PSEG Nuclear LLC
P.O. Box 236, Hancocks Bridge, New Jersey 08038-0236

PSEG
Nuclear LLC

10 CFR 50.90

LR-N07-0330
LCR H05-01, Rev. 1
December 31, 2007

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), November 13, 2007
3) Letter from George P. Barnes (PSEG Nuclear LLC) to USNRC, November 30, 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 the response to RAI 14.66 followup. The responses to the other questions in Reference 2 were provided in Reference 3.

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

Continuum Dynamics, Inc. (C.D.I.) Report 07-27P, "Finite Element Modeling Bias and Uncertainty Estimates Derived From the Hope Creek Unit 2 Dryer Shaker Test," is

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provided in Attachment 2 to this letter. C.D.I. Report 07-27P contains information which C.D.I. considers to be proprietary. C.D.I. requests that the proprietary information be withheld from public disclosure in accordance with 10 CFR 2.390(a)(4). An affidavit supporting this request is provided in Attachment 2. C.D.I. Report 07-27P is marked as proprietary in its entirety. A copy of C.D.I. Report 07-27P marked in accordance with 10 CFR 2.390(b)(1)(i)(B). and a non-proprietary version of the report suitable for public disclosure will be provided by January 14, 2008.

There are no regulatory commitments contained within this letter.

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 12/31/07
(date)

Sincerely,

George P. Barnes

George P. Barnes
Site Vice President
Hope Creek Generating Station

Attachments
1. Response to Request for Additional Information
2. C.D.I. Report 07-27P
3. Hope Creek Steam Dryer Vibration Test Report

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 NPF-57
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 to RAI 14.66 followup is provided below.

14. Mechanical & Civil Engineering Branch

Request for Additional Information (RAI) 14.66 Follow-up

In RAI 14.66, the staff noted that shifting the frequency of the Hope Creek steam dryer loading will account for uncertainty and bias in the FE model resonance frequencies. However, it does not account for errors in the mean and peak frequency response amplitudes due to uncertainty or bias in plate dimensions, boundary conditions (joints between plates and other members), pre-stresses within members, and friction between internal vanes and other components.

As a clarification of RAI 14.66, PSEG is requested to discuss its consideration of the uncertainty and bias in the dryer FE model frequency response function amplitudes (not in the modal frequencies, the uncertainties of which are already handled by frequency shifting the loads). For example, the assessment of the uncertainties should consider dryer component geometries (length and width, as well as thickness), boundary conditions, and pre-stresses that might occur during welding and assembly.

Response
Continuum Dynamics, Inc. (C.D.I.) Report 07-27P, "Finite Element Modeling Bias and Uncertainty Estimates Derived From the Hope Creek Unit 2 Dryer Shaker Test," is provided in Attachment 2 to this letter. The report describes the comparison of shaker test results against FE model predictions.

A description of the test is provided in Attachment 3 to this letter.

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), November 13, 2007