

Statement of Gregory H. Friedman

Inspector General

U.S. Department of Energy

Before the

Subcommittee on Oversight and Investigations

Committee on Energy and Commerce

U.S. House of Representatives

FOR RELEASE ON DELIVERY

10:00 am  
July 24, 2013

Mr. Chairman and Members of the Subcommittee, I appreciate the opportunity to testify at your request on the major challenges facing the Department of Energy as identified by the Office of Inspector General (OIG).

The Department of Energy is a multi-faceted agency responsible for executing some of the Nation's most complex and technologically advanced missions. These missions include cutting edge work in basic and applied science, clean energy innovation, energy efficiency and conservation, environmental cleanup, nuclear weapons stewardship, and efforts to enhance national security. In order to execute this diverse portfolio, the Department receives an annual appropriation approaching \$30 billion, employs nearly 110,000 Federal and contractor personnel, and manages assets valued at over \$180 billion.

The OIG provides independent oversight of the Department's operations through a rigorous program of audits, inspections, and investigations designed to promote economy and efficiency, and to detect and prevent fraud, waste, abuse, and mismanagement. A primary aspect of our work involves the examination of Department programs and procedures through a combination of performance and financial reviews, including cyclical evaluations of management and operating costs of the Department's numerous contractors. Much of our work is governed by an annual risk assessment process. Through this process, the OIG establishes its internal operating strategy based on an overarching goal of addressing the Department's most pressing issues on a priority basis.<sup>1</sup>

### ***Department of Energy Management Challenges***

Updated annually, the OIG identifies what it considers to be the most significant management challenges facing the Department. We have a unique, independent perspective, which allows us to provide management, the Congress, and the taxpayers with an unfiltered view of Departmental operations. For Fiscal Year (FY) 2013, our list of significant management challenges includes:

- Operational Efficiency and Cost Savings
- Contract and Financial Assistance Award Management

---

<sup>1</sup> A full inventory of published OIG reports can be found at: <http://energy.gov/ig/calendar-year-reports>.

- Cyber Security
- Energy Supply
- Environmental Cleanup
- Human Capital Management
- Nuclear Waste Disposal
- Safeguards and Security
- Stockpile Stewardship

Given the inherent nature and complexity of these challenges, they are not amenable to immediate resolution. Thus, these challenges must be addressed through a concentrated, persistent effort over time.

### *Office of Inspector General Activities*

Our inventory of work products provides the underpinning of our management challenges report. Virtually all of our work intersects with one or more of these challenge areas. I would like to discuss three recent reports that are reflective of this relationship. These include: project management, environmental cleanup, and contract administration issues at the Hanford Site; general Department contractor governance issues; and management of foreign travel by the Department and its contractors.

#### *Waste Treatment and Immobilization Plant Quality Assurance*<sup>2</sup>

An OIG review reported on problems with the Department's contractor-managed construction of the Waste Treatment and Immobilization Plant (WTP) in Hanford, Washington, a project with an estimated cost of over \$12 billion or three times larger than its original budget. Our review found that contractor management of this project, one of the largest undertakings of its kind, did not always meet quality assurance and contract requirements. To shield plant workers from intense radiation during WTP operations, processing vessels are to be located in sealed compartments called black cells. Because there is no engineered access to black cells once operations begin, it is critical that processing vessels last for the WTP's 40-year expected design

---

<sup>2</sup> *The Department of Energy's \$12.2 Billion Waste Treatment and Immobilization Plant-Quality Assurance Issues—Black Cell Vessels*, DOE/IG-0863, available at: [http://energy.gov/sites/prod/files/IG-0863\\_0.pdf](http://energy.gov/sites/prod/files/IG-0863_0.pdf)

life without in-service inspection and maintenance. However, the contractor responsible for the WTP effort procured black cell vessels that were missing required documentation intended to provide evidence that welds to the vessels met specifications. As we reported, this was inconsistent with the project's quality assurance process.

We also found that the Department paid the WTP contractor a \$15 million incentive fee for production of a vessel that was later determined to be defective. Our review disclosed that although the Department demanded return of the fee, it was never actually reimbursed. Department management told us the \$15 million incentive fee payment issue was included for consideration as part of the WTP contract restructuring; however, management could not furnish documentation to explain or support the rationale for its decision to forego recovery of the fee.

While it has a number of unique characteristics, the history of the WTP project is, in many ways, emblematic of the Department's long-standing problems with contract administration and project management, particularly as they relate to the Department's \$268 billion environmental remediation liability.

### *Contractor Governance*<sup>3</sup>

Given the Department's near total reliance on contractor support for mission execution, the importance of efforts related to enhancing contractor governance, and contractor performance, transparency, and effectiveness, cannot be overstated. In 2012, to assess Department progress in this area, we reviewed the status of contractor assurance systems by NNSA and its contractors.

We found that since July 2007, the Department and NNSA had required contractors to implement self-assessment systems to measure performance and help ensure effective and efficient mission accomplishment. NNSA's approach relies on contractors to assess and evaluate their own performance, with Federal oversight of contractor activities, especially with regard to nuclear safety and security.

---

<sup>3</sup> *National Nuclear Security Administration Contractor Governance*, DOE/IG-0881, available at: <http://energy.gov/sites/prod/files/IG-0881.pdf>.

Yet, as we reported, despite at least five years of effort, NNSA and its support offices and site contractors still had not implemented fully functional and effective contractor assurance systems. Specifically:

- The contractor governance system was rendered ineffective by what Federal site level officials referred to as an "eyes on, hands off" approach to contract management;
- Contractor self-assessments were not effective in identifying weaknesses;
- Contractor weaknesses were not effectively communicated to senior management officials; and
- Performance metrics tracked in the assurance systems were not clearly linked to those contained in the contractor performance evaluation plans used to determine fees.

We found that NNSA had placed substantial reliance on its contractors' ability to self identify and correct weaknesses, even those that have the potential to threaten the safe, secure, effective and efficient operation of the Department's national security facilities. Our findings suggested that such reliance may be unjustified absent more intense Federal validation of contractor assertions.

The underlying fact pattern associated with a July 2012 security breach at the Y-12 National Security Complex in Oak Ridge, Tennessee, as well as an ensuing compromise of Protective Force security tests at the facility, illustrated the potential severity of concerns regarding NNSA's contractor governance approach. While there were a number of relevant factors, the most significant may have been the "eyes on, hands off" approach attributed to the Federal staff providing contract oversight at Y-12.

*The Department's Management of Foreign Travel*<sup>4</sup>

Given its extensive reliance on contractors, measures to address the management challenges facing the Department, particularly in the area of efficiency and cost savings, must inherently involve issues related to contract governance, contract administration, efforts to measure

---

<sup>4</sup> *The Department of Energy's Management of Foreign Travel*, DOE/IG-0872, available at: <http://energy.gov/sites/prod/files/DOE-IG-0872.pdf>.

contractor performance, and efforts to hold contractors accountable. In this context, we recently examined the Department's response to a Presidential directive to reduce travel as a means of reducing Federal expenditures. To its credit, in response to the Presidential directive, the Department implemented a mandatory 30 percent reduction in Federal employee travel. However, parallel action had not been taken to manage or control foreign travel by contractors. Consistent with the Department's organizational structure and its significant reliance on contractor assistance, the vast majority of these taxpayer-funded trips, in fact about 85 percent, were taken by contractor employees. Had the Department applied the 30 percent reduction criteria to the international travel costs incurred by its nearly 100,000 contractors, as much as \$15 million could be saved each year. While we would not anticipate total equality between the treatment of Federal and contractor personnel, in our view in this case, an across-the-board application of the requirement to reduce travel would have been both appropriate and beneficial.

### ***Operational Efficiency and Cost Savings***

As part of our Management Challenges report for FY's 2012 and 2013, we concluded that Federal budgetary concerns made finding ways to optimize agency operations and reduce costs the preeminent management challenge facing the Department. In this context, we added Operational Efficiency and Cost Savings to our list of management challenges and presented the Department with five suggestions for reducing its cost of operations and enhancing agency efficiency. These proposals included:

- Applying the Quadrennial Technology Review (QTR) strategic planning concept to the Department's entire science and technology portfolio;
- Eliminating costly, duplicative NNSA functions;
- Evaluating, consolidating, and/or rightsizing the Department's laboratory and technology complex;
- Reprioritizing the Department's environmental remediation efforts with the goal of funding the work on a risk basis; and
- Re-evaluating the current structure of the Department's physical security apparatus.

Our intent was, and continues to be, to highlight possible ways in which the Department can reduce the overall cost of operations and become more efficient. While the suggestions are intended to provide only a starting point for further discussion and examination, we are mindful of the fact that they represent approaches that could be difficult to implement, highly controversial, and politically challenging. The following five summaries provide additional details on these suggestions.

*Expand the QTR strategic planning concept to the Department's entire science and technology portfolio:* In September 2011, the Department released its inaugural QTR, in essence a research and development strategic plan. In his message prefacing the report, then-Secretary Chu referred to the hard budget choices and fiscal challenges facing the Department, concluding that the Department must find ways to intelligently choose between the many technically viable activities it could pursue. The QTR, advanced as a mechanism to guide these difficult choices, provided quality analysis and important information. However, as beneficial as it may be, the scope was limited to the Department's energy-related technology sector. We concluded that the discipline of the QTR process should be applied to the Department's entire set of science and technology activities. This type of large-scale planning effort would enable the Department to better evaluate its multi-billion dollar per year science effort to determine whether initiatives are aligned with current priorities; identify metrics to help decision makers confirm that research dollars are used for the highest and best purposes; and determine whether the work of its separate system of 16 Federally Funded Research and Development Centers (FFRDC) are properly integrated.

*Eliminate duplicative NNSA functions:* Created in response to national security concerns, NNSA was established as a separately organized agency within the Department under the Defense Authorization Act of 2000. NNSA maintains a set of distinctly separate overhead and indirect cost operations that often duplicate existing Departmental functions. These include human resources, general counsel, congressional and public affairs, procurement and acquisition, and information technology. These expenses are significant and parallel functions that exist at Headquarters as well as a number of field sites where Department and NNSA activities are co-located. In addition to cost considerations, these redundancies can complicate communications

and program execution and cause different interpretations of core Departmental policy. We recommended that the alignment be closely examined with the goals of consolidating overlapping efforts, preserving scarce resources, and improving operations.

*Evaluate, consolidate, and/or rightsize the Department's laboratory and technology complex:*

The Department operates 16 FFRDCs at an annual cost of more than \$10 billion.<sup>5</sup> Of this amount, nearly \$3.5 billion was spent on general administrative functions including executive direction, human resources, procurement, legal, safeguards and security, utilities, logistics support, and information services. In our view, the proportion of scarce science resources diverted to administrative, overhead, and indirect costs for each laboratory may be unsustainable in the current budget environment. We recommended that the Department, using a BRAC-style formulation, analyze, and potentially, realign and consolidate laboratory operations to reduce indirect costs and, as a result, provide greater funds for science and research.

*Reprioritize the Department's environmental remediation efforts:* The Department's current unfunded environmental remediation liability is approximately \$268 billion. As a result of more than 50 years of nuclear defense and energy research work, the Department spends about \$6 billion per year on its environmental remediation activities. In doing so, at the time of our examination, program costs were largely "driven" by 37 individually negotiated Federal Facility Agreements (FFA) at key Department sites across the Nation. The FFAs involve no less than 350 milestones at these sites. The FFAs are augmented by numerous other local agreements with their own set of actions, requirements, milestones and due dates. The existing structure needs to be modified to reflect the realities of significant reductions in the Department's environmental cleanup budget. Consequently, we recommended that the Department revise its current remediation strategy and address environmental concerns on a national, complex-wide risk basis. This would result in a form of a complex-wide environmental remediation triage, funding only high-risk activities that represent imminent or near term danger to health and safety, or further environmental degradation.

---

<sup>5</sup> This figure excludes the sizeable "Work for Others" programs at the Department's national laboratories.

Re-evaluate the current structure of the Department's physical security apparatus: The Department spends more than \$1 billion per year providing physical security for its facilities and related materials and data. Of this amount, nearly \$700 million per year is spent on a complex-wide protective force staff of nearly 4,000 highly trained professionals. The protective force staff is made up exclusively of contractor personnel retained through different mechanisms. These arrangements, which lack uniformity and consistency, result in at least 25 separate contract instruments, all with costly overhead burdens. We concluded the new budget realities require change and we recommended an in-depth evaluation of available options. These included a “master contract” to provide security at all Department facilities, consolidating protective force contracts by region or Departmental entity, or federalizing the protective force. Protective force contract realignment or some form of federalization may reduce security costs and improve the Department's physical security posture.

### ***Observations***

In your invitation letter, the Subcommittee expressed specific interest in the status of project management at the Department. Your interest reflects a concern that we share and one that is clearly of prime importance to the Department’s senior managers. The Department currently has several major projects, such as the WTP, that are significantly over budget and face considerable delays. As I have testified previously, there are several “common threads” central to these and related contract and project management problems. Improvements are needed to ensure that:

- Project scopes and supporting project cost estimates are realistic and manageable, recognizing the technical challenges facing many Department efforts;
- Change control management is adequate and project baselines are updated on a real-time basis to maintain effectiveness as a primary management tool;
- Contract terms are kept current to track with project events;
- Contractor performance is measured against established metrics, including realistic and reliable cost estimates;
- Federal staffing is sufficient, in terms of size and expertise, to provide effective contract and project oversight; and

- Projects have focused, empowered and consistent Federal Project Manager leadership throughout their lifecycle.

Secretary Moniz recently unveiled a new structure for the Department, which is designed to focus on key programmatic priorities and agency performance and management. We are hopeful that the new initiatives will aid in addressing the Department's management challenges. We look forward to working with Secretary Moniz, Deputy Secretary Poneman, program officials, and the Congress to enhance Departmental efficiency and operations.

Mr. Chairman and Members of the Subcommittee, that concludes my statement and I will be happy to answer any questions you may have.