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BREATHING FUMES: A DECADE OF FAILURE IN ENERGY DEPARTMENT ACQUISITIONS

HEARING

BEFORE THE

COMMITTEE ON GOVERNMENT REFORM

HOUSE OF REPRESENTATIVES

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

MARCH 20, 2003

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BREATHING FUMES: A DECADE OF FAILURE IN ENERGY DEPARTMENT ACQUISITIONS

THURSDAY, MARCH 20, 2003

HOUSE OF REPRESENTATIVES,
COMMITTEE ON GOVERNMENT REFORM,
Washington, DC.

The committee met, pursuant to notice, at 11 a.m., in room 2157, Rayburn House Office Building, Hon. Tom Davis (chairman of the committee) presiding.

Present: Representatives Tom Davis, Duncan, Waxman, Maloney, Tierney, Clay, Watson, Van Hollen, Sanchez, Ruppersberger, Norton, Cooper, and Bell.

Staff present: Melissa Wojciak, deputy staff director; Ellen Brown, legislative director and senior policy counsel; Scott Kopple, deputy director of communications; Teresa Austin, chief clerk; Joshua E. Gillespie, deputy clerk; Corinne Zaccagnini, chief information officer; Ryan Voccola, assistant; Phil Barnett, minority chief counsel; Paul Weinberger, minority counsel; Karen Lightfoot, minority communications director/senior policy advisor; Mark Stephenson, minority professional staff member; Earley Green, minority chief clerk; and Jean Gosa, minority assistant clerk.

Chairman TOM DAVIS. I am going to start by recognizing my ranking member, Mr. Waxman, for an opening statement, and then I will move ahead. Thank you.

Mr. WAXMAN. Mr. Chairman, I would like to begin by thanking you for holding this important hearing today. Given the Energy Department's long, disturbing history of contract and project management, or mismanagement, congressional oversight is essential. I hope that the information the Committee learns today will help us do a better job monitoring DOE's acquisition management.

DOE has a unique and uniquely challenging mission. Its work includes maintaining the country's nuclear weapons stockpile, cleaning up environmental contamination, and promoting leadership and science. All of these jobs are essential and many involve cutting-edge work. There is no doubt that the Department has had some success stories. Unfortunately, contract and project management have not been among them. In fact, the Department's record of overseeing contractors and making sure that work gets done on schedule, within the budget, and without jeopardizing safety or the environment is appalling.

Take, for example, the Superconducting Super Collider. DOE's original cost estimate for the Super Collider grew from $5.9 billion to over $8 billion in just 1 year. By the time the project was termi-

nated by Congress in 1993, $2 billion had been spent and GAO had estimated the total cost at over $11 billion.

Or consider DOE's Savannah River site in South Carolina, which became operational in 1951. Millions of gallons of liquids containing highly radioactive waste accumulated in storage tanks over the years. The Department and its contractor spent 10 years and almost a half a billion dollars before deciding that their plan to clean up the contamination at Savannah River was a failure.

And then there is the Paducah Gaseous Diffusion Plant in Kentucky, where decades of unsafe and possibly illegal contractor practices have resulted in a public health and environmental catastrophe. It is still not clear how many workers at Paducah have suffered or will suffer serious health consequences or even death because they were unknowingly exposed to very hazardous, high radioactive substances. I hope that today we will be able to find out a little bit more about the Department's cleanup efforts at Paducah.

I could go on. The list of contract failures at DOE is a long one. So, unfortunately, is the list of DOE's promises to reform itself. Since the mid-1990's, the Department has repeatedly pledged to improve the way it designs and manages contracts and projects. Today we will learn whether and to what extent these reforms are succeeding. So far, however, the evidence is not very promising.

For over a decade, GAO has classified the Department's contract and project management as at high risk for fraud, waste, abuse, and mismanagement. In 1999, the National Research Council reported that DOE's construction and cleanup projects take much longer and cost 50 percent more than comparable projects at other agencies or in the private sector. And just last year the Department admitted that its entire environmental management program was a failure. That program manages cleanup operations at over 114 nuclear weapons sites covering an area of over 2 million acres. In 1998, DOE estimated that the life-cycle cost for the cleanup program was $147 billion; 4 years later, it admitted that the estimate could easily increase to more than $300 billion.

The purpose of today's hearing is not to place blame, particularly in cases where DOE has openly admitted its shortcomings. It is to make sure that DOE is capable of handling its many complex, challenging, and essential projects and contracts; and it is to ensure that the public can count on the Department and its contractors to get the job done on time, on budget, and without jeopardizing the environment or the health and safety of workers and the community.

Thank you, Mr. Chairman, again, for holding this important hearing, and I thank the witnesses for appearing on short notice.

[The prepared statement of Hon. Henry A. Waxman follows:]

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INDEPENDENT

Statement of Rep. Henry A. Waxman
Hearing on
DOE Contracting Problems

March 20, 2003

Mr. Chairman, I'd like to begin by thanking you for holding this important hearing today. Given the Energy Department's long, disturbing history of contract and project management – or mismanagement – congressional oversight is essential. I hope that the information the Committee learns today will help us do a better job monitoring DOE's acquisition management.

DOE has a unique and uniquely challenging mission. Its work includes maintaining the country's nuclear weapons stockpile, cleaning up environmental contamination, and promoting leadership in science. All of these jobs are essential and many involve cutting-edge work. There's no doubt that the Department has had some success stories. Unfortunately, contract and project management have not been among them. In fact, the Department's record of overseeing contractors and making sure that work gets done on schedule, within the budget, and without jeopardizing safety or the environment, is appalling.

Take, for example, the Superconducting Super Collider. DOE's original cost estimate for the Super Collider grew from $5.9 billion to over $8 billion in just one year. By the time the project was terminated by Congress in 1993, $2 billion had been spent and GAO had estimated the total cost at over $11 billion.

Or consider DOE's Savannah River site in South Carolina, which became operational in 1951. Millions of gallons of liquids containing highly radioactive waste accumulated in storage tanks over the years. The Department and its contractor spent ten years and almost half a billion dollars before deciding that their plan to clean up the contamination at Savannah River was a failure.

And then there is the Paducah Gaseous Diffusion Plant in Kentucky, where decades of unsafe and possibly illegal contractor practices have resulted in a public health and environmental catastrophe. It's still not clear how many workers at Paducah have suffered or will suffer serious health consequences – or even death – because they were unknowingly exposed to very hazardous, highly radioactive substances. I hope that today we will be able to find out a little more about the Department's cleanup efforts at Paducah.

-over-

I could go on. The list of contract failures at DOE is a long one. So, unfortunately, is the list of DOE promises to reform itself. Since the mid-1990s, the Department has repeatedly pledged to improve the way it designs and manages contracts and projects. Today we will learn whether and to what extent those reforms are succeeding. So far, however, the evidence is not very promising.

For over a decade, GAO has classified the Department's contract and project management as at high risk for fraud, waste, abuse, and mismanagement. In 1999, the National Research Council reported that DOE's construction and cleanup projects take much longer and cost 50% more than comparable projects at other agencies or in the private sector. And just last year, the Department admitted that its entire environmental management program was a failure. That program manages cleanup operations at over 114 nuclear weapons sites covering an area of over 2 million acres. In 1998, DOE estimated that the life-cycle cost for the cleanup program was $147 billion. Four years later, it admitted that the estimate "could easily increase to more than $300 billion."

The purpose of today's hearing is not to place blame, particularly in cases where DOE has openly admitted its shortcomings. It is to make sure that DOE is capable of handling its many complex, challenging, and essential projects and contracts. And it is to ensure that the public can count on the Department and its contractors to get the job done on time, on budget, and without jeopardizing the environment or the health and safety of workers and the community.

Thank you again, Mr. Chairman, for holding this important hearing. And I thank the witnesses for appearing on short notice.

Chairman TOM DAVIS. Thank you, Mr. Waxman.

I want to welcome everybody to today's oversight hearing on DOE's troubled acquisition management functions.

The Department of Energy is a unique agency with rare challenges. The Department is tasked with diverse missions such as assuring that the Nation's nuclear weapons stockpile is safe and reliable, cleaning up radioactive and hazardous waste, fostering a secure and reliable energy system, and performing world-class scientific research. The terror attack of September 11th and recent energy shortages have further compounded the Department's challenges.

To further complicate matters, DOE depends on contractors to operate its sites and carry out its crucial missions. The Department contracts for designing, constructing, and operating huge multimillion dollar facilities. The statistics are truly amazing. DOE is the largest civilian contracting agency in the Government. Approximately $18 billion of DOE's annual appropriations of about $21 billion is spent on contracts. Of that amount, about $16 billion is expended on contracts to manage and operate 28 major DOE sites. The agency has a work force of about 16,000 employees. A far larger work force, over 100,000 contractor staff, actually perform the bulk of the Department's work. Thus, it is particularly distressing that the Department's acquisition management has been included on the GAO's high risk list of government functions susceptible to fraud, waste, abuse, and mismanagement, and tops the DOE Inspector General's list of seven key management challenges.

Our hearing this morning will build on the work done by both the GAO and the IG on the difficulties experienced by DOE in managing its acquisitions and the Department's related problems in running its complex and critical programs. For over a decade, GAO and the DOE IG have criticized the Department's acquisition practices, particularly the Department's inadequate contract management and oversight and its failure to hold its contractors accountable for results. Poor performance of DOE contractors has led to schedule delays and cost increases on many of the Department's critical projects.

The good news is DOE has established a fairly extensive acquisition reform program in an attempt to remedy its problems. The Department is aiming its reform efforts to three key elements of acquisition: (1) alternative contract approaches, (2) increased competition, and (3) the use of performance-based contracting. The bad news is that, at best, the results are mixed. At worst, according to the GAO, the Department does not have the objective performance information. Thus, the Department may not even know whether its reforms are really working.

How can this rather depressing state of affairs be improved? GAO thinks that a good start would be to get a genuine handle on exactly where DOE stands in its current reform program. Then DOE should apply effective management practices used by high-performing organizations to reform program. To begin with, DOE should set clearly established goals and develop an implementation strategy that sets milestones and establishes responsibility.

Given the critical nature of DOE's programs and the huge dollars involved, it is imperative that DOE resolve these issues without

delay. Today we hope to explore the root causes of its perennial acquisition management difficulties, the viability of their acquisition reform program and whether it is reasonable to expect significant improvement in DOE's acquisition management program results in the near future. We wonder whether DOE has acquisition professionals with the right training and skills to manage its giant portfolio of complex contracts. To help us understand the complex issues surrounding their contracting, we will hear today from an expert in this area from the GAO and from the DOE Inspector General. A witness from DOE will give us the Department's side of the story.

In closing, I want to emphasize the committee will continue to follow DOE's efforts to reform its acquisition management. I would like to acknowledge my good friend and ranking member of this committee, Mr. Waxman, for his keen interest on this issue. It is at his suggestion that we are holding this hearing this morning.

[The prepared statement of Chairman Tom Davis follows:]

Opening Statement of Chairman Tom Davis
Hearing on "Breathing Fumes: A Decade of Failure in Energy Department Acquisitions"
Committee on Government Reform
March 20, 2003, following 10:00 a.m. Markup
Room 2154 Rayburn House Office Building

Good morning, I would like to welcome everyone to today's oversight hearing on the Department of Energy's (DOE) troubled acquisition management function. DOE is a unique agency with rare challenges. The Department is tasked with diverse missions such as assuring that the Nation's nuclear weapons stockpile is safe and reliable, cleaning up radioactive and hazardous wastes, fostering a secure and reliable energy system, and performing world-class scientific research If this were not enough, the terror attacks of 9/11 and the recent energy shortages have further compounded the Department's challenges.

To further complicate matters, DOE depends on contractors to operate its sites and carry out its crucial missions. The Department contracts for designing, constructing, and operating huge, multimillion-dollar facilities. The statistics are truly amazing. DOE is the largest civilian-contracting agency in the government. Approximately $18 billion of DOE's total annual appropriation of about $21 billion is spent on contracts. Of that amount, about $16 billion is expended on contracts to manage and operate 28 major DOE sites. DOE has a workforce of about 16,000 employees. A far larger workforce, over 100,000 contractor staff, actually performs the bulk of the Department's work. Thus, it is particularly distressing that the Department's acquisition management has been included on the General Accounting Office's (GAO) High Risk list of government functions susceptible to fraud, waste, abuse, and mismanagement and tops the DOE Inspector General's (IG) list of seven key management challenges.

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does not have objective performance information. Thus, the Department may well not even know whether its reforms are working.

How can this rather depressing state of affairs be improved? GAO thinks that a good start would be to get a genuine handle on exactly where DOE stands in its current reform program. Then DOE should apply effective management practices used by high-performing organizations to its reform program. To begin with DOE should set clearly established goals and develop an implementation strategy that sets milestones and establishes responsibility.

Given the critical nature of DOE's programs and the huge dollars involved it is imperative that DOE resolve these issues without delay. Today we hope to explore the root causes of DOE's perennial acquisition management difficulties, the viability of DOE's acquisition reform program and whether is it reasonable to expect significant improvement in DOE's acquisition management and program results in the near future? We wonder whether DOE has acquisition professionals with the right training and skills to manage its giant portfolio of complex contracts? To help us understand the complex issues surrounding DOE contracting we will hear today from an expert in this area from the GAO and from the DOE Inspector General. A witness from DOE will give us the Department's side of the story.

In closing I would like to emphasize that the Committee will continue to follow DOE's efforts to reform its acquisition management. I would like to acknowledge my good friend and ranking Member on this Committee Mr. Waxman for his keen interest in this issue. It is at his suggestion that we are holding this hearing this morning.

Chairman TOM DAVIS. I now yield to any other Members who may wish to make opening statements.

Yes, Mr. Ruppersberger.

Mr. RUPPERSBERGER. Mr. Chairman, thank you for calling this hearing today.

Accountability is the question today: Is the Department of Energy holding contractors who do nearly all the work for DOE accountable for their work?

I was a former county executive. In that role, accountability was extremely important to me. If you did not perform your job, if the subcontractors were not performing, they were eventually terminated. If you were not doing your job well, we found ways to make sure that you did your job well. We have to remember the Government is basically a customer-based business. We are in the business of making sure that we provide Government services safely and efficiently.

For the past decade, the Department of Energy has come under fire from GAO and the DOE IG Office for Mismanagement. Today hopefully we will learn more about what the Department is doing to fix these problems, holding our subcontractors accountable for performance. Now, more than ever, we have to make sure that our energy supply is safe. We have to make sure that delivery of energy service is not interrupted and that we are properly disposing of waste.

Again, thank you, Mr. Chairman, for holding this hearing.

Chairman TOM DAVIS. Thank you very much.

Any other opening statements?

Mr. DUNCAN. Mr. Chairman, very briefly.

Chairman TOM DAVIS. The gentleman from Tennessee.

Mr. DUNCAN. Well, first of all, I thank you for calling this hearing, because this is a very important topic considering the fact that $18 billion out of the $21 billion budget of the Department of Energy is done by contractors. But I want to read just this one sentence from a briefing paper. It says: "For over a decade, GAO and the DOE IG have criticized the Department's acquisition practices, particularly the Department's inadequate contract management and oversight, and its failure to hold its contractors accountable for results." And they talk about all sorts of cost overruns and schedule delays.

It is a very, very poor record, and, you know, most people across the country just can't understand why the Federal Government continues to enter into contracts with contractors and not set specific figures, and then to allow all these huge cost overruns. We have just heard the testimony about the contractor to hire Federal screeners. Of course, that is another department, but that contract was supposed to cost $107 million and it ended up costing over $700 million, a more than $600 million cost overrun. And we just can't continue to allow these things to go on and on and on and on.

So I thank you for calling this very important hearing today, Mr. Chairman. I yield back the balance of this time.

Chairman TOM DAVIS. Mr. Duncan, thank you very much.

Any other opening statements?

If not, I would like to move to our panel of witnesses. We have James A. Rispoli, the Director of Engineering and Construction Management at the Department of Energy; we have Robin Nazzaro, the Director of Natural Resources and Environment of the General Accounting Office; and Greg Friedman, Inspector General of Department of Energy.

It is the policy of our committee that all witnesses be sworn before they testify. Would you please rise and raise your right hands? And if you have any other staff that might testify with you, they can rise with you.

[Witnesses sworn.]

Chairman TOM DAVIS. Thank you very much.

In order to allow time for questions and discussion, we would like you to limit your testimony to 5 minutes. We have a light in front. When it turns on, you have a minute left; and when it turns red your time is up and we would appreciate your summing up. We have your whole statements in the record, and Members have presumably read it and the staffs have, and we have questions crafted on the total testimony.

Let me start with Mr. Rispoli, followed by Ms. Nazzaro, and then Mr. Friedman.

Thanks for being with us.

STATEMENT OF JAMES A. RISPOLI, DIRECTOR, OFFICE OF ENGINEERING AND CONSTRUCTION MANAGEMENT, U.S. DEPARTMENT OF ENERGY

Mr. RISPOLI. Good morning Mr. Chairman, members of the committee. I am pleased to be here to discuss acquisition and project management at the Department of Energy.

The Department takes the concerns raised by both the General Accounting Office and the Office of the Inspector General in their recent reports on major management challenges very seriously. Frankly, we agree with these independent assessments and are taking actions to aggressively address not only the management challenges, but all of the challenges contained in these reports. In fact, after being briefed by the GAO and the IG on these reports, the Deputy Secretary has directed his senior executives to develop timely, coordinated, and comprehensive action plans to address these challenges. He is personally tracking those corrective actions monthly, and expects them to be resolved prior to the next series of GAO and IG reports on management challenges. The Comptroller General and the Department's Inspector General have indicated their support for working with us in development of corrective action plans to ensure these challenges are resolved once and for all.

My own focus, I joined the Department 3 years ago from industry, in management of engineering and construction, and our focus of my office has been in the area of project management, one of the key concerns raised by the GAO and the IG. I would like to provide a brief overview of where DOE now stands with respect to its project management activities.

Secretary Abraham has identified project management as an overarching theme affecting all of its major program activities, whether it involves high energy physics, weapons maintenance and development, environmental remediation, or other energy projects.

It is very important, therefore, to conduct these projects within a disciplined framework to ensure that project goals, including cost, schedule, and performance, are monitored and achieved. I would like to now tell you what we have done and are doing to accomplish this.

In October 2000, the Department issued a directive on Program and Project Management for the Acquisition of Capital Assets. It provides a framework to identify projects based on mission need; conduct appropriate acquisition planning; develop alternative acquisition approaches; accomplish other essential project planning, including risk assessment; establish realistic cost and schedule baselines; and track and measure the execution of projects to those baselines.

The Deputy Secretary has directed that all new projects must be approved by a designated senior official; that is, all projects, $5 million and above, must be approved by either him or an Under Secretary or an Assistant Deputy Secretary. Once that project is approved, the acquisition strategy and evaluation of alternatives must be approved by the same level of approval official.

This is a significant change from what it was before. Knowing that a program's strategy will be questioned by senior management at that level is driving more thorough analysis, consideration of acquisition alternatives, the full range of acquisition alternatives, increased risk management, and better integration of project and acquisition practices. Cultural change is very difficult. We continue to push hard to effect these changes.

Additionally, there are other significant actions we have undertaken in the past 2 years, and they include the following: each project now contains measurable performance outcomes; metrics are provided monthly to the Deputy Secretary and senior management officials on every project above $5 million, that is the requirement; executive level management reviews of all major projects are required quarterly; portfolio performance metrics, showing performance and trends by Program Secretarial Office, are provided to the Deputy Secretary on monthly basis, it focuses senior-most attention on program accountability. The Department conducts external reviews to verify cost, schedule, and technical performance aspects of all projects above $5 million before they go in the budget, effective October 2000.

The Department recently implemented a major new developmental program for the improvement of Federal project management skills. We will begin certifying project managers this year by competency level. This initiative builds on a prior program established about 5 years ago for contracting officers. With the addition of project managers to that program, DOE is one of the very few agencies, outside of DOD, to have an umbrella program for certification of both contracting officials and project management officials.

A few other initiatives that we are pursuing. The Department has an aggressive target that 85 percent, this year, of its projects be performing within 10 percent of cost and schedule targets. Two years ago, the Department had no capability to track, assess, and report on our project portfolio. In fact, we did not have a list of our project portfolio. Today we have that list, and we are performing

at 74 percent within those cost and schedule targets as tracked against baselines in effect since January 2002.

We are institutionalizing the requirements of that October 2000 directive on project management into a more comprehensive Project Management Manual. I would like to point out to you that the management practices in this manual are strongly supported by the National Academy of Science's committee on oversight of DOE project management and they implement OMB's Capital Programming Guide, which is found in the statute.

To provide a strong focus on these initiatives, the Deputy Secretary, as I mentioned, is doing quarterly reviews with his senior management officials. Additionally, the Secretary has established a Blue Ribbon Commission to review and recommend criteria that can be used in the future to support decisions on re-competing or extending laboratory M&O contracts.

In conclusion, on behalf of Secretary Abraham and his management team, allow me to affirm DOE's commitment to build on these initiatives and work with this committee to improve the overall accomplishment of the Department's missions.

This concludes my formal remarks. I would be happy to respond to your questions.

[The prepared statement of Mr. Rispoli follows:]

STATEMENT OF JAMES A. RISPOLI
DIRECTOR, OFFICE OF ENGINEERING AND CONSTRUCTION MANAGEMENT
U.S. DEPARTMENT OF ENERGY

BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON GOVERNMENT REFORM

10:00 AM Thursday, March 20, 2003

Good morning Mr. Chairman. I am pleased to be here to discuss acquisition and project management at the Department of Energy. The Department takes the concerns raised by the General Accounting Office and the Office of Inspector General in their recent reports on major management challenges very seriously. Frankly, we agree with these independent assessments and are taking actions to aggressively address not only the management challenge on contract management, but all of the challenges contained in these reports. In fact, after being briefed by the GAO and the IG on these reports, the Deputy Secretary directed his senior executives to develop timely, coordinated, and comprehensive action plans by April 15 to address these challenges. He is personally tracking these corrective actions monthly, and expects them to be resolved prior to the next series of GAO and IG reports on management challenges. The Comptroller General and the Department's Inspector General have indicated their support for working with us in the development of corrective action plans to ensure these challenges are resolved once and for all.

The Department's acquisition management problems are grounded not only in pure contracting disciplines, but in other areas directly affecting acquisition programs, notably project and program management.

My focus has been in the area of project management, one of the key concerns raised by GAO and the IG. I would like to provide a brief overview of where DOE now stands with respect to its project management activities.

Secretary Abraham has identified project management improvement as an overarching theme affecting all of its major program activities, whether they involve high energy physics research, weapons maintenance and development, environmental remediation, or alternative energy sources. Many of these projects are inherently high risk, difficult to estimate in terms of cost, and complex both in terms of technology applications as well as safety management implications. It is, therefore, important to conduct these projects within a disciplined framework to ensure that project goals, including cost, schedule, and performance are monitored and

achieved. It is also important to know when and why these goals are not being achieved in order to provide senior management and Congress with the necessary visibility to make sound investment decisions. Here is what we have done and are doing to accomplish this.

In October 2000, the Department issued a directive on Program and Project Management for the Acquisition of Capital Assets. This prescribes a process to be followed by federal employees in the execution of DOE projects. The directive was the result of broad recognition of the need for improvement in the management of the Department's projects, documented by two studies of the Department's project management by the National Academy of Science and reviews by the IG, the General Accounting Office, and the Congress.

The directive provides a framework to: identify projects based on mission need; conduct appropriate acquisition planning; develop alternative acquisition approaches; accomplish essential project planning, including risk assessment; establish a realistic cost and schedule baseline; and track and measure the execution of the project to the established baseline.

Acting in response to the President's Management Agenda, the Department is aggressively emphasizing several core management principles to strengthen this directive. First and foremost the Deputy Secretary has directed that all new projects must be approved by a designated senior management official. That is, all projects above $5 million must be approved by an Assistant Secretary, an Under Secretary or the Deputy Secretary. Once a project is approved, the Acquisition Strategy must be approved by that same authority.

These are significant changes. They represent a departure from traditional Departmental practices. Mandating senior executive approval for these two critical points forces rigorous up front planning. Knowing that a program's strategy will be questioned by senior management is driving more thorough analysis, consideration of a range of acquisition alternatives, increased risk management, and better integration of project and acquisition practices. Culture change is always difficult. We continue to push hard to effect these changes.

Some of the most significant actions we have undertaken in the past two years to improve Project and Acquisition Management include the following:

- Each project contains measurable performance outcomes; performance is measured, and performance metrics are provided monthly to the appropriate executive official.
- Executive level management reviews of all major projects are required quarterly. This demonstrates management commitment, facilitates early identification of problems, and focuses attention on solutions.
- Portfolio performance metrics, showing performance and trends by Program Secretarial Office, are provided to the Deputy Secretary on a monthly basis. Again, this focuses senior executive attention on Program accountability.
- The Department conducts External Independent Reviews to verify cost, schedule, and technical and performance aspects of all projects above $5 million.
- The Department has recently implemented a major new developmental program for the improvement of federal project management skills. The Project Management Career Development Program includes 26 core and elective courses covering the range of project management skills. Additionally we will begin certifying project managers by competency level this year. This initiative builds on a similar program established for the acquisition workforce. As a result of that initiative, over 85 percent of our contract specialists have achieved professional certification to the level required of specialists in Department of Defense. With this enhancement, DOE is one of the few agencies to have developed a comprehensive career management and certification umbrella program for other workforce disciplines associated with acquisitions.

I would like to discuss other project management initiatives we are currently pursuing:

- The Department is about to launch a significant benchmarking program utilizing the Project Management Institute's Organizational Project Management Maturity Model (OPM3). This benchmarking program will focus on the management competency areas and levels of attainment. OPM3 will be piloted at the Department's Idaho site the week of March 24, 2003. If we find the information useful we will extend this benchmarking effort to other sites during FY 2003.

- The Department has set an aggressive target for FY 2003 that 85 percent of its projects be performing within 10 percent of cost and schedule targets. Two years ago the Department had no capability to track, assess, and report on our project portfolio. Presently we are at 74 percent as tracked against baselines in effect since January 2002.

- We are currently institutionalizing the requirements of the October 2000 directive on project management into a more comprehensive Project Management Manual. I would like to point out that the management practices in this manual are strongly supported by the National Academy of Science's committee on oversight of DOE project management and implement OMB's Capital Programming Guide.

- Utilizing the best management practices contained in the Project Management Manual as a starting point, the Department is developing a Departmental policy for all management initiatives (including acquisitions) that has as its core the establishment of clearly defined goals and results-oriented performance measures to enable a determination of improvements in contractor performance. These best practices are consistent with the recommendations contained in the National Academy of Sciences report on Improving Project Management in DOE.

Going beyond project management, neither contracting nor project disciplines can be wholly effective without good program management. Secretary Abraham is committed to this goal, consistent with the framework provided by the President's Management Agenda. Our various programs are undergoing comprehensive reassessments ranging from reconstituting research portfolios to a major reorganization of our weapons program. One recent example of this significant change in focus is within the Department's environmental management program. In a nutshell, that program has redefined its mission objectives as well as its operational culture. It is no longer being managed as a long term Departmental business line, but rather from a short term remediation and site closure mentality. This has drastically shifted work priorities, resource allocations, and acquisition strategies. As a result, the Department is pressing its contractors for results, expediting site closure, revising performance objectives, and is changing its contract administration focus.

To provide a strong focus on these initiatives, the Deputy Secretary has instituted quarterly reviews with his senior management officials to assess both program and project portfolio performance.

The Secretary has established a Blue Ribbon Commission to conduct an assessment of, and provide recommendations for changes to, the Department's policies and procedures for its laboratory management and operating contracts. This Commission will review and recommend criteria that can be used in the future to support decisions on re-competing or extending laboratory M&O contracts.

On a final note, I would also like to apprise you of the work being done at the Department to develop a comprehensive plan that will for the first time link budget development and execution with performance. The Department has established an outcome-oriented system. We have set a course of action that entails substantive improvement of our performance measurement system, changing our approach to evaluating programs and making decisions, and revamping business management systems to provide the necessary information. When fully implemented, the

management of DOE will be approaching real-time access to all performance metrics, with appropriate financial data, and the capability to "drill down" to specific measures of interest. Conversely, we will be able to summarize metrics at the Department's Strategic Plan goal level, and at a glance, see the progress and status of each goal. This data will be used not only during the budget process, but also serve as an early warning system which will allow managers at all levels to make changes, add resources, or terminate unproductive efforts.

In conclusion, on behalf of Secretary Abraham and his management team, allow me to affirm DOE's commitment to build on these initiatives and work with this Committee to improve the overall accomplishment of the Department's missions.

This concludes my formal remarks. I would be happy to respond to your questions.

Chairman TOM DAVIS. Thank you very much.
Ms. Nazzaro.

STATEMENT OF ROBIN M. NAZZARO, DIRECTOR, NATURAL RESOURCES AND ENVIRONMENT, U.S. DEPARTMENT OF ENERGY

Ms. NAZZARO. Thank you, Mr. Chairman and members of the committee. I am pleased to be here today to discuss the status of contract and project management at the Department of Energy. As we noted earlier, for over a decade, GAO, the IG and others have identified problems with DOE's contracting practices and contractor performance. Projects were late or never finished, and project costs escalated by millions and sometimes billions of dollars. It is in this context my testimony today focuses on, first, DOE's progress in implementing contract and project management reforms; second, the extent to which these reforms have resulted in improved contractor performance; and, third, observations on DOE's latest improvements.

In summary, since the mid-1990's, DOE has implemented a number of initiatives to improve its contracting and management of projects. As you noted, these contract reforms focused on developing alternative contracting approaches, increasing competition, and using performance-based contracts. However, DOE continues to encounter difficulties in implementing these reforms. For example, one of the initiatives now requires performance-based contracts at all of DOE's major sites. These contracts incorporate performance-based statements of work and identify performance measures and objectives that DOE will use to evaluate the contract's performance. However, some of these contracts contained ineffective performance measures. DOE was not focusing on high priority outcomes, was loosening performance requirements over time without adequate justification, and was failing to match appropriately challenging contract requirements with fee amounts. Thus, one could question whether these reforms have resulted in improved contractor performance.

DOE has developed little objective information to demonstrate whether the reforms have improved results. Most of DOE's evidence of progress has been anecdotal. On this basis, DOE can certainly point to some success. However, our analysis suggest that performance problems continue to occur. For example, in September 2002, we reported that based on a comparison of results of major DOE projects in 1996 and 2001, there was no indication of improved performance. In fact, costs increased and schedule delays were actually more prevalent in 2001 than they had been in 1996. Furthermore, problems with individual projects and with site operating contracts continue to appear. Problems are beginning to emerge at the Hanford site in Washington State, where a contract is in place to address the high level tank wastes. We learned recently that although the baseline for this $4 billion project was established in May 2002, as of January of this year the project was already 10 months behind schedule and the contractor was estimating cost increases and other adjustments to this contract that could total over $1 billion.

The limited progress to date is discouraging. DOE has a long way to go before it can claim that its contracting and project management problems are behind it. But we have seen a more promising indication that at least a part of DOE has a better understanding of its problems. DOE's current Environmental Management team has taken encouraging steps that could help to foster improvements in contract and project management. The scope and magnitude of some of the reforms being contemplated indicate to us for the first time that the environmental management team has seen and understood the full extent of the challenges that DOE faces. These actions are encouraging, but making these new policies a matter of practice will require strong leadership, clear lines of accountability and responsibility, and effective management systems to monitor results.

Thank you, Mr. Chairman. That concludes my statement. I would be pleased to respond to any questions you may have.

[The prepared statement of Ms. Nazzaro follows:]

United States General Accounting Office

GAO

Testimony
Before the Committee on Government Reform, House of Representatives

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DEPARTMENT OF ENERGY

Status of Contract and Project Management Reforms

Statement of Robin M. Nazzaro, Director
Natural Resources and Environment

GAO-03-570T

Mr. Chairman and Members of the Committee:

We are pleased to be here today to discuss the status of contract and project management reforms in the Department of Energy (DOE). DOE spends more money on contracts than any other civilian federal agency because it relies primarily on contractors to operate its sites and carry out its diverse missions. These missions include maintaining the nuclear weapons stockpile, cleaning up radioactive and hazardous waste, and supporting basic energy and science research activities. For fiscal year 2001, DOE spent about 90 percent of its total annual budget, or about $18.2 billion, on contracts. Of that amount, DOE spent about $16.2 billion on contracts to manage or operate 28 major DOE sites.

For over a decade, GAO, DOE's Office of Inspector General, and others have identified problems with DOE's contracting practices and the performance of its contractors. Projects were late or never finished; project costs escalated by millions and sometimes billions of dollars; and environmental conditions at the sites did not significantly improve. At the same time, contractors were earning a substantial portion of the profit (fee) available under the contract. Because of these problems, since 1990 we have designated DOE contract management as a high-risk area vulnerable to fraud, waste, abuse, and mismanagement.

To address these and other problems, DOE began a series of reforms in the 1990s that were intended to, among other things, strengthen DOE's contracting and project management practices, hold contractors more accountable for their performance, and demonstrate progress in achieving the agency's missions. In this context, contracting practices include, among other things, selecting the type of contract (such as fixed-price), deciding whether to ask contractors to compete for the contract or offer it only to a single contractor, and determining the performance measures that will be used to assess and reward the contractor's performance. Similarly, project management practices include, among other things, planning, organizing, and tracking project

activities and costs; training to ensure expertise of federal project managers; and project reporting and oversight.

In addition, in February 2002, DOE's environmental management team launched an improvement initiative that places additional emphasis on contracting and project management reforms in the cleanup program, which represents almost a third of the department's overall budget. This initiative followed a review by DOE managers, who concluded that the waste cleanup program was not achieving the desired results and that further improvements were needed to make the program effective, including improvements in contracting and project management.

