Special Report

Management Challenges at the Department of Energy

DOE/IG-0832  December 2009
MEMORANDUM FOR THE SECRETARY  

FROM: Gregory H. Friedman  
Inspector General  

SUBJECT: INFORMATION: Special Report on "Management Challenges at the Department of Energy"

BACKGROUND

Responsible for some of the Nation's most important and technically advanced missions, the Department of Energy faces an array of challenges that are more wide-ranging and complex than at any time in its history. While its origins can be largely traced to the Manhattan Project, the Department has evolved into a multi-faceted agency that encompasses a broad range of scientific, environmental, and national security activities. Since its creation under the Department of Energy Organization Act in 1977, the Department has shifted its emphasis and priorities over time as the energy and security needs of the Nation have changed. The Department has recently refocused these efforts, adding particular emphasis on the science and renewable energy components of its portfolio. In this regard, the Department has taken a lead role in the implementation and execution of the energy technology initiatives related to the American Recovery and Reinvestment Act of 2009 (Recovery Act).

As a means of accomplishing these initiatives, the Department received a substantial increase in its annual appropriation, rising from nearly $25 billion in 2008 to approximately $34 billion in 2009 as a result of additional funding in the Department's loan program and numerous science, energy, and national security initiatives. In addition, the Department was provided more than $36 billion in Recovery Act funding to be used over a two to three year period. Further, the Department, through existing authorities and those expanded by the Recovery Act, has been authorized to provide more than $100 billion in loan guarantees for innovative, clean energy technologies. To accomplish its vital missions, the Department employs approximately 115,000 Federal and contractor personnel and manages assets valued at more than $189 billion, including the 17 national laboratories at the heart of its science program.

On an annual basis, the Office of Inspector General is required to identify what it considers to be the most significant management challenges facing the Department. Our effort addresses new or emerging issues and evaluates the Department's progress in resolving previously identified challenges. The challenges identified by this process represent risks inherent in the Department's wide ranging and complex operations, as well as those related to problems with specific management processes. As noted in past reports, we recognize that often these challenges cannot be resolved in a single year and must, therefore, be addressed through a concentrated, persistent
effort over time. Consistent with our mission, the overall goal is to focus attention on significant
issues with the objective of working with Department managers to enhance the effectiveness of
agency programs and operations.

RESULTS

During the past year, the Department has taken a number of actions to promote its ongoing
strategy of resolving the management challenges identified in our prior reports. There have been
many notable advances. However, in our judgment, on the basis of the results of our work
during the past year and other risk assessment tools, the following management challenges
remain for Fiscal Year (FY) 2010:

- Contract Administration
- Cyber Security
- Energy Supply
- Environmental Cleanup
- Safeguards and Security
- Stockpile Stewardship

In addition, we have identified a "watch list," consisting of issues that do not currently meet our
threshold of being classified as management challenges, but warrant continued attention by
Department management. This year, the watch list includes: Infrastructure Modernization and
Worker and Community Safety. As noted above, the basis for these challenges is formed, in
large part, from the reports we have issued over the past year, which can be viewed at:
http://www.ig.energy.gov/.

As with a number of Federal agencies, the Department received an unprecedented infusion of
funds as a result of the Recovery Act. These funds, along with the overarching goals set forth in
the Act, were transformative in nature. On a positive note, the Department and its staff have
been energized by the new and evolving programmatic initiatives resulting from the Recovery
Act. However, as would be expected in an effort of this magnitude, the Department has
experienced significantly increased management stresses and strains, impacting virtually every
program and operation. In fact, the essentially unavoidable burden placed on existing human
capital and other resources has, in our judgment, affected the Department's ability to resolve its
existing management challenges, at least in the near term. To capture these emerging factors, as
part of this report, we have added two additional Departmental management challenges:

- Recovery Act Implementation
- Human Capital Management

Recovery Act Implementation

Signed by the President on February 17, 2009, the Recovery Act seeks to strengthen the U.S.
economy through the creation of new jobs, aiding State and local governments with budget
shortfalls, and investing in the long-term health of the Nation's economic prosperity. Intended to
have an immediate stimulative impact, the Department's stated goal is to ensure that these funds
are spent as expeditiously as possible. This effort, along with the necessity of providing effective management in subsequent years, represents a substantial increase in workload for virtually all Department programs and will undoubtedly strain existing resources.

