Statement

By

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Member
Defense Nuclear Facilities Safety Board

Presented

at the

Department of Energy's 15th Annual Facility Representative Workshop

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Good morning.

Thank you for the opportunity to address this, the 15th Annual Facility Representative Workshop. Before I begin my prepared remarks, I'd like to thank Bill Ostendorff for his keynote address, and Mike Weis for his remarks this morning. Bill's comments demonstrate that DOE senior leadership understands, appreciates, and supports the importance of the work performed by Facility Representatives. It's nice to know that NNSA's Central Technical Authority not only understands qualification, training, and technical competence, but also has a keen appreciation of its importance to the Department's success.

I also very much appreciated Mike Weis' presentation, and understand why he has been invited back each year for 15 years. If you did not identify with his observation regarding the use of authority versus influence, I recommend that you reflect upon that distinction. Successful Facility Representatives understand that maintaining a positive working relationship with contractor personnel is important, and as Mike pointed out -- in most circumstances -- that relationship is strengthened by first exerting "influence" in a given situation before resorting to the exercise of positional authority. I hope that Mike's presentation can be made available to the workshop's participants.

Bill and Mike, thank you for those presentations.

In addition to the Facility Representatives and Safety System Oversight (SSO) personnel that are here, I want to acknowledge the members of the Federal Technical Capability Panel, and the DOE and NNSA senior managers that are participating in this workshop. All of you have an important role in maintaining safe operations at facilities across the Department of Energy complex. Although my work at the Board is focused on safety at defense nuclear facilities, it is gratifying to acknowledge participation in this week's workshop by the Office of Science and the Office of Nuclear Energy. In fact, considering the broad cross-section of DOE participation, it may be appropriate to view this as not simply the Facility Representative's workshop, but as the "DOE Safety Oversight Workshop."

Before I proceed further, I would ask you to join me in sending our best wishes to Mark Whitaker for a speedy recovery. I also want to extend my compliments to Mark Whitaker, James Heffner, and their team for coordinating this workshop and continuing to provide this great forum to share your experiences from the field. I am also aware that the 2008 Facility Representative of the Year will be announced later this morning. I have read the accomplishments of the 13 candidates vying for this coveted award and I am truly impressed. There may only be one award, but they are all winners.

I have now been a member of the Defense Nuclear Facilities Safety Board for nearly two years. In that time, I have visited the defense nuclear sites within the Department of Energy and National Nuclear Security Administration complex and have observed the impact that Facility

Representatives have made in promoting safe operations. I have a deep personal appreciation for the type of environment in which you work. During my 33 year-career in the U.S. Navy, I served on ten ships, ranging from nuclear submarines to an aircraft carrier. These ships had work done at 12 naval and civilian shipyards in the United States and four facilities overseas. Some of this work required just a few weeks. Other cases, like the commissioning and outfitting of two submarines and one surface ship, required as much as a year in the hazardous industrial shipyard environment. This experience has ingrained in me a deep appreciation for the challenges these industrial environments pose. Therefore, I have the greatest respect for your work and the challenges of balancing safety against operational requirements in this highly-technical and demanding industrial environment. Your work requires a combination of intellect, qualification, self-confidence, and inquisitiveness.

The theme for this workshop is Safety Leadership. Nuclear safety is a weighty public responsibility requiring proper, deliberate, and timely technical decisions. In addition to the technical challenges of your job, there is another aspect with which I can identify: the need to persevere in the face of adversity while maintaining a high level of integrity. There are times in everyone's career when the easy thing to do is to ignore a problem or look the other way. Because the consequences are so great and often not adequately understood, you rarely have that luxury. Safety in the DOE industrial context requires a high level of moral fortitude to question the process and reject the "we've always done it that way" attitude, especially when the immediate consequences of your actions may be unpleasant. It is critical that you be able to make those tough but correct decisions. The safety of the public, your facility, and possibly the very people with whom you may be at odds depends upon it.

In years past, my colleagues who have spoken at this event have stressed the necessity of a technically rigorous qualification path to maintain a strong Facility Representative program. Permit me to reiterate four of the features that contribute to the development of this technical rigor:

- A strong mentoring program, where senior Facility Representatives share techniques for observing work activities, conducting reviews, effectively interacting with contractor personnel, asking questions, researching issues, finding answers, and effectively documenting and communicating their issues;
- (2) A strong commitment to position qualification by both management and the trainee;
- (3) Detailed understanding of Documented Safety Analysis (DSA) controls, including the impact of configuration and operational changes;
- (4) A commitment to professional development that may include taking technical courses and/or pursuit of an advanced technical degree, or taking opportunities for cross-training

at other facilities, or seeking temporary assignments to obtain leadership or programmatic experience.

These are the characteristics of the 2008 Facility Representative of the year nominees. They are also the characteristics of an outstanding Facility Representative qualification program.

