

Statement

By

The Honorable Joseph F. Bader

Member

Defense Nuclear Facilities Safety Board

Presented

at the

**Department of Energy's
12th Annual Facility Representative Workshop**

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Good Morning and thank you for this opportunity to address the Twelfth Annual Facility Representative Workshop. I was fascinated to listen to Beth Sellers (DOE Idaho Operations Office Manager) talking about the Advanced Test Reactor in her keynote address. Helping to design this reactor was the first job I had coming out of school. There are a few things around after 42 years that are still functional.

Prior to my selection as a Board Member, I worked for many years in several DOE contractor organizations, in design and construction of nuclear facilities and radioactive waste management. I have always worked as a contractor so this is the first time I have worked directly for the federal government. Most recently, I worked for DOE, OECM as a contractor in the performance of External Independent Reviews. During that time, I met several Facility Representatives, and found them to be capable and dedicated personnel. I would like to make a comment about the recent retirement of the Board's Chairman, John Conway. He was, and still is, a strong supporter of the Facility Representative Program. One of the things John Conway was very intent on was to keep the focus on the Facility Representative Program because of its importance. The Board intends to continue that focus because of the value you bring to the Department of Energy.

The Board would also like to recognize the two well-deserved selections for 2005 Facility Representatives of the Year, Jeff Cravens from Y-12 Site Office, and Bob Knighten from Idaho Operations Office. Congratulations on this superb recognition! I also would like to compliment Mark Whitaker, John Evans, Roy Schepens, and the many others who help make this valuable forum possible, and establishing this program as a model of "technical competence" for others to follow. I would also like to recognize last year's Facility Representative of Year, Joanne Lorence, from the Los Alamos Site Office, who I understand will soon be coming to work for Mark Whitaker in Washington, DC.

About one year ago, the Board highlighted areas that warranted strengthening in the Facility Representative Program and the Site Offices, primarily at NNSA sites, but with some application to the rest of DOE. The first area was a better evaluation and definition of Facility Representative staffing levels at NNSA sites. Since the issuance of the Board's letter, DOE has developed a more rigorous staffing analysis methodology and applied it to the NNSA sites. The enhanced analysis identified a need for an additional 20 Facility Representatives among the NNSA sites. NNSA is now developing a strategy for how to fund and fill those positions. We are glad to see this response. However, the current analyses still underestimates the required numbers of Facility Representatives needed at Sandia, Livermore, and, to a lesser extent, Los Alamos, in our estimation.

The second area mentioned in the Board's letter was that specific training on the hazards and controls associated with weapons or research operations, or changes in the safety basis, was either not being accomplished or needed significant additional attention. This area was recently reviewed by John Evans and Emil Morrow for the NNSA sites; they report that this issue on continuing hazards training has been successfully tackled by each site and incorporated into each site's training processes.

For the rest of the DOE sites, it might be beneficial to examine your own standing in these areas. How do your sites stand up in the area of staffing? How do your sites stand up in the area of specific hazard training?

The Board sees the role of the Facility Representatives as similar to that of the Board's Site Representatives. This position requires careful balancing and prioritization of primary responsibilities to maintain the intent of this key position...being the "eyes and ears" for the Department. It has been observed, however, that some Facility Representatives are required by their management to spend too much time on collateral duties, at the expense of field observations, and that some facilities may not be getting the attention that's warranted. This ties back into the number of Facility Representatives assigned. In a sense, it is a recognition of the good job you do such that your managers think you are so valuable that they want to pull you off your primary job to work another project. Don't lose sight of the main focus of your job, that is, to be the "eyes and ears" of the Department in your facilities. It is good to do these other jobs, and it is recognition of your expertise and worth, but don't lose sight of the fact of what you are there for. It has to be a balance. This issue arises periodically and requires a concerted effort by you and your management to ensure the balance is maintained. The improved staffing analysis methodology may help to identify any workload imbalances, or point to the need to re-assign certain collateral duties to others, or to add another Facility Representative to the site.