In addition to injecting a significant amount of funding into Department programs, the requirements for agencies to implement unprecedented levels of transparency and accountability will present challenges that even the most well-managed programs may find daunting. Under these circumstances and based on past experience, we identified a number of activities that need to be closely managed to help ensure that they satisfy Recovery Act goals. These areas include funding accountability and reporting, awarding and monitoring of grants and cooperative agreements, contract management, and management of loan programs.

Shortly after the signing of the Recovery Act, the Office of Inspector General issued a report entitled, "The American Recovery and Reinvestment Act and the Department of Energy" (http://www.ig.energy.gov/documents/OAS-RA-09-01-New508-G.pdf), the primary aim of which was to provide the Department with "lessons learned" and risks that should be considered as activities progressed. Our review outlined the immediate impact that the Recovery Act would have on the inherent risks associated with operating the Department's sizable portfolio of missions and activities. If these challenges are to be met successfully, all levels of the Department's structure and its many constituents, including the existing contractor community; the national laboratory system; state and local governments; community action groups and literally thousands of other contract, grant, loan and cooperative agreement recipients throughout the Nation will have to strengthen existing or design new controls to safeguard Recovery Act funds.

A subsequent review revealed that the Department had taken a number of positive and proactive steps designed to help ensure that Recovery Act funds were properly managed. While the internal controls detailed in our "Special Report on the Department of Energy's Efforts to Meet Accountability and Performance Reporting Objectives of the American Recovery and Reinvestment Act" (http://www.ig.energy.gov/documents/OAS-RA-09-04.pdf) were promising, we found that additional identified actions and sustained effort are necessary to ensure that the Department can satisfy all reporting, transparency, and accountability requirements. In particular, at the time of our review, reporting systems capacity and accuracy had not been verified, recipient reporting capabilities had not been determined, job creation estimating methods had not been coordinated across all programs, and a significant portion of Recovery Act performance measures were not quantifiable.

Most recently, in a report entitled "Selected Department of Energy Program Efforts to Implement the American Recovery and Reinvestment Act" (http://www.ig.energy.gov/documents/OAS-RA-10-03.pdf), the Office of Inspector General sought to determine whether the Department's major program elements had developed an effective approach for identifying and mitigating risks related to achieving the goals and objectives of the Recovery Act. We recognized that the Department had initiated a number of efforts to help ensure that it achieves the transparency and accountability objectives of the Recovery Act. In particular, the Department is actively involved in identifying program and activity-specific risks and has developed plans to address those risks. In addition, the Department developed program and project-level operating plans for each of its
major program elements detailing its risk mitigation strategies, internal controls, performance measures, and methods for the collection and reporting of data. As with our previous reports in this critical area, additional effort is necessary to help ensure that all funds are properly and promptly obligated and expended for their intended purposes.

The Recovery Act will undoubtedly continue to have a significant impact on the operations and activities of the Department and, in turn, the Office of Inspector General. The passage of this legislation makes this an eventful period for the Department, particularly in the area of scientific discovery and innovation. Given the importance of the Recovery Act's initiatives and the sheer amount of funding provided, the successful implementation and management of the Recovery Act is of paramount importance and represents a significant management challenge for the foreseeable future.

*Human Capital Management*

For a number of years, strategic management of human capital has been recognized by various government authorities and oversight organizations as one of the Government's most glaring problems. In the past, officials have recognized that the Department's staff lacked adequate project and contract management skills required to oversee large projects. Subsequently, the Department undertook an effort to perform a critical skills gap analysis to review and evaluate specific needs. These actions led to our removal, in FY 2009, of the human capital focus area from our management challenges. With the passage of the Recovery Act and the increased workload associated with its implementation, the Department faces a significant workforce deficit and must move to address the challenge of maintaining a highly skilled workforce with the technical knowledge to perform its new and expanded mission. As such, we believe that the risks in this area have increased substantially and that it has once again become a critical area that will challenge all major program elements.

