

Testimony of Robert G. Card
Under Secretary of Energy, Science and Environment
Before the Defense Nuclear Facilities Safety Board Public Hearing
October 21, 2003

Thank you, Mr. Chairman and members of the Board for inviting me to address you today. I welcome this opportunity to tell you about the progress the Department has made in assuring safe operations while accomplishing its missions. For my part, I am proud of the record to date.

First, we need to understand the historical context underlying the actions of this Administration. The DOE of the 80's was in denial of its defense environmental responsibilities, liabilities and risks. This culminated in the FBI raid on Rocky Flats in 1989. The DOE of the 90's acknowledged the responsibilities and liabilities but didn't understand the risks and couldn't develop systems and processes for addressing them. The DNFSB was chartered in 1988 and became an effective agent for helping DOE understand risk priorities and safety systems for addressing them.

We began this administration with very specific goals. Taking our lead from the Board, especially Recommendation 94-1, we aggressively moved forward to reduce risk to the public and workers by accelerating the cleanup of the DOE sites. Some of our cleanup schedules have been accelerated by more than 30 years. This reduction of risk to the public is a personal initiative of Secretary Abraham and is fully supported in President Bush's budget. The Secretary expects no increase in risk to workers as a result of this acceleration, however. I am pleased to report that we have, in fact, seen dramatic improvements in worker safety while engaging in some of the world's most hazardous work. As an added benefit to the taxpayer, we are on track to save over \$50 billion from a baseline that was impossible to achieve. This results in more than \$1 billion per year of funding for other risk reduction efforts from 2025 to 2070.

Further, the Administration has made the tough decision to open up waste receiving sites. Yucca Mountain was selected and is marching toward a December 2004 license application, two years earlier than was estimated just two years ago. Savannah River has become a processing center and the MOX project has been fully funded. The Waste Isolation Pilot Plant continues to achieve record throughput. All low level waste repositories have remained open and on-site disposal has been on schedule. These accomplishments have safety and risk reduction benefits that far transcend DOE's in-house clean up mission.

As an example of our progress, we are working hard to accelerate all 94-1 Material Stabilization and packaging requirements by the end of 2004 with the exception of Savannah River Neptunium Solutions and oxide packaging.

This change in strategy has had much broader implications for DOE. All of our programs have become much more focused on their overall end goals. The improvements in the Waste Repository baseline will save 20% in the overall cost and more than a decade in the completion of the initial consolidation. Fossil Energy is on the front lines working to resolve the natural gas shortage, fill the Strategic Petroleum Reserve, and develop state of the art power and hydrogen from coal without CO₂ emissions. The Energy Efficiency and Renewable Energy organization has developed a solid program to achieve a hydrogen vehicle commercialization decision in 2015. The Office of Nuclear Energy has focused considerable resources to building a new Generation IV nuclear reactor in Idaho, and the possibility of a new Generation III+ start appears within reach. The new Office of Electric Transmission and Distribution has begun a comprehensive review of new electricity technologies and policies, an analysis of the blackout, and ways to mitigate further incidents. The Office of Science has developed a new 20-year plan to focus on the critical questions in the physical sciences. And equally important, the Department has expanded the charter of the Office of Worker Transition to include Legacy Management, so the public lands that may remain in the control of the DOE are managed in an effective, safe and cost effective manner.

The Department's safety performance clearly shows our ability to get more work done, and do it safer. The DOE injury and illness rates have declined to a historic low in 2003. Much of this improvement is due to institutionalizing Integrated Safety Management as a way of doing business. Our workers have been empowered through formal Voluntary Protection and Behavior Based Safety Programs. Workers are actively using their stop work authority. This is a path we cannot back away from. Once workers are given the authority and accountability to protect themselves, they will not give it up willingly. Our annual measure radiation dose to workers has remained stable at well under 100 mrem, (this is 5% of the maximum allowed) although the increase in work in cleanup had the potential for a significant increase in exposures if not properly managed. There have been no Type A accident investigations since 2000, and only three Type B investigations a year since then. This is fewer than any of the previous 6 years.

These results are because of conscious efforts on the part of DOE and its contractors. We have emphasized effective work planning and accurate budgeting, made adjustments to our management oversight and policies, and better defined the roles and responsibilities of the Federal workforce and the contractors. We have made great strides in prioritizing and simplifying our requirements by reducing duplication and resolving conflicting requirements. We have a vision for excellence for all programs and sites and have moved forward in clearly defining corporate roles and responsibilities.

While we are proud of our accomplishments thus far, we have much yet to do. We must continue to make these changes, and also monitor and evaluate the effectiveness of these efforts. I hold my direct reports, the Assistant Secretaries and Office Directors, accountable for the safety, safeguards and environmental performance of the programs and sites under their purview. I hold Quarterly Executive Reviews of every site and program with the Senior Managers as a group. Many best practices and common problems have been shared at these meetings, and common solutions are discussed. I also hold quarterly meetings with the oversight organizations and others, including the Office of the Inspector General, Independent Oversight and Performance Assurance, Environment Safety and Health, Price Anderson Enforcement, and Security. I require

real time reporting of significant injuries, exposures and accidents to me, which I forward to the Secretary. I expect strong field enforcement of our requirements, and look for evidence of that behavior.

While much has improved, we have several safety concerns that require our immediate and continued attention. The accelerated pace of work generates its own challenges. The configuration of the job site constantly changes which may mean that the hazards are not always fully identified. The workforce may be only temporary for a specific job and they may not fully understand the safety requirements for work performed at a DOE site. As work is accomplished, there may be overconfidence in the ability to do that work safely. Our old facilities have many configuration questions, resulting in many electrical intrusion incidents. Lack of appropriate maintenance over many years has added to this problem. The hazards of D&D operations are often not familiar to the DOE workforce. Dealing with new production operations such as routine shipment of nuclear waste has brought with it many quality assurance issues. The utilization of the feedback and improvement step of ISM still needs work. The continued distraction of the workforce as sites downsize, missions change, and major contractors change through re-bidding of long standing contracts adds worker transition management to the mix.

DOE is making unprecedented progress in reducing risk, eliminating work and managing safety events. The DNFSB should take credit for much of the progress. In DOE, line management accountability, executive management engagement, and focusing on those objectives and requirements that are truly important have been key to this accomplishment. However, we know from commercial benchmarks that more can be done in both safety and productivity. We intend to continue to aggressively work to improve DOE performance in both of these areas. I want to extend our safety philosophy and culture beyond just event management. We need to fully understand the precursor indicators that predict safety problems and deal with them. In the end, the safest work is that which is eliminated while still achieving the same mission objective. Planning for the end of the job helps us prevent future legacy issues and undue risk to workers and the public, and is just good business.