A related item to consider in assessing the balance is your performance goal for each Facility Representative to spend 40% or more of his or her time in the field. We did something similar in the companies I worked in previously, and we called it "Management By Walking Around." If you are not walking around your facility or site, then you are in the "dark" as to what is really happening in the workplace. So 40% field time is a minimum. That said, is this performance level sufficient to capture the field time needed to review ALL of your assigned facilities within their required periodicity? If not, then how do you know, as an enterprise, that each facility is being operated or maintained in a safe manner?

I mentioned earlier that I have extensive experience in facility design and construction within the DOE Complex. That said, I have a few items of interest to discuss with all Facility Representatives.

First, each of you should know your facility as if you had been present during its design and construction. In some of our older facilities, this may be difficult since the as-built drawings are incomplete and many modifications have been made over time. However, you should strive to know as much about the design and construction as possible. Know the design basis accidents, the hazards, and the hazards analyses extremely well. Understand the bases for all controls in the facility and make it a point to review the Documented Safety Analysis and hazard documentation frequently so that you are well versed in the accidents and methods used to control them. These documents always seem to grow – sometimes to the point of becoming useless. Your job is to point this out when these important documents grow and become unmanageable, such that they need to be revised and edited. When you walk your facility be aware of changes and additions to processes and procedures – your awareness of conditions can be vital to maintaining a safe facility.

Second, for those of you who are lucky enough to be a Facility Representative at a facility that is being designed and/or constructed, or going through major modifications, you are being given a rare opportunity to really understand how the facility is being designed to operate. Since DOE has some unique facilities, it should be a fascinating experience. In most cases, they will be very expensive to build, making their success even more critical. DOE's future mission will be dependent on their successful design, construction, and operation. The last thing that any of us can afford is to have a new facility be a "cripple" in terms of operation. Only through a thorough understanding of operations can effective engineered safety controls be incorporated into the design. The cheapest, best way to design safety into a facility is to do it from the very beginning. When you try to jam safety in during construction, it becomes expensive and ineffective for the dollars spent. Your experience and input into a facility that is being newly designed, is a good way to make the safety design process effective. You won't be arriving 30 years after it is built and wondering how this facility was constructed. Take advantage of this opportunity to observe first hand how it is built to operate safely and accomplish its mission. You will also be given a rare opportunity to understand the complexity of modern building codes, and how to apply existing requirements into design and construction. I encourage you all to be a part of these projects that will help DOE achieve its mission over the coming decades. Facility designers, project directors, and safety system oversight personnel need to have your thorough understanding of operations to design facilities to operate safely. The best way to construct a facility which can be operated safely is to design safety into it from the beginning – to reemphasize this point.

For more than twelve years, the Facility Representative Program has built a technically qualified and competent cadre of personnel, who spend significant time in facilities overseeing contractor operations. As a whole, the Facility Representative community enjoys a well-deserved reputation for excellence. As you hire new personnel or take young engineers with little or no field experience directly from the intern pipeline, the community will need to devote a significant amount of time and effort to training them in the performance expectations, culture, and attitude required for success. They will need to be mentored by experienced Facility Representatives in the field, to learn how to identify safety issues, to resolve issues before they become real problems, and to apply the high standards necessary for safe nuclear operations. The training program for these new Facility Representatives is currently being prepared – it is already late – we will scrutinize the program plan with exquisite care. This whole area of training and competence of the Site Offices and Facility Representatives – we (the Board) want to be sure this program will produce personnel of the right quality and caliber, and people who can be quickly brought up to speed with mentoring by experienced Facility Representatives. Therefore, I challenge all senior Facility Representatives to be actively engaged in the training and mentoring of new Facility Representatives, to ensure this program remains strong and effective. One last thought, you are and should remain a credit to yourselves. You have a good institution. You have a need to expand the number of personnel on the sites. That is in progress, and it has to be done in a careful and controlled manner to maintain the quality of the Facility Representatives that I see before me today. Congratulations to all of you. This is a good program, and you are truly a credit to the Department of Energy.

Thank you.