In this context, my testimony today focuses on (1) describing DOE's progress in implementing contracting and project management reforms, (2) assessing the extent to which these reforms have resulted in improved contractor performance, and (3) providing observations on DOE's latest improvement efforts. My testimony is based on our past work in this area as well as the findings of DOE's Inspector General and the National Research Council, who, at DOE's request, independently reviewed DOE's project management practices.

In summary:

- Since the mid-1990s, DOE has made some progress in implementing initiatives to improve both its contracting practices and its management of projects, but it continues to encounter difficulties in implementing these reforms. Contract reform began in 1994 and consisted primarily of initiatives in three key areas—developing alternative contracting approaches, increasing competition for contracts among potential bidders, and using performance-based incentives in the contracts. For example, DOE now requires performance-based contracts at all of its major sites. These contracts incorporate performance-based statements of work and identify performance measures and objectives that DOE will use to evaluate the contractors' performance. DOE has also increased the proportion of

contractors' fees tied to achieving the performance objectives. Nevertheless, difficulties remain in implementing the reforms. For example, numerous studies and reports found that DOE's performance-based contracts had ineffective performance measures. DOE continues to modify and test its performance measures by, for example, developing multiyear and multisite measures that are more closely aligned with the department's missions. Regarding project management reforms, DOE began its reform effort in 1999 in response to recommendations from the National Research Council that were intended to improve DOE's oversight and management of projects. Among other things, DOE implemented new policy and guidance for developing and controlling projects and established a project office to lead the initiative. However, in November 2001 the National Research Council reported that, although DOE had taken some positive steps to address its recommendations, the department still did not adequately plan projects before starting them and had no training program for federal project managers. DOE is continuing its efforts to implement its project management initiative.

- While DOE has made some progress in implementing its contracting and project management initiatives, available information raises doubts about the extent to which these reforms have resulted in improved contractor performance. DOE has developed little objective information to demonstrate whether the reforms have improved results. However, in September 2002, we reported that, based on a comparison of 25 major DOE projects in 1996 with 16 major projects in 2001,[1] it did not appear that DOE's contractors had significantly improved their performance over the period. In both sets of projects, over half had both schedule delays and cost increases. And the proportion of projects with significant cost increases and schedule delays was actually higher in 2001 than in 1996. For example, 38 percent of the projects we reviewed in 2001 had doubled their initial cost estimates, compared with 28 percent in 1996. Furthermore, problems with

[1] U.S. General Accounting Office, *Contract Reforms: DOE Has Made Progress, but Actions Needed to Ensure Initiatives Have Improved Results*, GAO-02-798 (Washington, D.C.: Sept. 13, 2002).

individual projects and with site operating contracts continue to appear. These include a 3-year delay and $2.1 billion cost increase to submit the license application for the Yucca Mountain waste repository project in Nevada and allegations of contractor fraud, waste, and abuse at the Los Alamos National Laboratory in New Mexico.

- In 2002, we saw DOE's management team take encouraging steps that could help to foster improvements in contract and project management. The Environmental Management program, which administers DOE's waste cleanup program, completed a frank and open assessment of problems with the program and initiated a number of additional reforms. These initiatives included improving contract and project management and streamlining business practices. DOE has also been working on agencywide initiatives, including developing an integrated budgeting and program results information system and placing increased emphasis on human capital initiatives to develop the department's future leaders. Although these management actions are encouraging, making these new policies a matter of practice will require strong leadership, clear lines of accountability and responsibility, and effective management systems to monitor results.

Before I discuss these issues in greater detail, I would like to explain why improving DOE's contracting and project management practices is so important.

Background

DOE's missions include developing, maintaining, and securing the nation's nuclear weapons capability; cleaning up the environmental legacy resulting from over 50 years of producing nuclear weapons; and conducting basic energy and science research and development. The department carries out these diverse missions at over 50 major installations in 35 states. DOE's contractors manage and operate these facilities and sites and undertake the construction of new facilities under the direction of department employees in program offices at DOE headquarters and in its field offices. With a DOE

workforce of about 16,000 employees and over 100,000 contractor staff, the department relies heavily on its contractors to accomplish its missions. Because DOE spends about 90 percent of its annual budget on contracts, DOE's ability to direct, oversee, and hold accountable its contractors is crucial for mission success and overall effectiveness.

In 1990, we designated DOE contract management as a high-risk area vulnerable to fraud, waste, abuse, and mismanagement because DOE relies on contractors to carry out its missions and because of its history of both inadequate management and oversight and failure to hold its contractors accountable for results. In our January 2001 report on DOE's major management challenges, we broadened the definition of contract management to include both contracting and project management.[2] This expanded definition reflects our view that contracting and project management activities and responsibilities are interrelated and that effective performance in both areas is essential if DOE is to achieve its mission goals. In January 2003, we reported that the high-risk designation for DOE contract management still applies.[3]

DOE Has Made Progress in Implementing Contracting and Project Management Reforms, but Difficulties Remain

Since the mid-1990s, DOE has made progress in its efforts to improve both its contracting practices and its management of projects, but the department continues to face problems in implementing these reforms. In 1994, DOE began evaluating its contracting practices and implementing a series of reforms intended to improve results by enhancing contractor performance. Because of continued problems with the management and oversight of DOE's projects, the conference report accompanying DOE's fiscal year 1998 Energy and Water Development Appropriations Act directed DOE to obtain an independent review of its project management capabilities. DOE contracted

[2] U.S. General Accounting Office, *Major Management Challenges and Program Risks: Department of Energy*, GAO-01-246 (Washington, D.C.: Jan. 2001).

[3] U.S. General Accounting Office, *Major Management Challenges and Program Risks: Department of Energy*, GAO-03-100 (Washington, D.C.: Jan. 2003).

with the National Research Council (Council) for this study, and in 1999 began its project management initiative to implement the Council's recommendations.[4]

Contract Reforms Focused on Developing Alternative Contracting Approaches, Increasing Competition, and Using Performance-Based Contracts

As we reported in September 2002, the department has made progress in implementing three key contract reform initiatives—developing alternative contracting approaches, increasing competition, and converting to performance-based contracts--although DOE continues to encounter challenges in implementing these initiatives.[5]

Using Alternative Contracting Approaches

One of the major focuses of DOE's contract reform initiative was to develop alternatives to the traditional contracts used to manage and operate its major sites and facilities. Under these traditional "management and operating" contracts, one primary contractor performed almost all of the work at a site, the contractor had broadly defined statements of work, and DOE reimbursed the contractor for virtually all costs. As a result, work under these contracts focused more on annual work plans and budgets rather than on specific schedule and cost targets for accomplishing work. In implementing alternatives to these contracting arrangements, DOE intended to use the best contracting alternative given the required work and the objectives and risks associated with that work. To accomplish that goal, the department encouraged the use of different contracting approaches, such as fixed-price contracts that would shift the risk for performance to the contractor rather than the government, or "closure contracts," which tie the contractor's fee to cleaning up and closing a site rather than meeting annual targets.

However, DOE did not always systematically determine the best contract type for a given situation and thus experienced problems with implementation. For example, we

[4] National Research Council, *Improving Project Management in the Department of Energy* (Washington, D.C.: June 1999).

[5] U.S. General Accounting Office, *Contract Reform: DOE Has Made Progress, but Actions Needed to Ensure Initiatives Have Improved Results*, GAO-02-798 (Washington, D.C.: Sept. 13, 2002).

reported in May 1998 that DOE's use of fixed-price contracting was appropriate when projects were well-defined and when uncertainties could be allocated between DOE and the contractor.[6] When these conditions did not exist, cost overruns and schedule delays could occur. DOE has used fixed-price contracts for both small, relatively simple projects, such as laundry services, as well as for large, complex cleanup projects. We reported that this approach was generally not successful in controlling costs on large, complex cleanup projects, such as the project to retrieve high-level tank wastes and prepare the wastes for disposal at DOE's Hanford, Washington, site because of the high level of technical uncertainty and risk. To more systematically select the type of contract, DOE has been developing and implementing a formal strategy to evaluate contracting and financing alternatives and the associated business and technical risks before deciding on the best contracting approach.

Increasing Competition

Federal law generally requires federal agencies to use competition in selecting a contractor. However, until the mid-1990s DOE contracts for the management and operation of its sites generally fit within an exception that allowed for the use of noncompetitive procedures. As part of its contract reform initiative, DOE changed its contracting rules to set competition as the standard approach to awarding contracts. Under these revised regulations, the percentage of major site contracts awarded competitively (competed) increased to 56 percent as of 2001, up from 38 percent as of 1996. By 2001, 10 of the 11 contracts that had not been competed were for managing research and development centers which are statutorily exempt from mandatory competition.[7] Despite this exemption, DOE evaluates these contracts towards the end of their current contract term to determine whether they should be extended or competed.

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[6] U.S. General Accounting Office, *Department of Energy: Alternative Financing and Contracting Strategies for Cleanup Projects*, GAO/RCED-98-169 (Washington, D.C.: May 29, 1998).

[7] The one exception was the major site contract for the management of DOE's West Valley Demonstration Project in New York state. According to DOE procurement officials, the contract has been extended because of the limited amount of cleanup work remaining at the site and the lack of interest by other contractors to compete for the work.

DOE has thus far decided on noncompetitive extensions for these contracts for research and development centers, including some for contractors that have experienced performance problems. For example, in 2001, DOE extended the managing and operating contracts with the University of California, the contractor operating Los Alamos and Lawrence Livermore National Laboratories. The University of California has operated these sites for 50 years or more and is the only contractor ever to have operated them. In recent years, we and other organizations have reported significant problems with laboratory operations and management at these two laboratories—particularly in the areas of safeguards, security, and project management.[8] Although congressional committees and others have called for DOE to compete these contracts, DOE so far has opted to address these performance problems with specific contract provisions. However, it remains to be seen whether DOE will be successful in improving the University of California's performance using this approach.

Using Performance-Based Contracts

Before DOE initiated its contract reforms, major site contracts generally had broad statements of work that focused more on annual budgets and work plans rather than specific results to be achieved. Fees under these contracts usually consisted of a base amount that was guaranteed (fixed) plus an award amount that was paid if the contractor met general performance expectations.[9] In the mid-1990s, DOE began restructuring its major site contracts to use results-oriented statements of work and to incorporate performance incentive fees that were designed to reward the contractor if it met or exceeded specific performance expectations in priority areas. As of 2002, DOE reported that all of its major site contracts incorporated performance-based techniques to define requirements and measure results. To further emphasize the importance of the performance-based approach, DOE has increased the proportion of contractor fees tied

[8] For example, see U.S. General Accounting Office, *Department of Energy: Key Factors Underlying Security Problems at DOE Facilities*, GAO/T-RCED-99-159 (Washington, D.C.: Apr. 20, 1999); U.S. General Accounting Office, *Nuclear Security: Improvements Needed in DOE's Safeguards and Security Oversight*, GAO/RCED-00-62 (Washington, D.C.: Feb. 24, 2000); and A Special Investigative Panel, President's Foreign Intelligence Advisory Board, *Science at its Best, Security at its Worst: A Report on Security Problems of the U.S. Department of Energy* (Washington, D.C.: June 1999).

[9] The contract fee is the amount DOE pays to the contractor over the allowable costs under the contract.

to achieving the performance objectives to 70 percent in fiscal year 2001, from 34 percent in fiscal year 1996.

