#### TESTIMONY

Beverly Cook, Assistant Secretary
Environment, Safety and Health
U.S. Department of Energy
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Thank you, Mr. Chairman, and members of the Board, for this opportunity to address you today. You have invited me to speak on the roles and responsibilities of the Office of Environment, Safety and Health in the oversight process. In keeping with some of the questions you have sent to me, I would like to expand my remarks somewhat to the role of EH in assuring safety of the operations of the Department of Energy. I will speak to both my role personally, and that of my organization. I will also address efforts underway to improve DOEs performance, and where I continue to be concerned.

I would like to start with some of my overall assumptions. I absolutely believe that our workforce does not come to work with the intention to hurt themselves or others around them. They live with their families in the communities surrounding their workplace and have no intention of harming that environment. These are not self-destructive people.

I also believe that the companies that DOE has hired do not intend to harm the workers they employ or the environment surrounding their workplace. These are good people trying to do the job we have hired them to do

However, many factors drive behavior. These same people worry about keeping their jobs, so they can support their families. Therefore, if we communicate mixed signals about what is important to us, then we will drive performance in unexpected ways. The same is true of the companies that we hire. If we are not clear about our expectations, they may exhibit behavior that is unacceptable to us. That is what I want to talk about today. How do we, the DOE federal workforce, drive behavior, and what is my role in that process.

You have asked about my roles and responsibilities as the DOE Corporate Safety Officer and Assistant Secretary for Environment, Safety and Health. EH responsibilities are listed in a variety of DOE Rules, Directives and other documents. The EH responsibilities include:

- Develop and maintain ES&H policies, regulations, technical standards, and other directives (Orders, Notices, Manuals and Guides)
- Investigate and enforce nuclear safety/worker safety violations
- Analyze ES&H performance and provide feedback, lessons learned
- Maintain safety data systems (i.e. ORPS, CAIRS)
- Provide subject matter expertise on ES&H matters
- Assist in the investigations of accidents
- Assist in Operational Readiness Reviews
- Provide independent assessments of ES&H matters when requested

I am specifically identified as the:

- Agency Environmental Executive under E.O. 13101
- Designated Agency Safety and Health Officer under E.O. 12196, 29 CFR 1910

The Deputy Secretary has also identified that I act as his agent in identifying, evaluating, monitoring, managing, and resolving cross-cutting safety issues. I will describe how I and the EH organization fulfill these roles in the context of the overall safety structure of the Department.

The safety structure that I will refer to consists of setting clear safety goals, setting requirements for meeting those goals, setting performance measures and measuring performance, implementing the requirements through the line organizations, performing independent oversight, and feedback and improvement. I will speak to each of these steps, and my role in each step.

### SET SAFETY GOALS

First is setting goals. I have submitted as backup the Deputy Secretary's letter defining the 2004 management challenges. The first challenge is safety, and the first item is setting safety goals. It is the manner in which the entire organization knows what is expected of them. In the past DOE has defined safety goals in a variety of ways; every thing from keeping our risks below a certain level to statements of "Be Safe".

Secretary Abraham is very clear on his goals. In the DOE 2002 Annual Report on Environment, Safety and Health, the Secretary committed to keeping our workers safe, protecting the environment at and around our sites, and being proactive in evaluating trends and safety vulnerabilities to prevent recurrence of incidents. He stated that the Department is committed to accomplishing work in a safe and environmentally responsible manner. He has restated this goal in almost every venue, especially when he is speaking to the DOE workforce

This is a high standard. However, this is the topic of heated discussions within the Department. It is well recognized that setting the wrong detailed goals or communicating the goals incorrectly will drive the wrong behavior. For example saying "no incidents" or "no near misses" drives non-reporting. Therefore, in the context of the Deputy Secretary's management challenges, we will continue to look for ways to articulate the safety goals of the Department in a manner that improves performance. This is a work in progress. I am the lead to coordinate this effort.

In addition, all Department elements must articulate goals relevant to their portion of the work. Most organizations have tried to do that. I will discuss some of their efforts in the discussion of performance measures. For our part, the EH staff has looked at other outside organizations and companies for examples of setting safety goals that might work for DOE. But there are goals that may be relevant to our workforce that may not be relevant to others. For example, I frequently refer to a goal of "zero legacies," that is no environment, safety or health legacies from our work.

The goals must be effectively communicated, and rewards and punishments must follow consistent with those goals. It takes both setting the goals, and showing you are serious about it to drive the right behavior. My job is to assist the line programs in identifying and communicating the rewards and punishment that show consistency with those goals.

### SET REQUIREMENTS

Goals need further definition, based on the type of work performed. EH has the primary responsibility for establishing and maintaining DOE regulations and directives relating to environment, safety, and health. EH interacts with other government agencies, safety and health organizations, and organizations that develop standards. We strive to incorporate into the DOE directives and standards current industry best practices and policies.

DOE Directives contain four levels of documents: Policies, Requirements (Rules, Orders and Manuals), Guides, and Technical Standards. You asked that I describe how EH ensures that ES&H policy, requirements and standards are understood and properly implemented in the field. We utilize a variety of methods.

- We ensure awareness of issues by leading, managing or participating in the established DOE development and review processes and practices for requirements and standards
- We issue Nuclear Safety Technical Positions and Directives Interpretations when needed
- We maintain telephone "hot lines" and web sites to tee up concerns and facilitate resolutions
- We conduct training on Rule or Directives requirements and guidance (e.g., Part 830 Subpart B, Beryllium, Operational Readiness Reviews, Accident Investigations)
- We participate in EFCOG workshops so that we are available to answer questions and clarify direction to the DOE contractors
- We facilitate development and implementation of Functional Area Qualification Statements for safety analysts, implementers and reviewers
- We participate in assessments of implementation as Subject Matter Experts at the request of DOE Field organizations (e.g., criticality, fire safety, explosive safety, nuclear safety, quality assurance, maintenance programs, health physics, radiation protection)
- We maintain safety data systems to collect information on ES&H performance (e.g. CAIRS, ORPS) and analyze ES&H operational performance, occurrences, reports, and indicators to determine implementation issues, share lessons learned, and provide feed back
- Conduct independent assessments of safety issues/concerns at request of line management
- Participate in and assess Operational Readiness Reviews
- Provide safety basis support to DOE line organizations and field offices on nuclear facilities
- Review the adequacy of the Safety Evaluation Reports
- Analyze Unreviewed Safety Questions across the DOE for cause and corrective actions

All of these actions are to provide EH with information related to understanding and properly implementing the policy, requirements and standards. You have also asked what actions are available to EH to correct implementation issues. This depends on the root cause of the problem. The actions we can take are directly related to the root cause of the failure to properly understand and implement. There can be a variety of reasons for implementation issues. If it is a lack of understanding we can issue Nuclear Safety Technical Positions, Interpretations and Safety Notices. If it is lack of qualification of the staff responsible for implementing, we establish and facilitate safety functional area qualification standards for implementers and reviewers and conduct training. If it is clear the policy, requirement or standard does not result in the outcome we want, we will revise the DOE Directives and standards. If there is a lack of understanding of the root cause, or a significant difference of opinion, we manage and facilitate resolution through ES&H managers meetings, DOE cross-cutting technical working groups and interaction with EFCOG.

EH also has responsibility to investigate and report on accidents and investigate and enforce nuclear safety violations. A critical part of those investigations is to determine the root cause of the accident or violation, including identifying if DOE requirements are unclear.

There have been many initiatives over the last few years to better set the requirements. It has been recognized that DOE's requirements are sometimes confusing, conflicting, and not properly applied. Even with the advent of our current contracting method, where the set of applicable requirements are negotiated and documented in the contract, the contracts often contained items that were not directly relevant to the work at hand. This has lead to a system of waivers, exceptions, and inconsistent practices in holding contractors accountable for the items in their contracts.

Therefore, there has been an effort underway to streamline the requirements. The purpose is not to lower our standards for safety and performance, but to rather come to a concise, relevant set of requirements and then to hold contractors fully accountable for meeting those requirements. We would like to set the requirements and follow the requirements. Waivers should be at a minimum. The extensive use of waivers was noted in the Columbia report. The Department has continued to look for ways to reduce the need for waivers by better articulating requirements so that they are more generally applicable to the variety of work within the Department and by providing methods of tailoring of the set of requirements up front for a specific operation Once the right requirements are identified, compliance should be strictly enforced.

One of the difficult issues is how to hold all work on a site accountable to an appropriate set of standards. EH is aware of proposed changes to DOE O 251.1A and its associated Manual and we are actively engaged with the Office of Primary Interest for this Order (ME) and the DNFSB staff on concerns relating to the proposed limitation of the applicability of DOE Directives to site/facility management contracts. The challenge continues to be to how to define an appropriate set of standards and apply them to individual operations. There remain several options. EH will continue to aggressively work resolution on this issue, so that the correct outcome is achieved.

There is also a proposed revision to DOE M 251.1 that would change the exemption authority for DOE Orders from the Program Secretarial Office (PSO) to the Office of Primary Interest (OPI). Currently in the Directives process, the PSO as the exemption authority under the overarching DOE policy that line management is responsible for safety. The OPI has 30 days to provide comments to the PSO. EH is currently evaluating this change.

### SET PERFORMANCE MEASURES

As part of setting the right requirements and driving the right behavior, you must know if, in fact, following the requirements gives the outcome you desire. Therefore, performance must be measured. Performance measurement is difficult. Picking the right measures that indicate overall performance is important. The act of measuring, in and of itself, will drive performance. People will pay attention to what you measure. Over time, an organization should be able to identify precursor indicators that lead to unacceptable events, and be able to monitor those indicators, rather that being event driven. DOE continues to strive to move in this direction.

In the past, EH assumed the responsibility for collected and monitoring ISM performance measures for the Department. These included Total Recordable Case Rate, Occupational Safety and Health Cost Index, Releases to the Environment, Estimated Radiation Doses to the Public, and Worker Radiation Dose. It became apparent that improvements were needed. The consensus was that most of the ISM indicators lagged significantly and were not being used to drive safety improvements. We were awash in data, but weak on information.

We have expanded our efforts in EH. I have elevated the Office of Corporate Performance Assessment to Deputy Assistant Secretary level and increased the resources devoted to this office. We continue to work with DOE line programs to develop a more meaningful set of indicators of safety performance. We have revised the DOE occurrence reporting system in order to capture more relevant data.

The Under Secretary for Energy, Science and Environment conducts quarterly safety meetings with his direct reports. EH is responsible for evaluating performance and cross cutting trends at all EM, SC, NE, FE, RW, and EE sites. The Assistant Secretaries are held accountable for safety performance at their sites. The NNSA safety representative attends these quarterly safety meetings. We begin discussions with key indicators; TRC Rates (2 year moving trend); LWC Rates (2 year moving trend); Near Misses; (site-specific and DOE-wide Cross-cutting Analysis), and evaluating significant occurrences and trends for over 10 functional areas (nuclear safety, fire safety, safety basis, transportation safety, suspect and counterfeit items...). EH communicates lesson learned and best practices, and provides an independent assessment at the meetings.

The program offices articulate their specific safety goals at these meetings. For example, EM has initiated the 4.0 Program of Performance Indicators. They focus on the indicators that are most relevant to the EM sites, including transportation events. The Office of Science has established goals for Injury and Illness Rates in order to drive performance to the top 25 percentile of best in class private industry laboratories.

EH is currently working with NNSA to further refine similar indicators at their sites and I understand that Ambassador Brooks plans to begin holding quarterly safety reviews with his senior staff.

I believe the Department has evolved in its ability to track and trend safety performance at the corporate level. EH not only looks at the "numbers", we also want to understand exactly what is driving certain performance. A site may have good TRC and LWC rates but if near misses are occurring at an increased rate we need to understand why and ensure line management takes corrective actions.

We continue to look at ways to improve our ability to identify precursors and leading indicators. As NASA discovered, we must pay attention to the small events and evaluate what are safety systems are telling us. As Dr. Howard from the Columbia Accident Investigation Board stated in his presentation to us, "the system is talking to you." Please be assured that EH is not overlooking nuclear safety performance. If we are stumbling in the small things, it may be an indicator that we have problems with rigor in the operations that could result in more significant consequences, like those protected by our nuclear safety systems. An area for improvement in

2004 is tracking and trending nuclear safety performance. EH is currently working on better defining the nuclear safety indicators and would welcome the Board's insights in this area.

Recently, EFCOG has developed a proposal for the top ESH&Q Indicators. These have been provided to EH for consideration and comment. I am optimistic, since the proposal recognizes the need to develop leading indicators. EH will work closely with our line programs, and EFCOG to further develop these indicators.

