

January 11, 2005

CAL No. 1-05-001

Mr. A. Christopher Bakken, III
President and Chief Nuclear Officer
PSEG Nuclear LLC - N09
P. O. Box 236
Hancocks Bridge, NJ 08038

SUBJECT: CONFIRMATORY ACTION LETTER (1-05-001)

Dear Mr. Bakken:

On December 17, 2004, the NRC held a meeting at NRC Headquarters with Mr. M. Gallagher and other PSEG representatives to discuss questions that the NRC had regarding the vibration levels of the "B" reactor recirculation pump at Hope Creek. The vibration levels on this pump have been about twice the levels seen on the "A" recirculation pump. The vibration levels have been attributed to slight bowing of the pump shaft in the area below the seal package area which has led to frequent seal replacements. Also, industry operating experience indicates that some cracking is likely to be present in the pump shaft, which leads to questions about the expected remaining service life of the shaft. The recirculation pump forms part of the reactor coolant system boundary, and the NRC requires high reliability of that boundary during periods of plant operation.

During the December 17, 2004 meeting, you also discussed the findings of a review done for you by Sargent and Lundy (S&L) who independently assessed this vibration problem. The S&L assessment was summarized in the report, "Independent Assessment of Hope Creek Reactor Recirculation System and Pump Vibration Issues," dated November 12, 2004. The NRC had reviewed the S&L report and developed a number of questions which were provided to PSEG during December 2004, and which were discussed during the aforementioned December 17, 2004, public meeting and several subsequent teleconferences. You also addressed those issues in subsequent submittals sent to the NRC on December 29, 2004, January 4, 2005, and January 7, 2005.

The S&L Report had concluded that there is no immediate need to replace the "B" pump rotor during the current refueling outage, and the pump could be returned to service for the next operating cycle given the current level of reactor recirculation pump and piping vibrations. However, S&L recommended that both pumps be closely monitored for vibrations.

During various telephone conversations with the NRC staff in late December 2004, and early January 2005, your staff committed to a number of actions that would be taken to ensure acceptable operation of the "B" recirculation pump. These commitments are described in a subsequent letter you sent to the NRC on January 9, 2005. As a result of another telephone conversation that I had with you on January 10, 2005, it is our understanding that you have

taken (or will take) all of the actions set forth in your January 9, 2005 letter, consistent with the schedule set forth therein. These commitments included: implementing a vibration-monitoring program to continuously monitor the "B" reactor recirculation pump's primary and secondary harmonic parameters (total amplitude, 1X and 2X amplitude, and 1X and 2X phase angle) during future periods of plant operation; establishing objective criteria that demonstrate that monitored parameters are within an acceptable range; developing procedures which specify the actions to be taken if the monitored parameters are outside of the specified range of the acceptance criteria [the procedures HC.OP-AB.RPV-0003(Q), HC.OP-AR.ZZ-0008(Q) Attachment E-4, and HC.ER-AP.BB-0001(Z) Rev. 0 were provided by PSEG in a letter dated January 4, 2005]; continuing this program until an inspection of the "B" reactor recirculation pump's rotating assembly and replacement of the pump shaft have been completed; notifying the NRC prior to implementing any change to this vibration monitoring and operating procedures cited above, to provide sufficient time for the NRC to complete a review of the proposed changes; and replacing the "B" reactor recirculation pump shaft and inspecting the pump's rotating assembly and pressure boundary components (such as the pump casing, etc.) at the earlier of the next refueling outage (RFO13) or during an outage of sufficient duration to accomplish pump replacement.

Pursuant to Section 182 of the Atomic Energy Act, 42 U.S.C. 2232, you are required to:

- 1) Notify me immediately if your understanding differs from that set forth above;
- 2) Notify me if for any reason you cannot complete the actions within the specified schedule and advise me in writing of your modified schedule in advance of any change; and
- 3) Notify me in writing when you have completed all of the actions addressed in this Confirmatory Action Letter.

Issuance of this Confirmatory Action Letter does not preclude issuance of an order formalizing the above commitments or requiring other actions on the part of the licensee; nor does it preclude the NRC from taking enforcement action for violations of NRC requirements that may have prompted the issuance of this letter. In addition, failure to take the actions addressed in this Confirmatory Action Letter may result in enforcement action.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, your submittals referenced herein (including your January 9, 2005, letter), and your response, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial

Mr. A. C. Bakken

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information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

Sincerely,

/RA/

Samuel J. Collins
Regional Administrator

Docket No. 50-354
License No. NPF-57

cc w/encl:

M. Brothers, Vice President - Site Operations
J. T. Carlin, Vice President - Nuclear Assessment
M. Gallagher, Vice President - Engineering and Technical Support
W. F. Sperry, Director - Business Support
C. Perino, Director - Nuclear Safety and Licensing
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H. Otto, Ph.D., DNREC Division of Water Resources, State of Delaware
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