A specific area of concern, particularly in light of the rapid infusion of funds under the Recovery Act, centers on the Department's acquisition workforce. As a follow-up to a September 2007 review, the Office of Inspector General issued a report in March entitled, "The Department of Energy's Acquisition Workforce and its Impact on Implementation of the American Recovery and Reinvestment Act of 2009" ([http://www.ig.energy.gov/documents/IG-RA-09-02.pdf](http://www.ig.energy.gov/documents/IG-RA-09-02.pdf)). The general conclusion of our 2007 review was that the Department's budget, procurement obligations, and the number of procurement actions had risen steadily in recent years, while the number of contract specialists to oversee and execute these functions had remained relatively constant. As a result of the Recovery Act and its significant impact on Department operations, we decided to update our analysis through 2008 to determine if the size of the procurement workforce had changed in the intervening period.

We found that since our initial review the Department had, in fact, increased the number of contract specialists by 20 percent. However, as was the case at the time of our original review, procurement obligations within the Department have continued to rise steadily in recent years, increasing demands on the procurement workforce. In the environment currently facing the Department, ensuring transparency, accountability, and high quality program management requires the services of experienced, well-trained contract specialists. Over the last two years, the
Department has made progress in expanding its roster of professionals in this field. We concluded that the Department staffing efforts should continue and, in fact, be intensified. Given the Department's almost total reliance on the acquisition process (contracts, grants, cooperative agreements, etc.) to carry out its mission, enhanced focus on contract administration and, specifically, the work performed by Federal acquisition officials is of vital importance as the unprecedented flow of funds continues under the Recovery Act.

According to the Department, it will need to hire more than 5,000 new employees in the next four years to maintain its workforce. In a number of program areas, problems with identifying, attracting, and maintaining the staff necessary to complete Recovery Act-related functions have been identified as significant programmatic risks. These shortages are not limited to Federal staff, but extend to contractors and peer reviewers needed to process and evaluate the many applications for the use of Recovery Act funds. The simple act of hiring a significant number of new employees is a challenge in itself. Successfully acquiring the caliber of employee necessary to accomplish the Department's diverse set of missions poses an even greater challenge. As a result, human capital management will continue to be a significant challenge area that will, at a minimum, require significant attention for the term of the Recovery Act program design and execution.

Attachments

cc: Deputy Secretary
    Under Secretary for Science
    Under Secretary for Energy
    Administrator, National Nuclear Security Administration
    Chief Financial Officer
    Chief of Staff
### Challenge Areas and Significant Issues Reported by Various Groups

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#### OIG Watch List

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¹ According to *Major Management Challenges and Program Risks*, Department of Energy (GAO-03-100, January 2003).

Relevant Reports Issued in Fiscal Year 2009

**Recovery Act Implementation**


**Contract Administration**

- Audit Report on "Management Controls over the Use of Service Contracts at the Office of River Protection," (OAS-M-09-02, April 29, 2009).

**Cyber Security**


**Energy Supply**

• Audit Report on "Bonneville Power Administration's Acquisition of Transmission-Related Materials and Equipment," (IG-0824, September 29, 2009).
• Audit Letter Report on "Controls over Royalty Oil Exchanges," (OAS-L-09-07, April 30, 2009).

**Environmental Cleanup**

• Audit Letter Report on "Mixed Low-Level Waste Disposal within the Department of Energy," (OAS-L-09-17, September 28, 2009).
• Audit Report on "Potential Uses for Depleted Uranium Oxide," (IG-0810, January 9, 2009).

**Human Capital Management**


**Safeguards and Security**

• Inspection Report on "Personal Property Management at Lawrence Livermore National Laboratory," (INS-O-09-03, May 28, 2009).
• Inspection Report on "Internal Controls over Accountable Classified Removable Media at Oak Ridge National Laboratory," (INS-O-09-02, April 30, 2009).
• Audit Report on "Management Controls over the Department's Excess Weapons Inventories and Selected Sensitive Equipment used by Protective Forces," (OAS-M-09-01, January 22, 2009).
• Inspection Report on "Security Clearances at Lawrence Livermore National Laboratory and Sandia National Laboratory," (INS-O-09-01, December 11, 2008).
• Inspection Letter Report on "Department of Energy Activities Involving the President's Surveillance Program," (INS-L-09-01, November 6, 2008).

**Stockpile Stewardship**

• Audit Letter Report on "Follow-Up Audit of the Stockpile Surveillance Program," (OAS-L-09-16, August 20, 2009).

**Worker and Community Safety**

• Inspection Report on "Fire Suppression and Related Services at Los Alamos National Laboratory," (IG-0821, September 11, 2009).
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