



# Union of Concerned Scientists

Citizens and Scientists for Environmental Solutions

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November 29, 2004

Mr. A. Randolph Blough, Director – Division of Reactor Projects  
United States Nuclear Regulatory Commission Region I  
475 Allendale Road  
King of Prussia, PA 19406-1415

**SUBJECT: SAFETY CULTURE PROBLEMS AT THE SALEM AND HOPE CREEK  
GENERATING STATIONS**

Dear Mr. Blough:

On December 2, 2004, staff of the Nuclear Regulatory Commission (NRC) and representatives of PSEG Nuclear (PSEG) will conduct a public meeting to discuss progress made towards correcting serious safety culture problems at the Salem and Hope Creek nuclear power plants. On one hand, it is encouraging that this meeting will transpire since it amounts to an implicit admission by the NRC and PSEG that the “dark ages” of neglect and oppression existed. On the other hand, it is discouraging that so many unsafe byproducts – “sins of the past” – remain from those days. While the NRC and PSEG have plenty to discuss during this overdue meeting, the Union of Concerned Scientists (UCS) feels there are two important issues to address.

First, the NRC must cease its injustice to workers and former workers at the Salem and Hope Creek nuclear plants who risked much to make safety allegations to the agency. For example, Dr. Kymn Harvin came to the NRC in September 2003 with documented allegations, backed by audio taped conversations with senior PSEG officials. The NRC should be ashamed of its foot dragging in this matter. The NRC’s own procedures specify a 180-day timeline for investigating allegations and a 10-month timeline for completing Office of Investigations inquiries, yet the NRC didn’t even come close to meeting either of these timelines in Dr. Harvin’s case. It is extremely telling, and quite damning, that the NRC has NEVER, repeat NEVER, missed a timeline for nuclear plant license renewal. Clearly, the agency’s priorities are improperly focused away from safety.

The NRC’s inability to investigate well documented allegations of retaliation and discrimination in a reasonably timely manner is an unacceptable disservice to Dr. Harvin and others like her. Their lives are thoroughly and irreparably altered and the NRC’s glacial pace unnecessarily prolongs their agony. If Dr. Harvin and other PSEG workers had not been brave enough, courageous enough, and concerned enough about employee and public safety to risk much by coming to the NRC, it is likely that conditions at Salem and Hope Creek would be as pitiful today as they were in March 2003 when PSEG terminated Dr. Harvin.

The cliché “*Justice Delayed is Justice Denied*” applies and has the chilling effect of dissuading other workers from contacting the NRC with their own safety concerns. Who can blame them for remaining silent when the NRC denies them the justice they deserve under federal regulations? The NRC must do a much better job of serving this vitally important constituency. If those with first-hand knowledge of safety problems do not come forward, we all face a higher, and totally unnecessary, risk of a nuclear accident. These individuals deserve the NRC’s best effort, not the untimely, shoddy treatment they’ve endured from the NRC thus far.

The second issue affects the NRC and PSEG. It involves the response to the October 10<sup>th</sup> pipe rupture event at Hope Creek. While the specifics of what happened and why will be the focus of the public meeting tentatively scheduled for December 14<sup>th</sup>, the safety culture implications of that event are relevant to the subject of the December 2<sup>nd</sup> meeting.

The Hope Creek reactor shut down on Sunday, October 10<sup>th</sup> after an 8-inch diameter pipe broke in the turbine building. PSEG had planned to enter a refueling outage on October 29<sup>th</sup>. PSEG initially attributed the pipe failure to an improperly installed pipe hanger. PSEG managers directed workers to undertake steps to restart Hope Creek as soon as possible so as to consume ten more days of fuel from the reactor core before the refueling outage.

On Saturday, October 16<sup>th</sup>, PSEG was nearing the end of the repairs to the broken pipe and tentatively planned to restart Hope Creek by Tuesday, October 19<sup>th</sup>. PSEG senior manager Michael Brothers visited the Hope Creek control room that Saturday. He encountered something close to mutiny. The control room operators and their Operations Department management forcefully conveyed to Mr. Brothers their strong and unified convictions that Hope Creek could not be readied for restart in a few days because the unit would not be safe to operate in its current condition with so many safety systems not functioning properly. Mr. Brothers left the control room following the confrontation and relayed the information to PSEG Nuclear's President A. Christopher Bakken. Within an hour, Mr. Bakken announced that restart plans had been cancelled and Hope Creek would transition directly into its refueling outage.

Exactly one month to the day after PSEG's abandoned restart date for Hope Creek, Mr. Bakken announced that the root cause of the pipe break was not an improperly installed pipe hanger (as originally asserted) but a malfunctioning valve that created excessive stresses in the piping. The malfunctioning valve had been reported weeks before the pipe rupture by a dedicated control room operator but summarily dismissed by PSEG's engineering organization. Consequently, Hope Creek continued to operate in a degraded conditions until the pipe wore out and broke.

The safety culture questions raised by PSEG's response to the October 10<sup>th</sup> event:

1. Is (was) the NRC aware of the courageous stand taken by the Hope Creek operators in the control room on October 16<sup>th</sup> and its role in PSEG's decision to decide against restart? If not, does NRC have a clear picture of the true safety culture condition at this site?
2. Why was there such a large perception gap between PSEG senior managers and Hope Creek operators that allowed the former to believe restart was feasible and the latter to adamantly oppose it?
3. Why did it take nearly a week and a show down between Hope Creek Operations and PSEG senior managers to narrow the perception gap?
4. Would PSEG have restarted Hope Creek without first identifying the true root cause of the pipe break? If not, what formal administrative process would have prevented restart?
5. Have the Hope Creek operators been publicly praised for their courageous "Safety First" stand and this event used as a learning tool for managers who need senior leadership's encouragement to listen to workers more fully?

We look forward to the December 2<sup>nd</sup> meeting and the NRC/PSEG discussion of these important issues.

Sincerely,

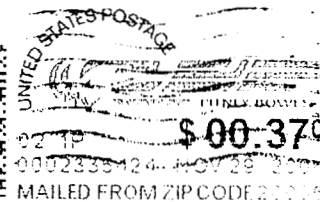
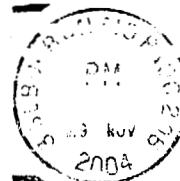
A handwritten signature in cursive script, appearing to read "David A. Lochbaum".

David Lochbaum  
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