



Union of Concerned Scientists

Citizens and Scientists for Environmental Solutions

March 14, 2005

Stuart Richards, Chief
Inspection Program Branch
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: REACTOR OVERSIGHT PROCESS CROSS-CUTTING ISSUES

Dear Mr. Richards:

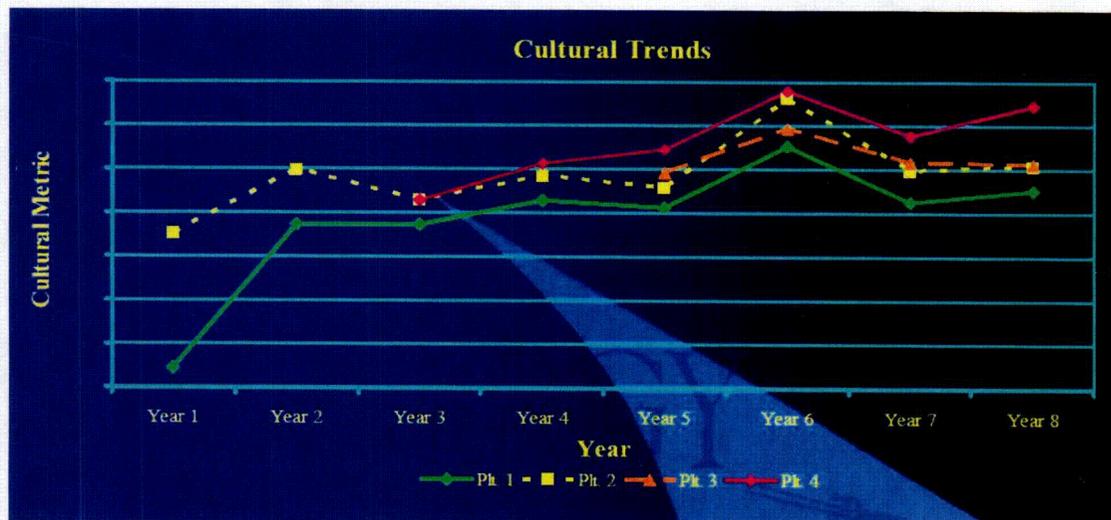
I attended the subject session you chaired on March 9, 2005, during the NRC's Regulatory Information Conference and was disappointed by the positions expressed by the industry representatives on the panel. They criticized the NRC for over-reacting to the Davis-Besse event and "punishing" (my characterization of their positions) the rest of the industry with a proliferation of cross-cutting issues. Even if the NRC over-reacted, the more appropriate focus for the industry would be to better police itself and avoid utter performance breakdowns like Davis-Besse that compel NRC to react. The industry (i.e., the Institute for Nuclear Power Operations) undeniably under-reacted to the numerous warnings signs that Davis-Besse emitted over the years. To paraphrase the Third Law, for every under-reaction there is an equal and opposite over-reaction.

The grounds cited by the industry panelists as "proof" of this alleged NRC over-reaction are neither compelling nor persuasive. Both industry panelists insisted that the rising number of cross-cutting issues released by NRC in 2003 and 2004 are unwarranted because there's no corresponding upward trend in either the number of greater-than-green performance indicators or the number of inspection findings. This logic is flawed for many reasons including:

1. There's no expectation that cross-cutting issues would move lockstep with performance indicators and/or inspection findings. If that were, in fact, the case then there would be unnecessary duplicity within the reactor oversight process and something could be eliminated. The reactor oversight process was intentionally constructed to avoid duplication so as to minimize undue regulatory burden on the licensees and maximize effectiveness and efficiency of the NRC. That the cross-cutting issues are increasing without a concurrent rise in greater-than-green performance indicators and/or inspection findings could reflect the reactor oversight process functioning as designed, rather than reflect some perceived NRC over-reaction.
2. It's only been three years, but apparently the industry panelists have forgotten that Davis-Besse had no – repeat, no – greater-than-green performance indicators and inspection findings in March 2002 when the worst condition since the Three Mile Island accident was finally discovered. It could not be clearer that lack of greater-than-greens fails to equate with adequate assurance of lack of cross-cutting performance issues. Davis-Besse had the mother of all cross-cutting performance issues despite its lack of greater-than-green findings. As point of fact, many of the

greater-than-green findings issued by the NRC to Davis-Besse in 2003 were for conditions that resided undetected at the facility in 2001. Thus, both the performance indicators and the inspection findings failed and failed dismally to flag even one of these many problems until after the cross-cutting issue forced a closer look.

3. Mr. Howard Levin, a Principal with Synergy Consulting Service, made a presentation earlier in the day during the session on Objective Measures of Safety Culture. In her introduction of Mr. Levin, Ms. Lisamarie Jarriel of the NRC staff indicated that Synergy had performed some 150 surveys of safety culture at U.S. nuclear power plants over the years. During his presentation, Mr. Levin displayed the actual results from surveys conducted at four unnamed U.S. nuclear power plants over an eight year period (see his chart below). The results showed peaks and valleys as the measured safety culture metric improved and declined. Mr. Levin explained during the Q&A portion of the session that Synergy's work has identified a correlation between slope changes in the safety culture trend (i.e., turnarounds from declining to improving safety culture and vice-versa) and station performance. Mr. Levin stated that the slope changes preceded the corresponding performance change by about 18 months. This experience strongly suggests that the cross-cutting issues are leading indicators of coming performance problems rather than reinforcing indicators of existing problems. If so, then the cross-cutting issues are extremely more valuable than the performance indicators.



4. Mr. Dale Ambler, an industry representative on your panel, stated that his company took the cross-cutting issues identified by the NRC extremely seriously and allocated considerable resources to addressing them. This point coupled with the preceding point about Synergy's experience raises the very real possibility that the cross-cutting issues identified by the NRC raised valid warning flags equivalent to Synergy's identification of changes from improving to declining trends and that the serious response by Mr. Ambler's company to those warnings prevented the performance downturn 18 months later. If so, Mr. Ambler should be commending the NRC for raising issues early enough to forestall pending performance declines rather than impugn the NRC for needless intervention.

It was evident from the session that the application of cross-cutting issues within the reactor oversight process is not clearly understood. UCS conceded that point in our letter dated February 2, 2004, to the Commission. In that letter, we commended NRC Region I for identifying safety culture as a potential cross-cutting issue at the Salem and Hope Creek nuclear plants. UCS also conceded that the reactor oversight process did not provide sufficient guidance in this area. Randy Blough and Jim Anderson of the NRC outlined steps taken since last February to upgrade the guidance and promote regulatory consistency. If the NRC opts for public meetings to further probe this area for additional guidance

updates, UCS would like to participate. This is an extremely important element of the reactor oversight process and UCS re-recommends the NRC for being on the right road to the right destination.

Sincerely,

A handwritten signature in black ink that reads "David O. Lochbaum". The signature is written in a cursive, flowing style.

David Lochbaum
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Distribution (via e-mail):

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