N. Kymn Harvin, Ph.D.
[redacted]

November 12, 2004

RI-2003-A-0110

7C

Subject: Concerns You Raised to the NRC Regarding Continuing Problems with the Safety Conscious Work Environment (SCWE) at the Salem and Hope Creek Stations

Dear Dr. Harvin:

After the low pressure steam line rupture event at Hope Creek on October 10, 2004, you contacted NRC Region I personnel (Mr. A. R. Blough on October 12, 13, and 14, 2004 via e-mail and E. Cobey on October 14 and 19, 2004, via e-mail and on October 19, 2004, via facsimile) with comments/concerns about the actions by Hope Creek management and staff in response to the event. In general, from information you have received, you feel that PSEG has not improved its SCWE. You indicated that workers have told you they no longer feel that the plant is being operated safely. Comments have been made that, while the approach to managing the facility has changed for the better for some managers, many managers are continuing "business as usual."

With regard to the Hope Creek event itself, you noted that you have been informed that management is "minimizing the seriousness" of the event, and trying to restart the plant quickly. You asked that the NRC interview all "relevant personnel" in a private setting. You also referred the NRC to a Notification written by th[redacted] in the aftermath of the Hope Creek event, which questions PSEG management's response to the event and the knowledge level of the control room operators who responded to the event, indicates that problems reflective of continuing reorganization at the site and ineffective change management persist, and asserts that an unsafe working environment still exists. You also indicated that you were informed that a Notification written weeks earlier which may have provided some insight about the Hope Creek event prior to its occurrence was ignored by management.

With regard to the NRC follow up of the Hope Creek event, as you are aware, an NRC Special Inspection Team (SIT) was established and dispatched to the site. The SIT is focusing on evaluating PSEG's analysis of the cause(s) for the pipe failure, evaluating the equipment and human performance issues that complicated the response to the steam leak and assessing the adequacy of PSEG's root cause evaluation and associated corrective actions. The SIT review includes an assessment of Notifications related to the event, including those you have mentioned, and PSEG's plans for corrective action. The SIT review also includes interviews with pertinent personnel.

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Information in this record was deleted
in accordance with the Freedom of Information
Act, exemptions _____
FOIA- _____

T-200

You are also aware that PSEG does not plan to return Hope Creek to service until after the refueling outage that was originally scheduled to commence at the end of October 2004. PSEG has committed to determine the cause of the pipe rupture, to evaluate the extent-of-condition, to make repairs, to assess operator and equipment performance, and to take any identified corrective actions prior to plant restart. The NRC was notified on October 17, 2004 of PSEG's decision to wait until after the refueling outage to restart the plant.

You also asked Mr. Blough to compare the event at Hope Creek with a similar event that occurred two months ago in Japan. Both events involved steam leaks in the turbine building of the plant. However, while the Japanese event caused several deaths and serious injuries, no one was injured as a result of the Hope Creek event. The Mihama plant in Japan is a pressurized water reactor, similar in design to the Salem plants, although somewhat smaller in size. Hope Creek is a large boiling water reactor. The Mihama pipe rupture occurred on a very large line (approximately 2 feet in diameter) that held rapidly flowing, 380 degree F water, under considerable pressure (> 200 psig). When the Mihama pipe ruptured, a very large amount of water flashed to steam and affected a wide area of the turbine building. The rupture at Hope Creek occurred on a considerably smaller line (8 inches in diameter) that contained predominantly steam at very low pressure. Also, the area where the Hope Creek rupture occurred was unoccupied and is an area that is not typically accessed during plant operation. It is too soon to tell whether the pipe ruptures were caused by the same problem. Such comparisons cannot be made until the Hope Creek event has been thoroughly evaluated.

Regarding your comments about continuing problems with the SCWE at Salem and Hope Creek, in our previous letter to you dated July 30, 2004, we informed you of NRC's conclusions regarding our assessment of the SCWE at Salem and Hope Creek. At the June 16, 2004, public meeting with PSEG, which you attended, as well as in a letter to the NRC dated June 25, 2004, PSEG described its plans for improving the SCWE at the site. While PSEG's action plans appeared to be sufficient to address the key findings of the various SCWE assessments (NRC, Synergy, USA, IAT), we acknowledged that much work needed to be done to implement the action plan in a manner that will affect sustainable improvements to the SCWE at Salem and Hope Creek. We informed you that it was our expectation that PSEG closely monitor the implementation of the action plans, frequently evaluate progress toward achieving intended actions, and adjust its plans and efforts accordingly.

We acknowledge that the aftermath of the Hope Creek event provides PSEG with an opportunity to demonstrate whether progress has been made in the SCWE area. The NRC is closely watching their corrective actions. Salem and Hope Creek are in a period of transition. As you understand, problems in the SCWE area are not often resolved quickly, and progress can be difficult to discern, particularly in the initial stages of recovery. From the NRC's previous experience with other facilities with similar problems, in the early recovery period, it is not uncommon for there to be continuing issues in the SCWE area, and some continued skepticism from staff about progress. We acknowledge your comments and will consider them as we monitor PSEG's performance and their efforts to improve the SCWE at Salem and Hope Creek.

You informed the NRC that some employees may feel harassed and intimidated as a result of PSEG management's actions in response to the Hope Creek event. Since it is our preference that an assertion of discrimination for raising safety issues be provided to the NRC directly by

the affected individual (i.e., not second hand), we ask that you inform these individuals that they may contact the NRC Allegation staff at the toll free telephone number noted below, if it is their preference to submit a discrimination concern.

Additionally, you asked Mr. Cobey several questions about previous activities related to the Hope Creek high pressure coolant injection (HPCI) system, and whether the recent Hope Creek event may have been caused by ineffective corrective actions. Specifically, you asked:

- Was thorough post-maintenance testing done on HPCI after the orifice change, and the setpoint data change in the procedure?
- Was a 10 CFR 50.59 evaluation completed?
- If all this (work) was done while the plant was in the Technical Specification Limiting Condition for Operation action statement which was exited on July 29, 2004, why would HPCI not operate as designed (during the Hope Creek event)?
- If all this (work) was not done, has HPCI been operational since July 29, 2004?

In response to your questions, we note that PSEG modified the HPCI injection line to achieve the required design flow at design pressure. The design change process which implemented this modification included a 10 CFR 50.59 screening and evaluation. After the modification was completed, PSEG performed testing and engineering analysis to demonstrate HPCI operability. The NRC Safety System Design Inspection (SSDI), that was onsite at that time, reviewed the actions completed by PSEG and found them to be acceptable.

Thank you for providing this additional information to the NRC. Our review of your concerns regarding potential discriminatory action against you for raising safety issues, and possible wrongdoing by PSEG management continue.

If I can be of further assistance at this time, please call me via the NRC Safety Hotline at 1-800-695-7403.

Sincerely,

[Original Signed by]

David J. Vito
Senior Allegation Coordinator