Despite this progress, development of good performance measures has continued to be a challenge for DOE. Numerous studies and reports found that DOE's performance-based contracts contained ineffective performance measures. For example, in 2001, DOE's Office of Inspector General reported on the performance measures in three major site contracts.[10] According to this report, DOE was not focusing on high-priority outcomes, was loosening performance requirements over time without adequate justification, and was failing to match appropriately challenging contract requirements with fee amounts. The department disagreed with this report, stating that it was not appropriate to evaluate the overall success of performance-based contracts by looking at individual performance measures. However, DOE continues to modify and test its performance measures to focus on developing performance incentives that are more directly linked to the priority missions at a site. For example, DOE has developed multiyear incentives in the management and operating contract for the Hanford site, and multisite incentives that tie together activities at four production sites. Nevertheless, the department acknowledges that it must make further progress in this area.

Project Management Reforms Ranged from New Policy and Guidance to an Improved System to Track Project Performance

DOE's initiative to reform project management stems from 1999 National Research Council recommendations for improving DOE project management. The Council reported that DOE's construction and environmental remediation projects take much longer and cost about 50 percent more than comparable projects by other federal agencies or projects in the private sector. It also reported that DOE's project management practices fell far short of best practices in a number of areas, when compared with other government agencies and the private sector. The areas included

[10] U.S. Department of Energy, *Use of Performance-Based Incentives at Selected Departmental Sites*, DOE/IG-0510 (Washington, D.C.: Jul. 9, 2001).

DOE's policies and procedures; documentation and reporting; project planning and controls; risk management; project reviews, acquisition, and contracting; organizational structure, responsibility, and accountability; and the selection, training, and skills of personnel.

Since 1999, when DOE established the Office of Engineering and Construction Management to lead the project management initiative, the department has been working to implement the Council's recommendations. In particular, in 2000, DOE issued a new policy, order, and guidance on managing and controlling projects. In 2001, DOE established new guidance that required the approval of projects of $5 million and above at the assistant secretary level or higher, and a project tracking system and monthly status reports on all projects with total costs over $5 million. Furthermore, in 2002, DOE established a performance goal that 85 percent of its major projects would have less than a 10-percent variance in either cost or schedule.

Despite these steps, many implementation challenges remain. In a November 2001 follow-up report, the Council noted that although DOE had taken positive steps in response to the recommendations in the 1999 report,[11] change had been inordinately slow, and there was no evidence that DOE's project management practices in the field had actually improved. Furthermore, DOE still had inadequate up-front project planning, no consistent system for evaluating the relative risks of projects, and no project management training program in place. The Council concluded that DOE was not in control of many of its projects and had virtually abdicated its ownership role in overseeing and managing its contracts and contractors.

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[11] National Research Council, *Progress in Improving Project Management at the Department of Energy—2001 Assessment* (Washington, D.C.: Nov. 2001).

Available Information Raises Doubts About Extent to Which Contract and Project Management Reforms Have Improved Contractor Performance

DOE has little objective information demonstrating whether its reforms have resulted in improved contractor performance. Instead of measuring outcome-oriented performance results, DOE has primarily gauged progress by measuring the implementation of the initiatives and by reviewing individual contracts. While DOE can point to examples of success, objective performance information on overall results is scarce. Indeed, the evidence on DOE major projects that we developed suggests that contractor performance may not have improved.

Contractor Performance May Not Have Improved

In our September 2002 report, as a potential indicator of contractor performance, we evaluated changes in cost and schedule for 16 of DOE's major projects as of 2001 and compared them with similar information we developed on DOE's major projects in 1996. We found no indication of improved performance; in both groups of projects, over half of the ongoing projects were experiencing significant cost increases, schedule delays, or both. Furthermore, as shown in table 1, the proportion of projects experiencing cost increases of more than double the initial cost estimates or schedule delays of 5 years or more increased over the 6-year period. For example, the initial cost estimate in 1998 for the spent nuclear fuels dry storage project at the Idaho Falls site was $123.8 million, with a completion date of 2001. In 2002, the cost estimate for this project was $273 million, with a completion date of 2006. Appendix I contains additional information on DOE's ongoing major projects as of December 2001.

Table 1. Cost Overruns and Schedule Delays for Ongoing Projects in 1996 Compared with Ongoing Projects in 2001

	Number of projects			
	1996		2001	
Number of projects reviewed	25[a]		16[b]	
Projects with a cost estimate of more than double the initial cost estimate	7	(28%)	6	(38%)
Projects with schedule delays of 5 years or more	8	(32%)	6	(38%)

[a]We evaluated 34 projects in 1996 with estimated costs greater than $100 million. However, nine of the projects were environmental restoration projects, and DOE's original and/or current cost estimates did not estimate costs through project completion. In 1998, DOE divided these environmental restoration projects into multiple projects at each site. Therefore, we excluded these projects from our current analysis.

[b]There are 10 additional projects with total project costs greater than $200 million, but those projects had either recently started or have been suspended.

Source: GAO.

The projects we reviewed—with estimated costs ranging from $270 million to $8.4 billion—may not be representative of all DOE projects.[12] Although this comparison provides only a limited measure of contractor performance, it does raise questions about the overall impact of DOE's initiatives on improving contractor performance.

Anecdotal Evidence Provides No Overall Measure of Improved Performance

Most of DOE's evidence of progress has been anecdotal. On this basis, DOE can certainly point to some successes. For example:

- Officials at DOE's Albuquerque operations office pointed out that after competing the contract for the Pantex site, the new contractor met production levels that were not achieved by the previous contractor.

[12] As of January 2002, DOE records indicated at least 42 ongoing projects with estimated costs greater than $100 million. We did not review all of DOE's capital projects with costs over $100 million because of the level of effort that would have been required, since DOE does not maintain centralized information on those projects. Furthermore, five of the ongoing projects we reviewed in 2001 began before the advent of DOE's contract reform initiatives.

- In a 1999 internal review of its performance-based contracting practices,[13] DOE reported that "anecdotal evidence supports that the proper use of well-structured, performance-based incentives is leading to improvements in performance at some DOE sites." One of the examples cited was at Rocky Flats, where DOE reported that contractor performance had improved with a new contractor, selected in 1995, and with performance-based incentives in the contract.

However, we have identified numerous projects or sites where performance problems continued to occur. For example:

- The National Ignition Facility at Lawrence Livermore National Laboratory in California is designed to produce intense pressures and temperatures to simulate in a laboratory the thermonuclear conditions created in nuclear explosions. We reported in August 2000 that the estimated cost of the facility had increased from $2.1 billion to $3.3 billion and that the scheduled completion date had been extended by 6 years to 2008.[14] We attributed these major cost and schedule changes to inadequate management by the contractor and DOE oversight failures.

- Paducah, Kentucky, is the site of DOE facilities used to enrich uranium for use in nuclear power plants. There is considerable waste material on site and significant on-site and off-site ground water contamination. In 2000, we reported that DOE's cleanup plan contained several assumptions and uncertainties that could significantly increase the time and add billions of dollars to the cost of cleaning up the site.[15] For example, not all areas needing cleanup were included in the plan and assumptions about available funding to address the problems were unrealistic.

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[13] U.S. Department of Energy, *Follow-up Assessment of the Effectiveness of Actions Taken to Improve Performance-Based Incentives in Performance-Based Management and Management and Integration Contracts* (Washington, D.C.: Mar. 31, 1999).

[14] U.S. General Accounting Office, *National Ignition Facility: Management and Oversight Failures Caused Major Cost Overruns and Schedule Delays*, GAO/RCED-00-271 (Washington, D.C.: Aug. 8, 2000).

[15] U.S. General Accounting Office, *Nuclear Waste Cleanup: DOE's Paducah Plan Faces Uncertainties and Excludes Costly Cleanup Activities*, GAO/RCED-00-96 (Washington, D.C.: Apr. 28, 2000).

- The Yucca Mountain Site Characterization Project, Nevada, is developing a high-level waste repository. The original project baseline estimated a total project cost of $6.3 billion and an October 2001 date for submitting a license application. DOE's latest estimate is that the license application will not be submitted until December 2004, with an estimated cost of almost $8.4 billion. We reported in December 2001 that DOE had stopped using the baseline to manage the project and was using estimates that were never approved or incorporated into the official project baseline.[16] Using baseline and change control procedures is essential to ensuring that the project is being managed effectively.

- Los Alamos National Laboratory, New Mexico, is one of DOE's primary locations for research on nuclear weapons. Allegations of contractor fraud, waste, and abuse and of poor internal controls by the University of California, which operates the laboratory for DOE, have surfaced in the last few months and have led to numerous investigations (currently ongoing) and questions about the adequacy of DOE's oversight of laboratory activities and personnel.

Problems are also beginning to emerge at the Hanford site in Washington State, where a contract is in place to address the high-level tank wastes. We learned recently that, although the baseline for this $4 billion project was established in May 2002, as of January 2003, the project was already 10 months behind schedule, and the contractor was estimating cost increases and other adjustments to the contract that could total over $1 billion. DOE withheld provisional fee payments to the contractor in January 2003, based on this "unacceptable performance."

Although interesting and sometimes revealing, anecdotal information provides no overall measure of whether the performance of DOE's contractors is improving or getting worse. DOE appears to have recognized the limitations of anecdotal information and is taking steps to implement a departmentwide project analysis and reporting system. Such a

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[16] U.S. General Accounting Office, *Nuclear Waste: Technical, Schedule, and Cost Uncertainties of the Yucca Mountain Repository Project*, GAO-02-191 (Washington, D.C.: Dec. 21, 2001).

system, if successfully implemented, could provide the information needed to conduct overall assessments of contractor performance.

Achieving Improved Contractor Performance Will Require Commitment and Perseverance

DOE's most recent management initiatives indicate that the department is aware it still has a long way to go in improving contractor performance. While the limited progress to date is discouraging, the frank admission of problems in the cleanup program and subsequent improvement efforts are an encouraging sign. The 2002 "top-to-bottom" review of the Environmental Management program concluded that process rather than cleanup results had become the basis for cleanup approaches, contracts, and performance measures.[17] Only about one-third of the budget was going toward actual cleanup; the remainder was spent on maintenance, support activities, and fixed costs. Furthermore, the review team concluded that DOE's financial liability would continue to grow well beyond the $220 billion estimated at the time if significant changes to the program were not made. The team's report stated that without higher performance standards and breakthrough business processes, cost growth and schedule delays would continue to obstruct cleanup, and the risk to workers, the public, and the environment would not be reduced.

The report recommended a series of initiatives to address these problems. These initiatives include developing an accelerated, risk-based cleanup strategy; improving contract management and establishing more meaningful performance measures for contractors; improving project management; and streamlining business practices. In addition, the report recommended implementing an effective human capital strategy to increase the technical expertise of DOE staff and improve accountability for results.

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[17] U.S. Department of Energy, *A Review of the Environmental Management Program* (Washington, D.C.: Feb. 4, 2002).

In addition to the efforts of the Environmental Management program, DOE is working on improving its agencywide management information systems and human capital systems. For example, in 2001, DOE began developing a unified planning, programming, budgeting, and evaluation process to integrate budget and program results information. Also in 2001, DOE began developing a training and certification program for federal project management, and strategies to address skill gaps in its contracting and project management workforce.

DOE has a long way to go before it can claim that its contracting and project management problems are over. As we have reported before, making new policy a matter of practice requires strong leadership, especially in an organization like DOE, which has diverse missions, a confusing organizational structure, and a weak culture of accountability.[18] But the scope and magnitude of the reforms being contemplated in the Environmental Management program indicate to us for the first time that the management team has seen and understood the full extent of the challenges DOE faces. And because DOE expects to spend hundreds of billions of dollars in future years on missions important to the well-being of the American people, such as cleaning up nuclear wastes and ensuring the safety and reliability of our nuclear weapons, there are compelling reasons to ensure that it has in place an effective set of contracting and project management practices and controls.

