



**AUG 8 1 2007**

10 CFR 50.90

LR-N07-0223  
LCR H05-01, Rev. 1

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Hope Creek Generating Station  
Facility Operating License No. NPF-57  
NRC Docket No. 50-354

Subject: Response to Request for Additional Information  
Request for License Amendment - Extended Power Uprate

References: 1) Letter from George P. Barnes (PSEG Nuclear LLC) to USNRC,  
September 18, 2006  
2) Letter from USNRC to William Levis (PSEG Nuclear LLC),  
August 21, 2007

In Reference 1, PSEG Nuclear LLC (PSEG) requested an amendment to Facility Operating License NPF-57 and the Technical Specifications (TS) for the Hope Creek Generating Station (HCGS) to increase the maximum authorized power level to 3840 megawatts thermal (MWt).

In Reference 2, the NRC requested additional information concerning PSEG's request. Attachment 1 to this letter provides PSEG's response to the NRC question.

PSEG has determined that the information contained in this letter and attachment does not alter the conclusions reached in the 10CFR50.92 no significant hazards analysis previously submitted.

There are no regulatory commitments contained within this letter.

A001  
NRR

**AUG 31 2007**

LR-N07-0223  
LCR H05-01, Rev. 1

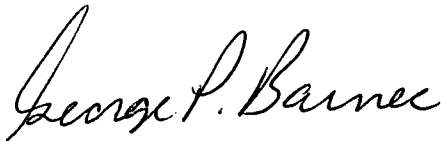
Page 2

Should you have any questions regarding this submittal, please contact Mr. Paul Duke at 856-339-1466.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 8/30/07  
(date)

Sincerely,



George P. Barnes  
Site Vice President  
Hope Creek Generating Station

Attachment

1. Response to Request for Additional Information

cc: S. Collins, Regional Administrator – NRC Region I  
J. Lamb, Project Manager - USNRC  
NRC Senior Resident Inspector - Hope Creek  
P. Mulligan, Manager IV, NJBNE

## **ATTACHMENT 1**

### **Hope Creek Generating Station**

**Facility Operating License No. NPF-57  
NRC Docket No. 50-354**

### **Extended Power Uprate**

### **Response to Request for Additional Information**

In Reference 1, PSEG Nuclear LLC (PSEG) requested an amendment to Facility Operating License NPF-57 and the Technical Specifications (TS) for the Hope Creek Generating Station (HCGS) to increase the maximum authorized power level to 3840 megawatts thermal (MWt).

In Reference 2, the NRC requested additional information concerning PSEG's request. PSEG's response is provided below.

#### **7 Balance of Plant Branch (SBPB)**

7-19 Updated Final Safety Analysis Report, Section 9.1.3.2.3 refers to Seismic Category I emergency fuel pool water makeup from station service water system (SSWS) loop A and a redundant makeup line from SSWS loop B. In addition, a fire hose fill connection located in the auxiliary building ties into the makeup line from SSWS loops A and B and provides supplementary makeup water.

Power Uprate Safety Analysis Report, Section 6.3.1 states that three Seismic Category I emergency makeup sources, the low pressure coolant injection, emergency fire makeup system, and the service water system, have a makeup capability greater than 130 gallons per minute.

The two sources above are not consistent and clear. Please clarify the source, makeup capability and seismic category of each emergency fuel pool water makeup source to the spent fuel pool.

#### Response

Normal makeup to the fuel pool is provided from the non-Seismic Category I condensate storage tank (CST). There are three systems available for emergency fuel pool water makeup: (1) residual heat removal (RHR) system in the low-pressure coolant injection (LPCI) mode during refueling; (2) fire water; and (3) service water. The emergency makeup sources are Seismic Category I systems, each system with capabilities to deliver flows in excess of 130 gpm.

In order to provide more consistency between the UFSAR and the power uprate safety analysis report (PUSAR), a note is being added to UFSAR Table 9.1-17 (Decay Heat

and Evaporation Rates for Loss of Spent Fuel Pool Cooling) to indicate that three Seismic Category I systems are available to provide makeup water to the spent fuel pool (LPCI, fire water makeup, and service water).

**References**

1. Letter from George P. Barnes (PSEG Nuclear LLC) to USNRC, September 18, 2006
2. Letter from USNRC to William Levis (PSEG Nuclear LLC), August 21, 2007

August 21, 2007

Mr. William Levis  
President & Chief Nuclear Officer  
PSEG Nuclear LLC - N09  
Post Office Box 236  
Hancocks Bridge, NJ 08038

SUBJECT: HOPE CREEK GENERATING STATION - REQUEST FOR ADDITIONAL  
INFORMATION REGARDING REQUEST FOR EXTENDED POWER UPRATE  
(TAC NO. MD3002)

Dear Mr. Levis:

By letter dated September 18, 2006, as supplemented on October 10 and October 20, 2006; February 14, February 16, February 28, March 13, April 18, April 30, May 10, May 18, June 22, and August 3, 2007, PSEG Nuclear, LLC submitted an amendment request for an extended power uprate for Hope Creek Nuclear Generating Station. The proposed amendment would increase the authorized maximum power level by approximately 15 percent, from 3339 megawatts thermal (MWt) to 3840 MWt.

The Nuclear Regulatory Commission staff has been reviewing the submittal and has determined that additional information is needed to complete its review. The specific questions are found in the enclosed request for additional information. The questions were sent by e-mail to you to ensure that the questions were understandable, the regulatory basis was clear and to determine if the information was previously docketed. Mr. Paul Duke of your staff agreed to respond by August 31, 2007.

Please note that if you do not respond to this letter within the prescribed response times or provide an acceptable alternate date in writing, we may reject your application for amendment under the provisions of Title 10 of the *Code of Federal Regulations*, Section 2.108. If you have any questions, I can be reached at (301) 415-3100.

Sincerely,

/ra/ (R.B. Ennis for)

John G. Lamb, Senior Project Manager  
Project Directorate I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-354

Enclosure: As stated

cc: See next page

August 21, 2007

Mr. William Levis  
President & Chief Nuclear Officer  
PSEG Nuclear LLC - N09  
Post Office Box 236  
Hancocks Bridge, NJ 08038

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Hope Creek Generating Station

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Hancocks Bridge, NJ 08038

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

REQUEST FOR ADDITIONAL INFORMATION  
REGARDING TECHNICAL SPECIFICATION CHANGES FOR  
EXTENDED POWER UPRATE  
HOPE CREEK GENERATING STATION  
DOCKET NO. 50-354

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