoming conference call in order to determine an appropriate response time for the attached set of questions associated with the licensee's submittal dated December 1, 2000. In the submittal, the licensee requested a revision to the Hope Creek Generating Station (HCGS) Facility Operating License and Technical Specifications to increase the HCGS licensed power level by approximately 1.4%. This memorandum and the attachment do not convey or represent an NRC staff position regarding the HCGS power uprate request.

Docket No. 50-354

Attachment: Issues for Discussion in Upcoming Telephone Conference

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Attachment: Issues for Discussion in Upcoming Telephone Conference

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Issues for Discussion in Upcoming Telephone Conference  
Related to PSEG License Change Request H00-05, dated December 1, 2000  
Hope Creek Generating Station  
1.4% Power Uprate

1. Attachment 1, Section 9.1, of the submittal provides the justification for the requested power uprate with respect to the design of the fuel pool cooling and cleanup system (FPCCS). The FPCCS is designed to remove heat and impurities from the spent fuel pool. The licensee has indicated that the FPCCS heat removal function will not be affected by the power uprate, but its cleaning function was not addressed. Describe how the removal of impurities from the water in the spent fuel pool will be affected by the power uprate.

The regulatory basis for this question is that the cleanup portion of the FPCCS conforms to the requirements of General Design Criteria (GDC) 61 of Appendix A to Part 50 of Title 10 of the Code of Federal Regulations (10 CFR Part 50) as it relates to appropriate filtering systems for fuel storage.

2. Attachment 1, Section 9.3, of the submittal provides the justification for the requested power uprate with respect to the design of the Standby Liquid Control System (SLCS). Provide justification why the concentration of sodium pentaborate in the SLCS is not changed after the power uprate.

The regulatory basis for this question is that the SLCS conforms to the reactivity control requirements of 10 CFR 50.62(c)(4).

3. Attachment 1, Section 10, of the submittal provides the justification for the requested power uprate with respect to the design of the Steam and Power Conversion Systems. The submittal states that the power conversion systems and their support systems were designed for 105% of rated steam flow and that the proposed 1.4% power uprate will increase the rated steam and feedwater flow by about 1.8%. Therefore, the proposed power uprate has no impact on the power conversion systems since the increased flow is bounded by the design conditions. Does the design analysis also bound the turbine overspeed and associated missile production for the 1.8% increase in steam flow?

The regulatory basis for this question is that the turbine generator system conforms to the requirements of GDC 4 of Appendix A to 10 CFR Part 50 as it relates to the protection of structures, systems, and components important to safety from the effects of turbine missiles.

4. Attachment 5 of the submittal provides PSEG's justification for an exemption request associated with the use of American Society of Mechanical Engineers (ASME) Code Case N-588. The staff has determined that Code Case N-588 will not provide HCGS with any reduction in unnecessary burden benefit because the HCGS reactor pressure vessel is not limited by circumferential weld material in the vessel. Since application of Code Case N-588 does not appear to provide HCGS with any reduction in unnecessary burden benefit, the staff requests that PSEG either withdraw the exemption request or provide additional information that demonstrates a reduction in unnecessary burden.
5. In order to assist in the evaluation of the effects of the proposed change on the Updated Final Safety Analysis Report Chapter 15 analyses, please provide a copy of the fuel vendors supplemental reload analysis report for the upcoming cycle. This information is required to assure that proposed changes conform to the requirements of:
  - a) GDC 10 of Appendix A to 10 CFR Part 50 as it relates to the reactor coolant system being designed with appropriate margin to ensure that specified fuel design limits are not exceeded during normal operations including anticipated operational occurrences;
  - b) GDC 15 of Appendix A to 10 CFR Part 50 as it relates to the reactor coolant system and its associated auxiliaries being designed with appropriate margin to assure ensure that the pressure boundary will not be breached during normal operations including anticipated operational occurrences;
  - c) GDC 20 of Appendix A to 10 CFR Part 50 as it relates the reactor protection system being designed to initiate automatically the operation of appropriate systems, including the reactivity control systems, to ensure that specified acceptable fuel design limits are not exceeded during any condition of normal operation, including anticipated operational occurrences; and
  - d) GDC 26 of Appendix A to 10 CFR Part 50 as it relates to the reliable control of reactivity changes to assure ensure that specified acceptable fuel design limits are not exceeded, including anticipated operational occurrences.