Thank you, Mr. Chairman and Members of the Committee. That concludes my testimony. I would be pleased to respond to any questions that you may have.

[18] U.S. General Accounting Office, *Department of Energy: Fundamental Reassessment Needed to Address Major Mission, Structure, and Accountability Problems*, GAO-02-51 (Washington, D.C.: Dec. 21, 2001).

Contacts and Acknowledgements

For further information on this testimony, please contact Ms. Robin Nazzaro at (202) 512-3841. Individuals making key contributions to this testimony included Carole Blackwell, Bob Crystal, Doreen Feldman, Stan Stenersen, Bill Swick, and Arvin Wu.

Appendix I

Cost and Schedule Performance on DOE's Major Projects, as of December 2001

As we reported in September 2002, table 2 shows the original and revised cost estimates and completion dates for ongoing DOE projects with estimated costs greater than $200 million. We excluded from the table 10 additional DOE projects with estimated costs greater than $200 million because the projects were suspended or only recently started as of December 2001.

Table 2: Original and Revised Cost Estimates and Schedule for DOE Projects with Estimated Costs Greater than $200 Million as of December 2001

Dollars in millions	Cost		Schedule	
Project name and construction line number[a]	Original cost estimate[b]	Revised cost estimate	Original completion date	Revised completion date
Advanced Mixed Waste Treatment Project (97-PVT-2)[c]	$1,078.9	$1,087.7[d]	December 2002	December 2002
Civilian Radioactive Waste Management Program[e]	6,300.0[f]	8,394.6	October 2001[f]	December 2004
Dual-Axis Radiographic Hydrodynamic Test Facility (97-D-102)[g]	30.0[h]	269.7	September 1990	December 2002
East Tennessee Technology Park Three-Building Decontamination and Decommissioning and Recycle Project (OR-493)	283.9	348.1	December 2003	March 2004
Facilities Capability Assurance Program (88-D-122)[i]	N/A[j]	445.6	N/A[j]	June 2000
Hanford Tank Waste Treatment and Immobilization Plant (01-D-416)	12,488.0[k]	4,350.0	2007	2007
High-Level Waste Removal from Filled Waste Tanks (93-D-187)[l]	88.6[m]	1,550.5	September 1999[m]	September 2028
Initial Tank Retrieval Systems (94-D-407)	245.0[n]	274.9	March 2000[n]	December 2015
National Ignition Facility (96-D-111)	1,073.6	2,248.1	June 2002	September 2008
Silos	N/A	338.1	N/A	December 2006
Spallation Neutron Source (99-E-334)	1,332.8	1,411.7	September 2005	June 2006
Spent Nuclear Fuel Dry Storage (98-PVT-2)[o]	123.8	273.0	June 2001	December 2005
Hanford Spent Nuclear Fuels	714.8	1,600.0	2001	September 2006
Tank Farm Restoration and Safe Operations (97-D-402)	289.2	285.3	June 2005	June 2005
Tritium Extraction Facility (98-D-125)[p]	390.7	401.0	June 2005	March 2006
Weldon Springs Site Remedial Action Project	357.7[q]	905.2	September 1995[q]	September 2002

[a]Projects that are not funded as construction line items do not have project numbers. All costs, unless otherwise specified, are "total project costs." The cost data were obtained from DOE Congressional budget requests and other DOE-provided data. The term N/A means cost or schedule not available or not yet developed.

[b]For consistency we used, when available, preliminary budget estimates submitted to Congress as the basis for original cost estimates.

[c]Total project cost for construction projects typically includes only the design, construction, and startup costs that precede production operations. Total project cost for this project also includes estimated costs for over 10 years of production operations and other associated costs. The revised completion date refers to completion of the construction phase.

[d]The contractor has submitted a "Request for Equitable Adjustment" of over $48 million due to a six-month schedule slip the project experienced as a result of a delay in the issuance of environmental permits. Because the Request for Equitable Adjustment is still under review, the $48 million is not included in the revised cost estimate.

[e]The original baseline for this program included construction of the exploratory studies facility and, if suitable, a site recommendation and a license application. The current scope of the program was broadened in 1997 to include all elements of the Civilian Radioactive Waste Management Program, which now includes development of license application, design and construction of Yucca Mountain Repository, licensing interactions with the Nuclear Regulatory Commission, and development of a transportation system. The revised completion date is only for the license application.

[f]We reported in 1996 that the current cost and completion date for the Yucca Mountain Site Characterization Project were $4,300 million and March 2002, respectively. In 1997, DOE expanded the project to include the entire Civilian Radioactive Waste Management Program.

[g]The original scope of this project at initial authorization in 1988 included two buildings and two single pulse flash x-ray machines. The project has since undergone several changes in scope, which now includes three buildings, a containment vessel to reduce emissions to the environment, a single pulse machine, and a multiphase machine.

[h]This amount is a total estimated cost from the fiscal year 1988 Budget Request, which does not include other project costs. Other project costs include supporting research and development and plant support costs during construction, activation, and startup. There was no requirement for a total project cost estimate in 1988.

[i]This project has a few subprojects completing closeout activities and two still underway. DOE anticipates additional funding needs and a schedule extension to complete the final two subprojects.

[j]We reported in 1996 that the current cost for the Facilities Capability Assurance Program was $447 million and the completion date was not available. No cost estimate was available when the project was originally proposed.

[k]This original cost estimate from the fiscal year 2001 Budget Request was based upon the privatization concept and included plant operations through fiscal year 2018.

[l]DOE expanded the original scope of this project in fiscal year 1994 to incorporate three ongoing projects, which increased the total project cost from $88.6 million to $828 million and the project completion date from 1999 to 2008 in the fiscal year 1996 budget. The cost and schedule were revised again in fiscal year 2000 to include, among other projects, the equipment and infrastructure required to remove the high level waste inventory from nine additional tanks.

[m]We reported in 1996 that the current cost and completion date for the High Level Waste Removal project were $828.2 million and September 2008, respectively. DOE expanded the scope of this project in 1994.

[n]We reported in 1996 that the current cost and completion date for the Initial Tank Retrieval System project were $358.2 million and March 2010, respectively.

[o]The original and revised estimated costs include design, construction, startup, and operating costs. The revised completion date refers to completion of the construction and startup phase.

[p]In June 2002 DOE's Office of Inspector General reported that the total project cost for the Tritium Extraction Facility could increase to as much as $500 million and that the facility may not be completed until December 2006.

[q]We reported in 1996 that the current cost and completion date for the Weldon Springs Remedial Action Project were $865.0 million and 2001, respectively.

Source: GAO analysis of DOE and National Research Council data.

(360322)

Chairman TOM DAVIS. Thank you very much.
Mr. Friedman.

STATEMENT OF GREGORY H. FRIEDMAN, INSPECTOR GENERAL, U.S. DEPARTMENT OF ENERGY

Mr. FRIEDMAN. Mr. Chairman and members of the committee, I am pleased to be here at your request to testify on the Department of Energy's contract administration activities.

The Department, as you pointed out, is one of the most contractor-dependent agencies in the Federal Government. Currently, approximately 100,000 contract employees, plus numerous subcontract employees, support the Department's mission at its contractor-operated facilities. In fiscal year 2002, $15.7 billion, or nearly 75 percent, of the Department's budget was spent on facilities management contracts. Clearly, it is essential the Department of Energy administer these contracts as effectively and efficiently as possible. Consequently, the Office of Inspector General has performed substantial work in this area.

Since the 1940's, the Department and its predecessor agencies have relied upon facilities management contracts for many of its key operations. Through this mechanism, nearly 30 contractors perform many of the Department of Energy's most sensitive missions. This includes maintaining and securing the Nation's nuclear weapons capability, remediating environmental contamination from past weapons production, and conducting leading-edge research and development activities.

Facilities management contracts differ significantly from traditional cost-type contracts. In general, they indemnify the contractors for virtually all costs and liabilities incurred; are frequently extended noncompetitively; do not require submission of traditional invoices for review, approval, and payment; and, allow the contractor to draw funds from a letter-of-credit account as costs are incurred rather than bill the Department after the fact.

Over the past several years, based on criticisms of its contracting practices, the Department has initiated a series of actions to modify and reform its contract administration activities. As you heard earlier, the General Accounting Office reported in September 2002 that the Department has made progress in certain areas. These included developing alternative contract approaches, working to increase competition, and making greater use of performance-based contracts. In addition, partially as a result of Office of Inspector General reviews, the Department has recently completed a "top-to-bottom" review of its environmental management program; modified its field structure to eliminate an unnecessary layer of management; and held the University of California accountable for procurement and property deficiencies of Los Alamos National Laboratory.

Furthermore, again as you heard earlier, on March 17th, the Deputy Secretary formally established a program to confront and address broad management challenges facing the Department. Despite these efforts, our reviews have indicated that more needs to be done. The Department has not always effectively monitored contractor performance or held the contractors accountable for their actions. Our reviews have disclosed continuing weaknesses, includ-

ing the failure to develop quantifiable, outcome-oriented contractor performance measures; maintain a system to track critical aspects of contractor performance; require strict adherence to contract terms; require utilization of a full range of project management tools and it has failed from time to time to rate and reward contractors commensurate with their performance.

All of these points, Mr. Chairman, in my full testimony are identified with specific reports.

Failure of the Department to effectively manage certain aspects of its contract operations has led to the use of taxpayer funds for purposes not intended, wasteful management practices, and excessive project costs. Based on the work the Office of Inspector General has completed over the years, we believe that Department managers must place even greater emphasis on efforts to adopt sound contract administration practices. Specifically, the Department must develop its own realistic expectations of desired outcomes; establish clear contractor performance metrics; closely monitor contract activities; hold contractors accountable for their performance; and work to maximize competition.

Addressing the challenge of contract administration will require the commitment of all parties involved. In this regard, the Office of Inspector General will continue to focus on ways to help the Department improve operations and specifically its contract management practices.

Mr. Chairman and members of the committee, this concludes my prepared remarks, and I will be pleased to answer any questions that you may have.

[The prepared statement of Mr. Friedman follows:]

STATEMENT OF GREGORY H. FRIEDMAN
INSPECTOR GENERAL
U.S. DEPARTMENT OF ENERGY

BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON GOVERNMENT REFORM

For Release on Delivery
10:00 AM Thursday, March 20, 2003

Mr. Chairman and Members of the Committee, I am pleased to be here at your request to testify on the Department of Energy's (Department) contract administration activities.

The Department is one of the most contractor dependent agencies in the Federal government. It places great reliance on contract operations to accomplish its mission. The basic premise of this relationship is that contractors manage the day-to-day operations, while the Department is responsible for administering the contracts to ensure that the taxpayers receive fair value for their money and that the contractors are held accountable for their performance.

Although the Department has made some progress in restructuring its contract activities, our reviews have shown that the Department has not done an adequate job of contract administration. As a result, taxpayer funds have not always been spent economically and efficiently. Because of the critical importance of contract administration, the Office of Inspector General (OIG) has performed substantial work in this area.

BACKGROUND

Facilities management contracts have been used by the Department and its predecessor agencies since the 1940s. This continues today with key operations being performed by over 30 such contractors. Currently, the Department, to include the National Nuclear Security Administration (NNSA), has approximately 100,000 contract employees, plus numerous subcontract employees, who support the Department's mission at its contractor-

operated facilities. In Fiscal Year 2002, for example, $15.7 billion, or nearly 75 percent, of the Department's budget was spent on its facilities management contracts. The Department's contractors use these funds to maintain and secure the Nation's nuclear weapons stockpile, remediate environmental contamination from past weapons production, and conduct leading-edge research and development activities.

