



## Union of Concerned Scientists

Citizens and Scientists for Environmental Solutions

October 27, 2005

Michael R. Johnson, Director  
Office of Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**SUBJECT: FOLLOW-UP: SAFETY CULTURE WITHIN THE REACTOR  
OVERSIGHT PROCESS**

Dear Mr. Johnson:

I am writing to you in your capacity as Chairman of the Safety Culture Steering Committee following the October 26<sup>th</sup> public meeting on the subject. I share the perspective articulated several times by the NRC staff during the public meeting that status quo on safety culture is not an option. Nevertheless, I prefer the status quo to a backstep and am genuinely concerned that the "findings approach" proposed by the NRC staff will be a huge backstep.

I worked for more than 17 years in the nuclear power industry before coming to UCS nine years ago. I worked for many years as a shift technical advisor and/or reactor engineer at operating nuclear plants. My time in the control rooms taught me many lessons, including that the two most useless items in the world are an instrument that always reads downscale and an instrument that always reads upscale. Neither provides any useful information.

Up until now, the NRC's regulatory gauge for safety culture always read downscale. That gauge never identified a safety culture problem at any nuclear power plant. Such identification was made via means other than the downscale gauge. The 'findings approach' will simply re-calibrate this gauge from always reading downscale to always reading upscale. If all it entailed was a different form of uselessness, at least this exercise would maintain the status quo. But the upscale safety culture gauge will consume massive amounts of NRC and industry resources for no safety gain. Hence, it will be a huge backstep from the status quo.

The reason that the 'findings approach' cannot produce anything other than an upscale safety gauge is quite simple. The NRC staff proposes to screen green and greater than green inspection findings for potential safety culture implications. As conveyed in the October 26<sup>th</sup> public meeting, that screening would entail the inspectors perusing a list of safety culture factors and checking off any that may have played a contributing role in causing the inspection finding. Column 3 in the NRC's Safety Culture Attributes Table dated October 24, 2005, was frequently cited by NRC staff as such a screening tool.

I wholeheartedly agree with the comment made by Mr. Brian McCabe during the October 26<sup>th</sup> meeting that this tactic will result in virtually every green and green plus finding being tagged as having potential safety culture implications. Column 3 of the NRC's Safety Culture Attributes Table contains items such as "Problems are identified completely, accurately..." (page 8), "Training assures technical competency"

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(page 9), "Operator training is effective" (page 9), "Work is planned and coordinated to prevent unintended interactions between jobs/activities" (page 11), "procedures are available...[and] accurate" page (14), and "procedures are followed" (page 14) that span the entire spectrum from design to operations to maintenance and all points in between. It will be a rare inspection finding that fails to touch one or more of the Column 3 items.

But don't take my word, or Mr. McCabe's word, for it. Mr. Gene Cobey stated during the October 26<sup>th</sup> meeting that about 700 green and green-plus inspection findings were generated across the entire fleet of operating reactors last year. Review those inspection findings against the items in Column 3 of the Safety Culture Attributes Table and see how many have potential safety culture implications. Or save the FTE and guess 660 to be within 4 or 5 of the final answer.

If we are right, the NRC's 'findings approach' will label virtually every inspection finding as having potential safety culture implications. And the reactor oversight process will change from never finding a safety culture problem to finding nothing but safety culture problems. Don't allow that mistake to happen.

As I mentioned to you during the October 26<sup>th</sup> meeting, it reminded me of the November 6, 1997, public meeting the NRC staff conducted with industry and public interest group stakeholders about its proposed Integrated Reactor Assessment Program (IRAP). The NRC staff did not have time to address the many concerns communicated by industry representatives and me before presenting IRAP to the Commission on April 2, 1998. As you know, IRAP went down in flames and the Commission directed the staff to start over from square one. The current state of the NRC staff's plans for addressing safety culture within the ROP are eerily similar to the plans on November 6, 1997. Both feature concepts developed unilaterally by the NRC staff with essentially no external stakeholder input. Both feature arbitrarily imposed schedule deadlines that tie the NRC staff's hands from incorporating input received from external stakeholders at the 11<sup>th</sup> hour. This recipe made IRAP an unviable option. This same recipe will almost certainly render the NRC staff's 'findings approach' equally unviable. At least with the IRAP debacle there was a chance to start over and do it right. I only hope there's a second chance at addressing safety culture within the ROP.

Sincerely,

A handwritten signature in dark ink, appearing to read "David Lochbaum". The signature is fluid and cursive, with a long horizontal line extending from the end of the name.

David Lochbaum