

Good morning, my name is Jim McConnell, and I am the Deputy Technical Director for the Defense Nuclear Facilities Safety Board. I am pleased to provide some opening remarks on oversight on behalf of the Board's staff.

This is the first in a series of public meetings that will focus on how best to provide oversight of hazardous government activities. Consistent with the Board's enabling legislation, the purpose of this meeting is to assist the Board in evaluating approaches to oversight in use by or under consideration by DOE. In this context, oversight includes contractor self-assessment, DOE line-management assessment of its contractors and independent assessment. This is an important subject from a safety perspective because oversight is the activity that ensures that safety expectations are actually met. Through oversight, DOE and its contractors assure themselves, their workforces, and the public that hazardous defense nuclear facilities and activities are designed, constructed, operated, maintained, and decommissioned in a manner that will ensure safety. Initially, we will be hearing from several organizations that have valuable information and experience with various forms and models for oversight.

Before we start, it is useful to put oversight, particularly DOE oversight, in perspective. Oversight can be considered as part of a system by which an organization ensures that its mission objectives are being satisfied. I will describe that system in more detail shortly. I will also describe how, at DOE, the elements of this system change depending on mission objectives. As I will explain, DOE has many, potentially competing objectives because DOE sometimes acts as a customer, sometimes as an owner, and sometimes as an enforcement agency.

The basic system by which DOE or any similar government agency ensures that its contractors clearly understand and achieve the government's expectations comprises three elements. The first element is rules, directives, consensus standards, and best practices that communicate requirements and guidance. The second element is a contract that establishes specific details of cost, scope, schedule, performance, and methods of interaction between DOE and its contractors to accomplish specific work. The third element is oversight, which ensures that the expectations established in regulations and contracts are actually met. Through oversight, DOE checks to ensure that its expectations are understood and are being fulfilled. If they are not, action is taken—as prescribed in the regulations or the contract—to address the problem. In this manner, the three elements of the system—requirements, contracts, and oversight—work together to determine what DOE will receive from its contractors.

As a government agency, DOE has many mission objectives including national security, research and development, remediation of surplus facilities and sites, and protection of the public, workers, and the environment. For much of its work, DOE relies upon contractors to perform inherently-risky activities in government-owned facilities. Additionally, and importantly, DOE establishes and enforces its own nuclear safety requirements. This structure has many advantages, but it is not without its challenges. For example, DOE has three main, simultaneous roles: Customer, Owner, and Enforcer of Requirements. These roles sometimes have competing demands that must be reconciled to ensure that the Department's overall mission is achieved.

As a customer, it is expected that DOE will focus its attention on the deliverables called for in its contracts. In this role, DOE's expectations are intended to define as clearly as possible the goods, services, and results that the government seeks. In DOE's terminology, this is the "what" that is specified for delivery. DOE's oversight as a customer is focused on ensuring that high-

quality deliverables are provided as efficiently, effectively as possible. In this role, DOE delegates a significant amount of flexibility to its contractors to determine how to provide mission deliverables.

DOE also emphasizes its short-term objectives in its role as the owner. In this case, DOE is also responsible for thinking in the longer term about such issues as preserving its core capabilities, and maintaining or replacing its capital assets. Another key aspect of the owner role is that DOE maintains ultimate responsibility for the accidents that occur at its facilities as well as the long-term environmental consequences of its operations. Oversight, in this role, should focus not only on “what” is accomplished, but also “how” it is accomplished, because different approaches to satisfying short-term objectives can have varying impacts on long-term objectives and can pose greater or lesser risks to the public, workers, and the environment. DOE must be more self-reliant in this role, because the time-frame of activities in this area often exceeds the length of DOE’s typical contract. By this I mean that DOE must maintain a sufficient cadre of technically competent personnel to fulfil these responsibilities that cannot be delegated to its contractors.

In its enforcement role, DOE focuses on the work performed by its contractors and compares it to preestablished expectations for safety, security, financial management, and other areas of concern to the government. These preestablished expectations are generally set forth in Rules and Directives. DOE’s oversight in this role is aimed at ensuring that performance is consistent with requirements, and identifying areas where performance improvement is needed. Enforcement is primarily a government responsibility. It is important to note that the safety benefit of enforcement is bounded by the quality of the safety requirements that form the basis for the assessments and by the competence of the people who conduct the assessments.

The complex system I have just described is further complicated by the fact that DOE is currently implementing, or is at least planning, three simultaneous initiatives that affect the system. Specifically, DOE is changing its method of specifying requirements, changing the focus of its major contracts, and planning to change its oversight methods.

DOE is changing its directives system and its approach to promulgating requirements for its contractors, to emphasize “what” is to be accomplished but not necessarily “how” it is to be accomplished. This approach is intended to provide contractors with the flexibility to tailor and streamline approaches to their work to allow for improved efficiency and effectiveness. This approach has potential advantages, particularly from the perspective of productivity. However, given the significant, inherent safety risks of DOE’s missions, there are also potential drawbacks to relaxing the centrally-controlled safety requirements that have been developed based on the collective experience of the defense nuclear complex during the last 60 years. This is particularly concerning because much of that hard-won experience has refined how best to perform activities safely—not just what activities to do.

DOE is also in the process of changing many of its contracts to specify and reward the achievement of ultimate outcomes or results rather than on intermediate process outputs. DOE contracts are increasingly specifying required end-states, products or conditions, but are becoming less prescriptive about methods to achieve those required outcomes. For example, DOE may require a contractor to close a high-level waste tank rather than specify how to treat and dispose of the waste in the tank. This can be a positive step to ensure that DOE’s contractors are focused on producing the important results DOE expects. However, this approach can result in unintended

consequences if DOE and contractor personnel perceive that producing results warrants taking greater risks than should be considered acceptable.

DOE is in the early stages of an initiative to revise its oversight model and methods. The asserted advantages of such a shift are that the government will get its work done more efficiently and just as safely, thus allowing a reduction in government costs and staffing while accelerating completion of the work. These improvements would be welcome. However, there is the potential that the new system will not be as effective as the one it is replacing which could result in a decrease in safety. This is one of the reasons why the Board is conducting this series of public meetings.

Through these meetings, the Board will examine what impact, if any, the DOE's new initiatives in oversight and management of contractors operating its defense nuclear facilities may have upon assuring adequate protection of the health and safety of the workers, the public, and the environment. Information presented at these meetings should provide the Board and DOE with insights concerning both positive and negative aspects of various methods of oversight.

This morning, the Board seeks to gain a broad perspective by hearing about the experiences of other organizations that have used different forms of management and oversight. Some organizations have exerted rigorous oversight, while others have relaxed the level of oversight by varying degrees. Our intent is to explore what these organizations have learned as a result of using these various oversight models and methods, particularly in regard to safety performance.

In subsequent public meetings, the Board will explore DOE's management and oversight policies. DOE personnel will be invited to discuss their new approaches to contract reform, contractor self-assessment, and Federal oversight.

I would like to end by suggesting several explicit and practical questions that we may want to explore as we progress through this meeting and others in the series.

- First: Can the government's management and oversight be streamlined without degrading its ability to ensure health and safety?
- Second: What criteria should be used to judge the adequacy of the Federal oversight system?
- Third: What criteria should be used to judge the adequacy of the contractor's self assessment role?
- and Fourth: What are there minimum levels of Federal or contractor oversight that should be maintained?

Subject to any questions from the Board, this concludes my remarks. Thank you,