The Federal Acquisition Regulation authorizes the Department to enter into these unique facilities management contracts. We have observed a number of differences between facilities management contracts and traditional cost-type contracts. Facilities management contracts generally:

- Indemnify the contractors for virtually all costs and liabilities incurred;
- Have succeeding contractors retain all but a few employees of the preceding contractor;
- Are frequently extended noncompetitively;
- Do not require submission of traditional invoices for review, approval, and payment; and,
- Allow the contractor to draw funds from a letter-of-credit account as costs are incurred rather than bill the Department after the fact.

Because of these differences, the Department's contractors have been provided significant flexibilities. These flexibilities, in some cases, have led to great benefits, but they have also created opportunities for mismanagement of taxpayer-provided resources.

Over the past several years, based on criticisms of its contracting practices, the Department has initiated a series of actions to modify and reform its contract administration activities. These included developing alternative contracting approaches, increasing competition, and using performance-based contracts. The General Accounting Office's report on contract reform (GAO-02-798, September 2002) addresses these initiatives and the progress the Department has made. In addition, partially as a result of OIG reports, the Department has recently:

- Completed a comprehensive "top-to-bottom" review of its environmental management program;
- Modified its field structure to eliminate an unnecessary layer of management; and,
- Held the University of California accountable for procurement and property deficiencies at Los Alamos National Laboratory.

CONTRACT ADMINISTRATION CHALLENGES

Despite the Department's reform efforts, our reviews have indicated that more needs to be done to strengthen its administration of contractor operations. In the past, the Department has not always effectively monitored contractor performance or held the contractors accountable for their actions. Our reviews have disclosed continuing weaknesses, including the failure to:

- Develop quantifiable, outcome-oriented contractor performance measures;
- Maintain a system to track critical aspects of contractor performance;
- Require strict adherence to contract terms;
- Require utilization of a full range of project management tools; and,
- Rate and reward contractors commensurate with their performance.

Our recent special report on *Management Challenges at the Department of Energy* (DOE/IG-0580, December 2002) highlighted the continuing challenges the Department faces in contract administration. This report identified seven key management challenges, which represented the most serious management and performance issues that impacted the Department's ability to carry out its critical missions. Since the Department is heavily reliant on contractors to perform its missions, contract administration permeates all of these areas. A discussion of these challenges follows, and serves to illustrate the problems the agency has faced, and continues to face, in implementing an effective contract administration strategy.

PROJECT MANAGEMENT/PROCUREMENT

Our reviews have shown that the Department's contractors continue to experience problems in managing large projects. At the request of the NNSA, we conducted a review of the Tritium Extraction Facility under construction at the Savannah River Site, operated by Westinghouse Corp. and Bechtel Inc. Our report, *The Department of*

Energy's Tritium Extraction Facility (DOE/IG-0560, June 2002), disclosed that the project might cost approximately $100 million more than planned and will not be completed by February 2006, as scheduled. In this case, as well as in other projects we reviewed, Department officials did not require that its contractors make full use of project management controls. We raised similar concerns in our reports on the Pit Production Project at Los Alamos National Laboratory, operated by the University of California, and the Spallation Neutron Source Project at Oak Ridge National Laboratory, operated by University of Tennessee-Battelle.

More recently, my office conducted a special inquiry at the Los Alamos National Laboratory. The focus of this review was to determine whether the Laboratory had engaged in a deliberate cover up of procurement irregularities and security concerns. Our report on *Operations at Los Alamos National Laboratory* (DOE/IG-0584, January 2003) noted that a series of actions taken by Laboratory officials obscured serious property and procurement management problems and weakened relevant internal controls. These actions created an atmosphere in which Los Alamos employees were discouraged from, or had reason to believe they were discouraged from, raising concerns to appropriate authorities. During the time period in question, the Department gave the Laboratory an excellent rating in both personal property management and procurement management.

In addition, our report on the *U.S. Department of Energy's Purchase Card Programs - Lessons Learned* (I01OP001, February 2002) disclosed misuse of purchase cards, the vast majority of which were in the hands of contractor employees. Even when appropriate

policies and procedures were present, they were not adequately enforced. The Department's Chief Financial Officer, in a recent follow-up review, identified instances where:

> cardholders and approving officials did not follow established procedures, and where existing controls and procedures were not adequate to safeguard against misuse. Major causes included: ineffective implementation of basic controls such as prior authorization of purchases and approving official reviews, a proliferation of cardholders, inadequate training, and a lack of specific criteria for cardholder and approving official accountability for purchases.

ENVIRONMENTAL CLEANUP

In an effort to make the Department's environmental remediation program more effective and efficient, Secretary Abraham directed the Office of Environmental Management to conduct a "top-to-bottom" assessment of all aspects of this $210 billion program. The 2002 assessment report concluded that remediation activities, which are largely performed by contractors, have not focused on reducing risk or completing the cleanup with an appropriate sense of urgency.

Our reviews of the Department's contractor operations have disclosed similar problems. In our report, *Remediation and Closure of the Ashtabula Environmental Management Project* (DOE/IG-0541, January 2002), we found that the Department had not required

strict compliance with the terms of the remediation contract. For instance, the contractor (RMI Titanium Co.) did not always follow the approved Department decommissioning plan for the Ashtabula site. Additionally, the contractor incurred questionable costs and developed new technologies instead of dedicating resources to site remediation activities. As a result, the cleanup effort at Ashtabula might not be completed until 2012 instead of 2003, as originally scheduled. This would extend the 10-year expected life of the project to 19 years, resulting in a likely increase in project costs (and the burden on the taxpayers) of over $60 million.

In our report, *Disposition of the Department's Excess Facilities* (DOE/IG-0550, April 2002), we found that the Department and its contractors did not fully consider mission requirements, risk reduction, and costs when prioritizing facility disposition activities at contractor-operated facilities. In certain cases, disposition plans were in conflict with requirements for new facilities. In other instances, facilities posing little risk to human health and the environment were decommissioned while Department contractors deferred disposition of buildings representing substantially greater risks.

Further, in our report, *Treatment of Mixed Incinerable Waste* (DOE/IG-0588, March 2003), we noted significant inefficiencies in the treatment and storage of the Department's mixed incinerable waste at contractor locations. For example, the Department continued to pay a contractor substantial costs and fees for operation of the Toxic Substances Control Act Incinerator operations at Oak Ridge, even though minimum burn requirements were not being met.

INFORMATION TECHNOLOGY MANAGEMENT

With an estimated $1.4 billion annual expenditure for information technology (IT), it is essential that the Department and its contractors develop and implement an effective IT management investment and control process. The Clinger-Cohen Act of 1996 and the E-Government Act of 2002 were intended to enhance the management and control of IT. Further, the *President's Management Agenda* encourages the use of electronic commerce to make it simpler for citizens to receive high-quality services from the Federal government while reducing the cost of delivering those services.

Although the Department continues to integrate IT into all aspects of its missions, it has experienced a substantial challenge in fully implementing the requirements of the Clinger-Cohen Act and related information security legislation. To illustrate, our report, *Nuclear Materials Accounting Systems Modernization Initiative* (DOE/IG-0556, June 2002), concluded that the Department had not adequately managed activities to redesign, modernize and integrate its nuclear materials accounting systems. Presently, the Department and its contractors maintain over 50 separate tracking systems, many of which are duplicative and inefficient.

Similarly, we found that while the Department had taken a number of positive steps to improve its unclassified cyber security program, many of its critical information systems, particularly at contractor locations, remain at risk. For example, our report, *The*

Department's Unclassified Cyber Security Program 2002 (DOE/IG-0567, September 2002), concluded that the Department and its contractors had not: (1) consistently implemented a risk-based cyber security approach; (2) assured continuity of operations through adequate contingency and disaster recovery planning; (3) strengthened its incident response capability by reporting all computer incidents; (4) ensured that employees with significant security responsibilities had received adequate training; or (5) adequately addressed configuration management and access control problems.

NATIONAL SECURITY

While the deterrent provided by nuclear weapons has been, and continues to be, a key component of the Nation's security posture, the Department and the Nation face a complex set of challenges related to defending against worldwide threats. These challenges, brought to the forefront by the events of September 11, 2001, require the Department and its contractors to consider implementing new security measures.

The OIG recently issued a report, *The Department's Unclassified Foreign Visits and Assignments Program* (DOE/IG-0579, December 2002), which disclosed that two contractor-operated laboratories had not adequately controlled unclassified visits and assignments by foreign nationals. While such visits and assignments can benefit the Department, the laboratories, and international partners by providing a forum for the exchange of scientific information, they also pose certain security risks. We found that

complete and up-to-date passport and visa information was not being maintained at the two contractor-operated laboratories examined. Also, access to a contractor site was frequently granted before required approvals were obtained and background indices checks were performed. In addition, the laboratories were not forwarding complete and up-to-date information on foreign visits and assignments to Department officials who were responsible for managing this program.

The OIG has also reported on weaknesses in remote access to unclassified information systems. In our report, *Remote Access to Unclassified Information Systems* (DOE/IG-0568, September 2002), we found that many offices had not implemented risk-mitigation strategies. Of the 13 Department and contractor organizations included in our review:

- Ten had not considered the risk associated with remote access when developing cyber security protection plans;
- Nine had not developed specific guidance addressing remote access security requirements; and,
- Nine had not required the use of protective measures such as personal firewalls, and up-to-date virus protection and systems software, when accessing network resources.

Inadequate protective measures placed critical Department and contractor unclassified information systems at risk of attack from internal and external sources and could

ultimately result in data tampering, fraud, disruptions in critical operations, and inappropriate disclosure of sensitive information.

PERFORMANCE MANAGEMENT

The Department and its contractors have also been criticized for deficiencies in performance management, an emphasis area in the *President's Management Agenda.* Noted deficiencies included performance measures that: (1) were not quantifiable; (2) did not support key goals; and, (3) were not results oriented. To illustrate, our report on *Environmental Management Performance Measures* (DOE/IG-0561, June 2002) noted that although the Office of Environmental Management had developed a number of corporate and project-specific performance measures, these measures did not capture overall program results. Specifically, the measures did not cover the majority of cleanup projects or budgets at contractor locations, capture overall program performance, or appropriately address risk. The lack of focus of the measures on overall program results deprived the Department and its contractors of a valuable tool for monitoring the progress of the cleanup program.

OIG reports have also identified specific contractor-operated programs that would have benefited from enhanced performance measurement. For example, our report on *Synchrotron Radiation Light Sources at Lawrence Berkeley National Laboratory and Stanford Linear Accelerator Center* (DOE/IG-0562, July 2002) disclosed that the beam

lines at Berkeley, operated by the University of California, were idle during 35 percent of the time when we made observations. Berkeley did not have a centralized scheduling system and, therefore, was unaware that additional beam time was available. As a consequence, scientifically-valid research proposals were rejected for study. We found that the Department did not require its contractors to track and report actual use of the facilities or establish useful performance measures to evaluate beam line use.

STOCKPILE STEWARDSHIP

The Department and its contractors are actively involved in maintaining the safety, reliability, and performance of the aging nuclear weapons in the Nation's stockpile. During the past year, OIG reports have addressed difficulties in meeting this critical mission. For example, our report on the *National Nuclear Security Administration's Test Readiness Program* (DOE/IG-0566, September 2002) disclosed that, based on the current status of available human and physical resources, the ability of the Department and its contractors to conduct an underground nuclear test within established parameters was at risk. A report issued by the Nevada Operations Office, *Enhanced Test Readiness Cost Study*, similarly concluded that the Department's ability to maintain a test readiness posture of 24 to 36 months was "at risk."