Normalization of deviants was a major issue identified by the Columbia Accident Investigation Board. NASA had conditioned themselves to expect deviations and didn't consider them serious. The Department is improving the use of daily operating experience events. ORPS events are published daily and distributed to a large group of headquarters and field personnel for the purpose of fostering a continuing awareness and evaluation of operational information. Biweekly Operating Experience Summaries are published and distributed throughout the complex that focus primarily on discrete operational deviations that are precursors to more serious events. Also, EH provides Weekly Summary Reports of significant events and trends to Under Secretary Card and Ambassador Brooks. Many times the Under Secretaries require further evaluation from the line programs. This sends a strong signal to the entire complex to not ignore or accept deviations from normal performance.

### LINE IMPLEMENTATION AND OVERSIGHT

Once the framework is set, that is, the goals, the rules, and the measures, the line organizations are responsible to make it work. They adapt this framework to the specific work, work environment, and workforce. The line organizations are responsible for implementing the rules in a manner that ensures the goals are met. Therefore, the first "oversight" is performed by the line organization closest to the work, that being the local DOE offices. The line programs must have the expertise to fulfill that role and to know when to ask for help.

EH has an interest in all of the initiative underway by the Program Offices to best fulfill their responsibilities to implement the Departments safety requirements and provide oversight. The Programs are evaluating the methods for fulfilling the role that will best work for their operations. Specifically, I have been briefed and asked to provide feedback and concurrence in many of the organizational changes. I have had the opportunity to freely express my questions and concerns, including my interest on how the Program Offices are identifying the level of expertise that is required at any given Area Office. EH has been involved in working groups at the staff level on most of the initiatives identified to the Board during the public hearing, including:

- New Federal management and oversight policies being developed by DOE and NNSA for defense nuclear facilities (i.e. draft Policy and Notice on Oversight DOE P 226.1 and DOE N 226.1),
- New approaches to contract reform, contractor self-assessment, and federal oversight,
- Field application of Federal management and oversight policies being developed for defense nuclear facilities,
- Applying the lessons learned and corrective actions resulting from reviews of the Columbia Accident Investigation Board report,
- Identifying the technical competence required (qualifications and staffing) to ensure the effective management and oversight of activities.

As the involvement in these initiatives is part of the normal course of work for EH, I have not kept a record of the amount of time spent by my staff and I in reviewing these initiatives. We continue to be cautiously optimistic. I find the Program Offices acutely aware that making changes while still continuing current operations is difficult.

I believe there is a misunderstanding of efforts to strengthen contractor self-assessment programs. The purpose is to hold contractors accountable for their performance. They should be responsible for having programs in place that catch precursor events and failures in their safety systems and fix them. This should not be the responsibility of DOE line oversight. One role of the DOE line oversight organizations should be to check to be sure the contractor has adequate self-assessment programs in place, and to verify that those programs are working. DOE should not be the only line of defense.

An example is the situation that had developed concerning Operational Readiness Reviews. The contractors were not always ready. DOE would come in and identify items that should have been found and fixed before DOE got there. When the EH staff is asked to participate in a DOE ORR, they are directed to leave if it is apparent the contractor is not ready. We had slipped into bad habits, both as contractors and as customers. We are regrouping and setting our roles appropriately. This does not mean that DOE is counting on the contractors to oversee themselves, and we will just take their word for it. It means we have raised our expectations.

It is the contractor's job to prove they are ready to perform work, not DOE's job to prove they are not.

EH is often asked to provide technical assistance to DOE and NNSA on health and safety concerns that may require remedial action at their request. I have included a recent list in my written testimony, which I will not repeat at this time.