Proper qualification is not only essential to the day-to-day work of Facility Representatives and other safety oversight personnel, but is also a key driver toward recruiting, retaining, and developing their careers. Individuals are more likely to want to become Facility Representatives and safety oversight personnel if they sense that management has provided a clear path for professional development and personal advancement. A multifaceted qualification program that includes technical, management, and leadership aspects is critical to producing Facility Representatives and safety oversight personnel who are astute, effective, and motivated.

While Facility Representatives and safety oversight personnel have a responsibility to enthusiastically participate in qualification opportunities, management must provide an effective professional development program that encourages and incentivizes participation. Most importantly, senior management must adequately budget for this intellectual capital investment, just as they would for a project or design-and-construction program or weapons campaign. When budgets are tight, as they frequently seem to be, training programs are often viewed as expendable. This attitude and practice must change because of the significant potential for future negative consequences. Putting training and qualification at the bottom of resource priorities is short sighted, and – as most of you know – it is penny-wise and pound-foolish.

The Board doesn't attempt to prescribe specific training plans for safety oversight personnel in the defense nuclear complex. Both the Facility Representative Program Standard and the Qualification Standard provide a good roadmap for specific training needs. Beyond this, we are encouraged when we observe creative programs that produce technically competent and well-rounded individuals. The desired product is Facility Representatives who have the ability to perform at a high level in their current positions and have the potential to become senior leaders within DOE.

While I have largely focused on Facility Representatives, my points are applicable to all members of the safety oversight community. Related to this, I believe that more attention needs to be devoted to elevating the Safety System Oversight program to be on par with the more mature Facility Representative program. The Safety System Oversight program, as you know, was an outgrowth of the Board's Recommendation 2000-2, which was aimed at past problems with safety system functionality and configuration management. Safety System Oversight is the engineering and configuration management counterpart of Facility Representative operational oversight. The two groups should work together to provide the best information to DOE and NNSA management. They complement each other by maintaining awareness of the operability and effectiveness of safety hardware, safety management systems, and operations. They should

be the reservoir of highly trained, qualified, and experienced technical experts. Filling the Safety System Oversight positions with qualified personnel is essential, and management must assign the programmatic resources to meet these needs.

The Board closely monitors DOE reports on these safety oversight programs. The general health of these programs seems to be improving, and there are certainly some bright spots around the complex. The DOE goal is to – quote – exceed 80% fully qualified or on schedule for qualification – unquote. Over the last year there was an increase of ten percentage points in the Technical Qualification rate from 81% in 2007 to 91% in 2008. The improvement across the DOE complex is to be commended.

But is that really satisfactory? Some DOE sites remain below the 80% objective in one or more areas. And at least one site is below 80% in all areas. That site has zero fully qualified Safety System Oversight personnel, 55% fully qualified Facility Representatives and less than 40% fully qualified Senior Technical Safety Managers and Nuclear Safety Specialists. So do these statistics relate to safety performance? Is there a correlation between the sites that have not staffed, or qualified, their safety oversight personnel and the sites that we – the Board – find most troubling?

I have to tell you that the answer is yes. Sites where the safety oversight professionals are understaffed and under-qualified appear in a disproportionate share of the Board's correspondence. And when the qualification program atrophies beyond a certain point, it becomes extremely difficult to reinvigorate it.

But there are signs that DOE recognizes the problem. Let me quote from a February 2008 DOE report on Safety System Oversight Programs:

- Only one DOE site has dedicated full-time SSOs. At all other sites the SSO is a collateral duty that occupies as little as 10% of the available matrixed SSO's time.
- Only three of eleven sites report that they have enough SSO staff now.
- There are wide variations in the methods for implementing the SSO program, but to be effective, the SSO must be well integrated with other oversight functions.

I am encouraged that DOE has acknowledged the importance of the SSO program, and that the Federal Technical Capabilities Panel will be working with HSS, CNS, CDNS and DOE line management to correct the identified deficiencies.

I would like to conclude by advocating the development of a more unified safety oversight community. There are several organizations within the Department, such as the Facility Representative and Safety System Oversight programs, that are dedicated to the goal of the safe

operation of the defense nuclear complex. I believe that these programs could be even more effective by sharing more information and training to promote a synergy of effort. As I mentioned earlier, it may be beneficial to conduct "Safety Oversight Workshops" in the mold of the Facility Representative Workshop. And perhaps, in addition to the Facility Representative of the Year Award, a "Safety Oversight Worker of the Year" Award might be in order.

Because I must return to DC, I will not be able to remain for the remainder of the program. So permit me to recognize DNFSB staff that will remain throughout:

- Bob Lewis who many of you know, and has participated in many of these workshops in years past.
- Jay DeLoach Jay has been with the DNFSB for 18 years and has in many ways been the Godfather of the DNFSB's general interest in DOE safety oversight, and specifically the Facility Representative Program. This will be Jay's last FR workshop. He's accepted a full time position with the Navy. We wish Admiral DeLoach fair winds and following seas.

Thank you. I'd be happy to address your questions at this time.