



Union of Concerned Scientists

Citizens and Scientists for Environmental Solutions

January 11, 2008

Elmo Collins, Regional Administrator
U.S. Nuclear Regulatory Commission Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-4005

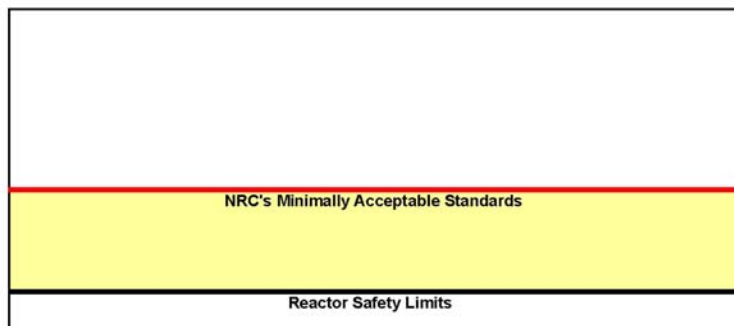
SUBJECT: PALO VERDE PERFORMANCE IMPROVEMENT PLANS

Dear Mr. Collins:

I was unable to attend the December 19, 2007, public meeting the NRC conducted with the licensee for the Palo Verde nuclear plant regarding the NRC's recently completed 95003 inspection. I read the materials in the December 28th summary of the meeting provided by the NRC (ADAMS ML073650094). While reviewing the slides from the NRC's presentation at the December 19th meeting, I often had to flip back to the first slide to re-verify that the NRC was talking about Palo Verde in 2007. The NRC's findings about "Multiple human performance and correction action program problems" (slide 11) and "cost controls had been viewed as more important than safety" (slide 31) were eerily reminiscent of the NRC's findings for Salem/Hope Creek in 2004, Davis-Besse in 2002, DC Cook in 1998, Millstone in 1996, and so on. Like a bad penny, the nuclear industry seems unable to rid itself of these problems, resorting merely to swapping them from facility to facility.

Ineffective corrective action programs and improper focus on production instead of safety contributed to the performance decline at Palo Verde as they have too many times in the past elsewhere. The NRC deserves credit for having detected this adverse trend and forcing the licensee to undertake measures intended to restore conditions at Palo Verde. During the July 24, 2007, Commission briefing, Commissioner Jackzo acknowledged the positive oversight role played by the NRC at Palo Verde, but tempered that praise by observing that maybe the pace of the reform efforts could have been accelerated once the declining performance trend was detected.

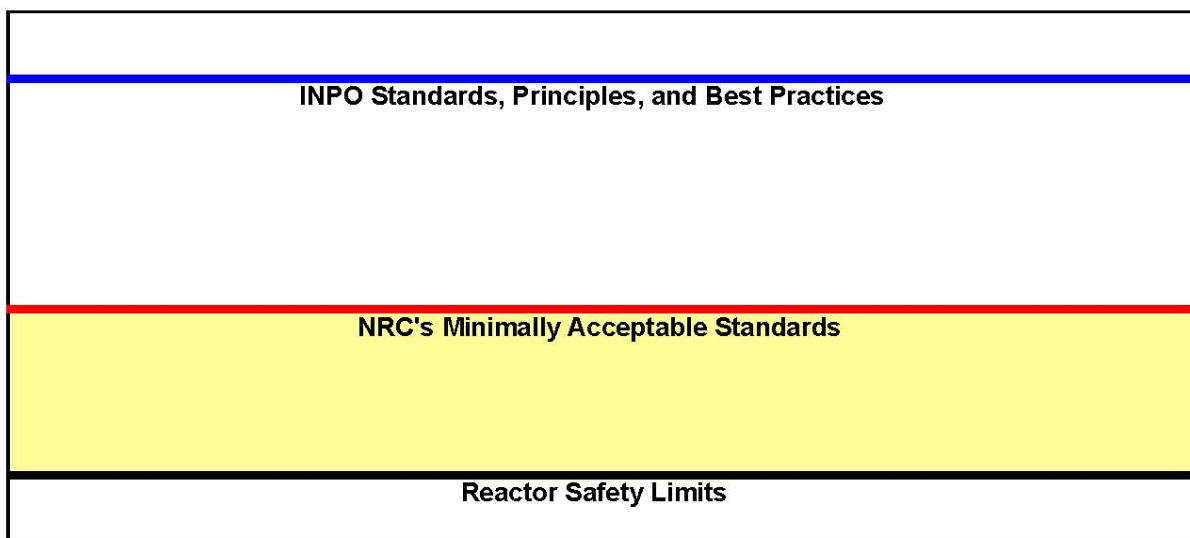
Commissioner Jackzo's observation was in mind as I reviewed the meeting summary. The context the NRC provided (slides 10 to 14) suggest that the Commissioner has a valid point. There might have been opportunities between 2003 and March 2007 for the NRC to spur the licensee to faster reform efforts. As



