

June 18, 2001

Mr. Harold W. Keiser  
Chief Nuclear Officer & President  
PSEG Nuclear LLC - X04  
Post Office Box 236  
Hancocks Bridge, NJ 08038

SUBJECT: HOPE CREEK GENERATING STATION - ENVIRONMENTAL ASSESSMENT  
AND FINDING OF NO SIGNIFICANT IMPACT FOR INCREASE IN  
ALLOWABLE THERMAL POWER LEVEL (TAC NO. MB0644)

Dear Mr. Keiser:

Enclosed is a copy of the "Environmental Assessment and Finding of No Significant Impact" related to your application for license amendment dated December 1, 2000, as supplemented on February 12, May 7, and May 14, 2001. The proposed license amendment would allow an increase in the licensed core power level from 3,293 megawatts thermal (MWt) to 3,339 MWt for the Hope Creek Generating Station.

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

**/RA/**

Richard B. Ennis, Project Manager, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-354

Enclosure: Environmental Assessment

cc w/encl: See next page

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Hope Creek Generating Station

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UNITED STATES NUCLEAR REGULATORY COMMISSION

PSEG NUCLEAR LIMITED LIABILITY COMPANY

DOCKET NO. 50-354

HOPE CREEK GENERATING STATION

ENVIRONMENTAL ASSESSMENT AND FINDING OF

NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an amendment to Facility Operating License (FOL) No. NPF-57, issued to PSEG Nuclear LLC, (the licensee), for operation of the Hope Creek Generating Station (HCGS) located in Lower Alloways Creek Township, Salem County, New Jersey.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed license amendment would revise the FOL and Technical Specifications (TSs) for the HCGS, to allow the licensee to increase the licensed core power level from 3,293 megawatts thermal (MWt) to 3,339 MWt, which represents a 1.4-percent increase in the allowable thermal power. The NRC authorized HCGS for full power production at 3,293 MWt with issuance of the FOL on July 25, 1986. In addition to the power uprate, the proposed license amendment would allow the licensee to make editorial changes to the TS Bases and Index sections.

The proposed action is in accordance with the licensee's application for license amendment dated December 1, 2000, as supplemented by letters dated February 12, May 7, and May 14, 2001.

The Need for the Proposed Action:

The proposed action would allow an increase in power generation at HCGS to provide additional electrical power for distribution to the grid. In certain circumstances, power uprate has been recognized as a safe and cost-effective method to increase generating capacity. The proposed action would also allow editorial changes to the TS Bases and Index sections to provide corrections to references and typographical errors.

Environmental Impacts of the Proposed Action:

The NRC has completed its evaluation of the proposed action and concludes that implementation of the proposed amendment would not have a significant impact on the environment.

With regard to potential radiological impacts, the licensee has evaluated the proposed 1.4-percent power uprate with respect to its effect on the consequences of postulated design-basis accidents and on normal releases of liquid and gaseous effluents. For postulated design-basis accidents, the effects of the proposed power uprate are bounded by current licensing basis dose analyses. No increase in the probability of these accidents is expected to occur. For liquid and gaseous effluents, the offsite doses resulting from normal releases are not impacted by the proposed power uprate because the uprated power is less than the core power level that was used for the source term development in the existing analyses. The release volumes from the liquid and solid waste processing systems are not expected to change as a result of the proposed power level change. The proposed editorial changes to the TSs are administrative in nature and would have no radiological impact. The proposed action will not significantly increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in occupational or public radiation exposure. Based on the above, the staff

concludes that there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential non-radiological impacts, the proposed action does not involve any historic sites. With regard to other non-radiological impacts, the licensee performed an environmental evaluation, as documented in the submittal dated May 14, 2001, that considered thermal effects, consumptive uses, and particulate emissions. This evaluation was performed assuming a 1.5-percent uprated power value, thus bounding the proposed 1.4-percent power uprate. The evaluation was performed as required by the Environmental Protection Plan (EPP) for HCGS (Appendix B to FOL No. NPF-57). The EPP states that “[e]nvironmental concerns identified in the FES-OL [Final Environmental Statement - Operating Licensing Stage (NUREG-1074, dated December 1984)] which relate to water quality matters are regulated by way of the licensee’s NPDES [New Jersey Pollution Discharge Elimination System] permit.” The NJDES permit imposes limits on plant effluents that are discharged to the Delaware River estuary. The licensee’s environmental evaluation concluded that there are no significant non-radiological environmental impacts associated with the proposed power uprate and that the current NJDES permit limits would not require any changes. The proposed editorial changes to the TSs are administrative in nature and would have no non-radiological impact. Based on the above, the staff concludes that there are no significant non-radiological environmental impacts associated with the proposed action.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action.

Alternatives to the Proposed Action:

As an alternative to the proposed action, the staff considered denial of the proposed action (i.e., the “no-action” alternative). Denial of the application would result in no change in

current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for the HCGS.

Agencies and Persons Consulted:

In accordance with its stated policy, on June 7, 2001, the staff consulted with the New Jersey State official, Mr. Dennis Zannoni, of the New Jersey Department of Environmental Protection, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

On the basis of the environmental assessment, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated December 1, 2000, as supplemented by letter dated February 12, May 7, and May 14, 2001. Documents may be examined, and/or copied for a fee, at the NRC's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records will be accessible electronically from the Agencywide Documents Access and Management Systems (ADAMS) Public Electronic Reading Room on the Internet at the NRC web site, <http://www.nrc.gov/NRC/ADAMS/index.html>. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the

NRC Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737 or by email to [pdr@nrc.gov](mailto:pdr@nrc.gov).

Dated at Rockville, Maryland, this 18th day of June 2001.

FOR THE NUCLEAR REGULATORY COMMISSION

**/RA/**

Richard B. Ennis, Project Manager, Section 2  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation