



10 CFR 50.90

LR-N07-0055
LCR H05-01, Rev. 1
March 13, 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: Supplement to License Amendment Request for Extended Power Uprate

Reference: 1) PSEG letter LR-N06-0286, Request for License Amendment: Extended Power Uprate, September 18, 2006
2) PSEG letter LR-N07-0034, Supplement to License Amendment Request for Extended Power Uprate, February 27, 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). Reference 2 provided the results of evaluations performed to facilitate staff review, demonstrating the conservatism in the predicted loads on the HCGS steam dryer for extended power uprate (EPU) operation.

An acoustic circuit model (ACM) was used to predict fluctuating pressure loads on the steam dryer from measured pressure pulsations in the main steam lines (MSLs) at current licensed thermal power (CLTP). As described in Reference 1, strain gage channels on two of the MSLs failed, preventing a complete set of CLTP strain gage data from being taken. The available CLTP in-plant strain gage data was used to replace the failed strain gage data. The MSL pressure-time histories were phase shifted to maximize the load predicted by the ACM. This load was then applied to a finite element model of the steam dryer. Even with this conservatism to account for the failed MSL strain gage channels, all locations on the steam dryer were shown to have more than 100% margin to alternating stress limits.

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PSEG recently completed a maintenance outage during which failed main steam line strain gage channels were restored to service. Comparison of low-resolution loads at CLTP conditions demonstrates that the predicted loads with all strain gages operational are lower than those used in the CLTP stress analysis provided in Reference 1. In addition, loads predicted from scale model testing at CLTP conditions were determined to be conservative with respect to CLTP in-plant data.

A report describing the loads comparisons is provided in Attachment 1. Attachment 1 contains information which Continuum Dynamics, Inc. (CDI) considers to be proprietary. CDI 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 1. A non-proprietary version of the report is provided in Attachment 2.

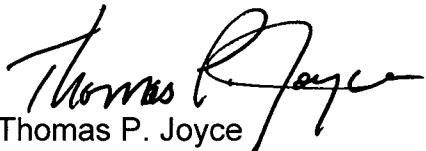
PSEG has determined that the information contained in this letter and attachments does not alter the conclusions reached in the 10CFR50.92 no significant hazards analysis previously submitted.

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 3/13/07
(date)

Sincerely,



Thomas P. Joyce
Site Vice President
Salem Generating Station

Attachments (3)

1. "Revised Hydrodynamic Loads on Hope Creek Unit 1 Steam Dryer to 200 Hz,"
CDI Report No. 07-01P, Revision 0, February 2007
2. "Revised Hydrodynamic Loads on Hope Creek Unit 1 Steam Dryer to 200 Hz,"
CDI Report No. 07-01NP, Revision 0, February 2007

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