the NRC presented during the December 19th public meeting ("...there has been a degradation in safety margin..." on slide 38), the declining performance trend eroded some of the safety margin, shown by the yellow band in the graphic, reserved for public health protection. It is that eroded safety margin now being restored. Commissioner Jaczko rightly questioned whether the agency could have acted differently to lessen the duration and depth of that erosion.

But the larger factor was the initial and sustained reluctance by the licensee to accept the problems being identified by the NRC. This state of denial forced the NRC to first prove to the licensee that the agency's findings represented genuine problems and then to prove that the string of problems represented a genuine adverse trend. It took time for the NRC to do the homework and convincing, time that delayed the initiation and pace of the reforms efforts.

It really should not have taken the NRC to flag problems and focus the licensee's attention on their declining performance trend. That awareness should have happened long before safety margins were compromised. The Institute for Nuclear Power Operations (INPO), created by the nuclear industry in the wake of the 1979 accident at Three Mile Island, routinely audits the performance at Palo Verde and other nuclear plants. INPO does not audit against the NRC's regulations – INPO established higher standards, principles, and best practices aimed at achieving excellence in operation. And INPO does not provide this service as a courtesy – Palo Verde pays INPO hundreds of thousands of dollars each year.



For Palo Verde to drop below NRC's minimally acceptable standards and eroded safety margin, performance had to drop even farther away from INPO's higher standards. Thus, there was a departure from excellence for INPO's auditors to find long before there was a drop below minimally acceptable standards for NRC's inspectors to find. Had INPO auditors detected the drop, remedial actions could have been taken to prevent compromised safety margin. For safety margins to have been eroded at Palo Verde, either INPO's auditors failed to detect problems and sound a warning or the licensee failed to listen to INPO's warning. The fact that Palo Verde is not an isolated case but merely the latest in an appallingly long series of troubled performers suggests very strongly that INPO's auditors are failing to detect problems. Palo Verde's owners either paid hundreds of thousands of dollars each year for inadequate INPO audits or from accurate INPO audits they ignored.

The slides presented by the Palo Verde licensee cover a wide range of efforts intended to correct the consequences from past bad processes. In essence, their efforts seek to return Palo Verde to restore the eroded safety margin and return performance to or above the NRC's minimally acceptable standards line.

But what about resolving whatever flaw exists in INPO audit mechanism that repeatedly allows departures from INPO's standards to go undetected and/or uncorrected until safety margins are compromised and NRC must act? Absent those overdue reforms, there's no reason to believe that backsliding at Palo Verde, or any one of the nation's 101 other nuclear power reactors, will be checked in time to prevent safety margin erosion.

The NRC should expand the scope of its efforts at Palo Verde to address INPO's failings. Because Palo Verde and the other licensees each pay INPO hundreds of thousands of dollars each year, INPO is a sub-contractor to each licensee. The useless or unused INPO audits at Palo Verde, Salem/Hope Creek, Davis-Besse, DC Cook, Millstone, et al suggest that INPO is providing inadequate service to multiple NRC licensees. As a consequence, the safety margin defined by the NRC's minimally acceptable standards has been compromised. It's happened too many times in the past and will continue to occur in the future unless the NRC acts now.

NRC would be justified in requiring INPO's problems to be addressed now. In addition to its audits, INPO manages an accreditation program for licensees. When a licensee's training program has been accredited by INPO, the NRC's role in reactor operator licensing is reduced. This seems material to the current performance issues at Palo Verde. For example, slide 28 from the NRC's presentation on December 19th stated "The control room operators did not always demonstrate high standards associated with nuclear plant operations." INPO has a key role in the training program for control room operators at Palo Verde, and thus appears implicated in this finding. The reforms underway at Palo Verde must not omit INPO from their scope.

Sincerely,

A handwritten signature in dark ink, reading "David A. Lochbaum". The signature is written in a cursive, flowing style.

David Lochbaum
Director, Nuclear Safety Project