- Provided review and comment on a plutonium uptake investigation at Rocky Flats and forwarded comments to RFFO.
- Provided technical support at the Princeton Plasma Physics Laboratory on safety and health inspection techniques.
- Participated on an EH-led team to evaluate radiological control practices at the Rocky Flats Plant.
- Led a team to evaluate internal dosimetry, air monitoring, and implementation of the workplace indicator program at Rocky Flats.
- Participated on an EH team to evaluate possible health physics issues associated with drum retrieval activities at the Idaho-Advanced Mixed Waste Treatment Project.
- Provided support as an advisor to the Type B accident investigation of a fall injury at the Stanford Linear Accelerator Center.
- Provided health physics technical support to the Idaho Operations Office in reviewing work plans and respirator usage requirements for planned operations at the Advanced Mixed Waste Treatment Project's (AMWTP) Transuranic Storage Area-Retrieval Enclosure (TSA-RE).
- Provided an industrial safety specialist on an ORR to validate industrial safety CRADs at the Advanced Mixed Waste Treatment Project at the Idaho National Engineering and Environmental Laboratory.
- Provided technical support to NE-ID in evaluating BNFL's request to downgrade personal protective equipment requirements at the Advanced Mixed Waste Treatment Project.

- Provided safety basis support to DOE line organizations and field offices on nuclear facilities including Idaho Advanced Test Reactor, ORNL High Flux Test Reactor, ORNL Radiochemical Engineering Development Center, LLNL Plutonium Building 332, and ORNL Spallation Neutron Source Project.
- Provided cross cutting review on the adequacy of the Safety Evaluation Reports prepared by the DOE field offices for EM nuclear facilities at 11 DOE sites.
- Participation in Software Quality Assurance reviews at LANL, Y-12, Sandia, Pantex, SRS and Hanford

My biggest concern regarding some of these actions is that we are providing assistance at times for events and conditions that we have seen before. I will speak to that more when I discuss feedback and improvement.

A continued concern within the Department is the technical competence of the staff. EH is involved in several ways to address technical competence within DOE and NNSA in the area of ES&H.

- In its role of managing the Technical Standards Program, EH coordinates the review and approval of the Functional Area Qualification Standards that support the Technical Qualification Program
- A senior manager in EH is actively involved in the Federal Technical Capability Panel and as such provides input and feedback on technical competence issues
- Subject matter experts in EH participate in the development and implementation of Functional Area Qualification Standards
- EH provides and/or supports technical training in ES&H areas such as safety bases, criticality safety, accident investigation, quality assurance and administrative controls.

My biggest concern regarding technical competency of the DOE staff is the average age of our workforce. Many of our staff are retirement age. We are working together with the human resources organization to identify unique strategies to assure we have competent staff in the future. I have also spent significant time recently speaking with Congressional staff about the role of EH in DOE. The funding for my staff has been cut by Congress significantly in recent years. I do not believe my current staffing levels are sufficient to fulfill the requirements of my organization. The Department is actively working to rectify this situation. My job is to communicate to Congress the critical role of the Corporate Safety Office in an agency like DOE so that sufficient funding is forthcoming.

EH is responsible for review of operating contracts and Requests for Proposal (RFPs) to ensure that the essential ES&H requirements are present and to determine if adequate resources are planned for ES&H activities. Specifically, 1) the list of applicable directives are reviewed for completeness, 2) the list of applicable DEAR clauses is reviewed, 3) novel contracting strategies are reviewed (e.g., use of commercial standards for non-nuclear demolition contracts), and 4) the entire contract is reviewed for consistency among ES&H terms and conditions in various sections.

The new Conditional Payment of Fee clause should help fee determination officials better utilize that 'enforcement' tool. EH will continue to provide support to the Procurement Executive and field offices in the interpretation and application of the new clause. EH will also monitor clause applications in the future, but will not be a part of fee determinations.

## INDEPENDENT OVERSIGHT

Finally, we get to independent oversight. It is important that an independent check is made to see if the desired outcomes are achieved. Independent oversight is critical. Independent oversight is not the first line of defense for safety. It is the check to assure the framework and implementation is achieving the desired results. EH does not perform independent oversight, but does have important interface with the organizations that do perform this function.

EH supports the DOE Office of Independent Oversight in their field review by providing analyses of site and facility performance. This analysis helps the review teams to focus their efforts on likely problem areas and increase the effectiveness of the reviews and time spent.

The next interface with the oversight organizations is related to feedback and improvements. Therefore, I will go directly to feedback and improvement.

## FEEDBACK AND IMPROVEMENT

I believe that feedback and improvement continues to be the Department's biggest challenge. Valuable information is provided to the Department every time another organization identifies a process or event that the line organization has not already identified and fixed. We are not effectively utilizing the feedback provided to us by other organization in order to improve performance. We often get so caught up in the specific corrective actions related to an issue we loose sight of what it takes to really fix the root cause of the problem. Part of EH's role in cross cutting issues is to address this issue.

We meet with the Office of Independent Oversight and discuss the findings of their audits. We are actively evaluating other reports and audits of the Department to look for issues that may be applicable for organizations other than the direct subject of the report. EH receives notice of reports and correspondence issued by GAO, DOE IG, DNFSB, Homeland Security and other outside agencies. EH staff reviews this information to determine whether site or programspecific issues could have generic safety and health implications. The conclusions of the review of these reports are documented for consideration for action or referral to other DOE elements. As part of this role, EH will strive to enhance our interaction with all oversight organizations, including the DNFSB, in order to better understand the underlying issue and to assure corrective actions really fix the root cause.

For EH, the most important information related to our specific job is to determine if the regulations, standards and policies that we are responsible for are driving the right behavior. Therefore, feedback from all organizations is important, whether it is line management oversight or independent oversight. First and foremost, we need to know if the regulations we have written need improvement, and to take action if they do.

However, as you know, it is usually not that simple. The biggest challenge is to understand the drivers of good behavior and unacceptable behavior. It is easy to just assume it is bad people or a bad company, but that is unrealistic. Other actions drive people and companies to do things that are fundamentally against their nature. The Department has a long way to go in root cause analysis. EH will be providing training on root cause analysis in the future. We continue to learn from other organizations such as INPO on effective ways to improve root cause analysis.

Part of EH's role coordinating and managing DOE's cross cutting commitments is to resolving issues across DOE and NNSA. The resources needed to accomplish that task vary depending on the issue. In general, we try to facilitate a corporate view of the outcome that is desired, and then help the individual programs to implement their efforts to meet the commitments in a way that is clear and meets the intend. This is somewhat new for the Department, and we will continue to improve in our ability to coordinate cross cutting commitments.

EH sponsors and manages monthly meetings of ESH Managers from all DOE Program Offices with health and safety responsibilities. This collaborative forum enables discussion, notification and decision-making on methods to address potential safety and health issues that may cut across DOE program offices, and sharing of best practices at a Headquarters level. EH also uses this forum to provide information on new, revised, or upcoming ES&H requirements or activities that might impact budget decisions. In general, the Department is trying to minimize those budget items that are allocated or shared between program or field offices. This goal has not been fully realized at this time.

### LESSONS LEARNED

You specifically asked me to speak on lesson learned from the Columbia accident and the Davis Besse near miss. Several reviews have been made by EH staff, including me, of the lessons to be learned from these events. Because the issues identified cover a broad range of topics, EH's role is varied in implementing the lessons learned.

With regard to Davis Besse, EH will issue a Lesson Learned publication in the near future. Although the Davis Besse near miss was somewhat unique, there are generic performance related lessons learned that are applicable to all DOE operations. It certainly identifies the need for a performance analysis function. Fortunately, EH has already moved to strengthen that function in DOE. In addition, EH and all the Program Offices continue to work towards determining the correct set of performance measures that will truly provide early indication of performance problems. While the Department is proud of our overall performance at this time, everyone is concerned about what we may not know.

Next, let me touch on some of the issues related to the Columbia Accident. It is important to note that the Program Offices have also reviewed the Columbia accident, discerned applicable lessons learned, and are moving forward with certain actions where applicable. EH staff has provided input to NNSA and EM for use in their reviews. This included participating in work groups and meeting with line management prior to them initiating broader reviews.

Reliance on past successes, treating operations as routine:

I believe these two issues are related as they apply to a specific situation in DOE. They both have applicability to our workforce. Many of these people have been doing their job for many years, and have been able to do so without incident because of their personal knowledge or skill. This issue is coming to a critical point for the Department. A large portion of our workforce is retirement age. We must fully documented our processes and procedures, and start with the assumption that every operation is new and unique. I know that the Program Offices are looking at this issue, but the changes in workforce may be the strongest driver to correct this problem at the contractor and task level.

Resource constraints; placing mission before safety:

It is the expectation of the senior managers in DOE that missions will be accomplished safely. As we all know, that view is not always communicated throughout the organization. The conversations that occur during the quarterly safety meetings often focus on the actions that are taken by the program offices to reward or punish good or bad behavior. We may say that work must be accomplished safely, but often our actions do not communicate that message. We must not reward contractors who take risks to meet the mission goals, and we must fully recognize the contractors who accomplish the mission goals safely. EH continues to strive to bring attention to those contractors who perform work safely, through best practices information, and identification to the program offices. Our rewards and punishments must be consistent with our stated goals.

# Organizations must learn from past mistakes or failures:

I have already stated that I believe this is DOE's biggest challenge. We realize that the use of lessons learned must be improved within DOE. We are currently redesigning our process for communicating the information and holding line managers accountable for corrective action. For example, EH recently published an operating experience report on hoisting and rigging events and precursors. This report has been forwarded to headquarters line managers through their program offices for action.

We need better methods for capturing lessons learned in the nuclear safety area. Lessons learned in nuclear safety have not received as much attention and EH is working to provide better information in this area.

Poor organizational structure can be just as dangerous as complex technical issues: I believe DOE's ISM policy is clear that line management is accountable for safety. We must maintain that emphasis. It should not be an option for line management to reduce attention to safety. It should not become a role for an outside organization that can then be reduced, as budgets get tight.

### A questioning attitude:

There are methods that can be used to increase a questioning attitude on the part of senior management and the program offices are discussing the best approach for their organizations. One method that was provided to me very early in my career was to hold people accountable for their signature. If your signature means you are fully accountable for the content of a document or decision, then you are less inclined to proceed with just a summary briefing on a subject, and are more inclined to actively seek minority opinions.

EH will follow the actions by the program offices to address the issue of questioning attitude, and facilitate the sharing of ideas and best practices. In additions, DOE must continue to communicate our worker involvement philosophy. It is a key tenet of ISM, VPP, and Behavioral Based Safety. We should expect our workforce to raise concerns and report safety problems. This is not just a right, it is also an obligation and condition of employment. One of the Deputy Secretary's Management Challenges for 2004 reinforces the Department's commitment for workers to fully report safety concerns without the fear of reprisal.

Many of the other issues identified in the Columbia report directly relate to ongoing initiatives in the Department. EH will closely watch how these initiatives are proceeding and evaluate the effectiveness of these efforts.

## **ISM**

You asked about our activities to ensure ISM is being effectively implements. DOE is committed to ISM. We should not move away from this model. It is how we do work. But there are things that can happen that would drive us away from ISM. I believe that first and foremost, we must maintain the first of the guiding principles; line management responsibility for safety. This has proven to be one of the most difficult parts of ISM to preserve. At every turn, someone wants to remove line management responsibility, accountability and authority. Once this starts to slip, the entire ISM model is in jeopardy. Line organizations have the responsibility to do work safely. All three of those words matter; do, work, safely. At no time is it acceptable to say you can do work, but it won't be safe; or you can be safe, but you can't get work done. I believe it is the expectation of the managers in DOE that work be done safely.

We have senior leadership commitment and focus on safety, a comprehensive set of safety requirements, and contracts that communicate expectations and allow DOE to hold contractors accountable. ISM implementation has been verified in the field by review teams and concurrence by senior managers. ISM should now be how the Department does business, not an add-on program.

We recognize there are still weaknesses in ISM implementation. We do not always identify all hazards adequately and the feedback and improvement function needs significant work. However, efforts are well underway to improve the recognition and reporting of occurrences; associated causal analysis; and the use of occurrence information by line managers as a means of timely feedback on ISM implementation and corrective action effectiveness. How do know ISM is working? It is our feedback process that has allowed us to identify where we are weak. We are getting the feedback. We need to work on the improvement.

### **CONCLUSIONS**

I have not covered many other items that concern me about the Department. There are many changes ongoing in the complex, and that leads to great distraction on the part of the workforce. Contractors are concerned about competing the contracts, which may distract them from the work at hand. The age of our workforce has brought up issues related to how you judge the ability of a worker to do the job, after you have assessed the hazards and determined the appropriate controls. These are only some of the day-to-day issues that must be addressed.

I expect the Board will come to some conclusions and ideas for the Department on how to better use both independent and line oversight as methods for assuring and improving the performance of the Department. I hope that your suggestions include some ideas on the human factors issues we currently face. I look forward to you conclusions at the end of your hearings. Thank you for this opportunity. I would be happy to take any questions you have at this time.