In addition, our report on *The Department of Energy's Pit Production Project,* (DOE/IG-0551, April 2002) disclosed that it was unlikely that the Department's contractor would be able to produce a certifiable pit in accordance with its performance plans. The Los

Alamos National Laboratory had the lead on this project. As of December 2001, over half of the approximately 40 nuclear manufacturing processes that will be used to produce pits were behind schedule.

More recently, our report, *Refurbishment of the W80 – Weapon Type* (DOE/IG-0590, March 2003), disclosed that it is unlikely that NNSA's W80 refurbishment project, which is estimated to cost over $1 billion, will meet its scope, schedule, and cost milestones. Specifically, Lawrence Livermore National Laboratory, operated by the University of California, and Sandia National Laboratories, operated by Lockheed Martin Corp., had cancelled and delayed testing, weapon component completion, and support-facility renovation activities, without notifying NNSA.

WORKER/COMMUNITY SAFETY

OIG reports have also identified problems related to contractor updates of safety procedures. For example, our previously mentioned report on the *National Nuclear Security Administration's Test Readiness Program* (DOE/IG-0566, September 2002) disclosed that contractors at the Nevada Test Site had not fully incorporated enhanced nuclear safety requirements into their nuclear explosives studies. Outdated or incomplete procedures could affect the Department's ability to resume underground testing should the President determine that such tests are necessary.

Likewise, our report on the *National Nuclear Security Administration's Nuclear Explosive Safety Study Program* (DOE/IG-0581, January 2003) disclosed that required comprehensive safety studies at Pantex, operated by BWXT Pantex, LLC, had been delayed for a majority of active nuclear weapons in the Nation's stockpile. Without approved safety studies, NNSA faced disruption to its nuclear weapons surveillance testing and dismantlement activities. In addition our report on *Explosives Safety at Selected Department of Energy Sites* (DOE/IG-0578, December 2002) indicated that improvements could be made in the areas of explosives, fire, and lightning safety at contractor-operated facilities in Nevada and Tennessee.

CONCLUSION

Failure of the Department to effectively manage certain aspects of its contract operations has led to excess expenditure of funds, use of taxpayer funds for purposes not intended, wasteful management practices, and excessive project costs.

Based on the work that the Office of Inspector General has completed over the years, we believe that Department managers must place even greater emphasis on efforts to adopt sound contract administration practices. Specifically, the Department must:

- Develop its own realistic expectations of desired outcomes;
- Establish clear contractor performance metrics;
- Closely monitor contract activities;

- Hold contractors accountable for their performance; and,
- Maximize competition.

Addressing the challenge of contract administration will require the commitment of all parties involved. In this regard, the Office of Inspector General will continue to focus on ways to improve the Department's operations and its contract management practices.

Mr. Chairman and Members of the Committee, this concludes my prepared testimony. I will be pleased to answer any questions.

Chairman TOM DAVIS. Thank you.

I mean, unfortunately, the problems of DOE are not just confined to DOE, it is a problem that is endemic in government. It is just that DOE has such a large portion of contracts, such a large number, and so many big and cutting-edge areas; it becomes even more complex. But this is not brain surgery, when you think about it. You need well trained procurement officials who are in touch with their customer and giving them the appropriate contract vehicles so that they can choose the best vehicle. We have had examples where we have tried to do fixed price contracts where it doesn't work.

Let me ask Ms. Nazzaro, what about share and savings contracts? Have there been any let here; would that be an appropriate vehicle in some of these cases? That certainly cuts the downside to the Government.

Ms. NAZZARO. I am familiar with the use of fixed price contracts, but not with that.

Chairman TOM DAVIS. OK.

Anyone else familiar with it? The share and savings contract, briefly described, is where a contractor comes in and says I can do A, B, C, D for you. To the extent they share that, they can share in the savings that the Government realizes. To the extent they don't, they end up eating it. For the contractor there is a larger upside, potentially. To the Government there is a lower downside.

Yes.

Mr. FRIEDMAN. I am sorry, Mr. Chairman. The contract that the Department has entered into, the relatively recent contract, Rocky Flats, which is a major environmental remediationsite, has many of the same characteristics as you just described. So I am not sure it is formally called the nomenclature that you have used, but essentially that is the way it works.

Chairman TOM DAVIS. And you feel you have more control. Your downside is certainly limited in a situation like that, isn't it?

Mr. FRIEDMAN. Correct.

Chairman TOM DAVIS. And ordinarily I am not for eliminating downsides, you try to look for how you can save money the best, but look, we can talk at length about what the cadre of procurement officials is, how much training they are getting, what the vehicles that are available to them are, but at the end of the day, I was a government contracts attorney for 15 years for a major company, for a billion dollar company before I came. Usually when things went wrong it was a combination of a communications issue between the contractor and the Government; sometimes oversight, sometimes it is a competence issue. But we also have issues where we are just not using the right contracting vehicle. And that takes experienced personnel.

My theory of contracting is pretty simple: your procurement officials are probably some of the most important officials in Government, and you can't pay them enough if it comes in. If somebody brings a contract in on schedule or ahead of schedule and under budget, there ought to be a reward for that. If they bring it in over, there has to be some deterrence. And that is not the way the Government operates today. It is not your fault, it is the way we write the rules; and maybe we need to look at some of those.

Let me ask Mr. Rispoli. Human capital concerns make effective oversight of contract and project management activities even more challenging. In its September 2001 5 year work force reconstruction plan, DOE included strategies to address skill gaps in its acquisition in project managerial Federal work forces. Have we made any progress in that area? And do you think DOE has the resources to provide adequate training for its acquisition and project management work force?

Mr. RISPOLI. Mr. Chairman, yes, we have. In January 2003, a few months ago, we rolled out a career development program for the Department's project managers at all levels. The program builds upon credentials derived from experience, particular training. There is, in fact, course work to be done, testing, and then a certification process for each of four levels. In other words, there is an entry level and there is a top level, level four. To attain the top two levels, the certification process actually requires an interview by a board of professionally qualified people. This is a departmentwide program.

Chairman TOM DAVIS. What is the pay level for those top?

Mr. RISPOLI. If I may, the pay level for the level four is envisioned to be GS–15 and SES. The entry level, level one, is not going to be GS–7 or 9, it is at a higher level, typically GS–11 or thereabouts. And they would be qualified and certified to manage the smaller projects. There is a tiered system. Basically to manage a $400 million or above project, you would have to be a level four person.

We have developed a set of courses. There are a total of 16 courses, of which 4 are core. I am sorry, 12 are core and 4 would be electives. They include a wide variety of sources. For example, some of them are put on by DOE or our contractors. But we also go to NASA, to Stanford, to the Construction Industry Institute, to the Center for Creative Leadership, and to the American Management Association. So we have tried to find best-in-class courses that fit the appropriate level of certification.

Again, we have rolled this out just in January. People have been taking these courses, and the objective is that we would get 80 percent of our people certified by the end of the 2-year rollout period.

You asked about resources. The initial cost in the first 2 years, including all training and cost of tuition, enrollment, but not including travel, is just under $2 million. And after the first 2 years it will roll down to something like $1.3 million. That number is, I believe, 0.001 percent of the value of a $40 billion project portfolio. We certainly can afford to fund $2 million or $1.3 million per year.

Chairman TOM DAVIS. Absolutely. Absolutely.

Mr. RISPOLI. And as I mentioned in my statement, we believe we are one of the only agencies, if not the only agency, to now have a program that falls under the acquisition umbrella set up by Clinger-Cohen. So we now have added the project management professionals and the integrated project team members into the fold of those who could have a career development ladder, as the contracting officers already do, so that we can provide a more balanced development experience for the entire team, as opposed to just those in the contracting community.

Chairman TOM DAVIS. Given some of the problems we have had in contracts, is there any thought to bringing any of this in-house, maybe building a more in-house cadre capability of doing this?

Mr. RISPOLI. Yes, there is.

Chairman TOM DAVIS. Because I don't think you measure efficiency by how many employees you have. I mean, some people do, but that doesn't tell me if I am saving money if they are doing the job. In the case where you have a huge overrun, it certainly isn't advantageous.

Go ahead.

Mr. RISPOLI. Yes, Mr. Chairman, there is. And I didn't mention, but some of the courses are in fact offered by Feds, if that course will have enough of a demand and we have the proper expertise level. The reason we went to others like NASA and Stanford and the Construction Industry Institute is because they have such a level of expertise, it affords the opportunity for cross-fertilization.

Chairman TOM DAVIS. Absolutely. And I have no problem with that, but let me just ask. Some of the areas that we are farming out right now to the private sector within the Department and running the labs, any opportunity, any thought of bringing some of that in-house, given the experience we have had with contractors in trying to build an in-house cadre? And if not, why wouldn't you do that? Do you understand what I am saying?

Mr. RISPOLI. Perhaps you could rephrase the question?

Chairman TOM DAVIS. Well, the fact is most of DOE's work is done by contracts.

Mr. RISPOLI. Yes.

Chairman TOM DAVIS. It is not done by employees. I am just saying is there any of this work that we could take in-house and build an in-house bureaucracy to do it and build an in-house cadre of people that could perform this work instead of outsourcing it, when the outsourcing has had overruns and delays and has not been very efficient?

Mr. RISPOLI. Yes.

Chairman TOM DAVIS. Again, it goes back to my premise that I am a great believer in outsourcing, I think it tests the marketplace when it is done right. But when things keep going badly, sometimes you are better off maybe just bringing it to the Government; you limit your liability to some extent. And you also keep contractors honest when you have an in-house capability.

Mr. RISPOLI. Yes. This training, this entire career development program, the whole purpose is intended to raise the level of competency of Federal project managers, or people who are directly engaged in the management of projects. We will open these courses to contractors on a space available basis, as do some of the other agencies, but the primary focus for this is to raise the competency level of the Federal work force, the entire work force on the team. So that would include safety people, project management people, technical people, as well as the contracting officers. And we have integrated it with the contracting community.

Chairman TOM DAVIS. Thank you. My time is up.

Mr. Waxman.

Mr. WAXMAN. Thank you, Mr. Chairman.

I thank the witnesses for their very helpful testimony.

Ms. Nazzaro, one of the more disturbing statements in your testimony was the DOE has little objective information showing its reforms have actually worked. You went on to say that the evidence you have suggests that contractor performance may not have improved. How is it possible that after almost a decade of so-called reforms the Department still doesn't have data showing it is on the right track in improving contract and project management?

Ms. NAZZARO. Yes. If you will, the reforms that they have put in place, if you would refer to them as like a toolbox. They now have the tools; the problem is that they haven't implemented to use those tools appropriately. We have identified shortcomings in the three reforms that we talked about today: the developing the alternative contracts, increasing the competition, and certainly using the performance-based contracts. There are shortcomings in all of those, and so it is really an issue of not identifying additional reforms, but appropriately implementing those using best practices.

Mr. WAXMAN. Well, what should the Department be doing to measure the success of its reforms?

Ms. NAZZARO. One, they need data on what currently is going on at the Department. Just this morning Mr. Rispoli was informing me of some of the recent efforts now to try to gather data. Up to this point, they don't even know how many projects they are managing, much less what the results of those projects are. And if you don't know the status and what is going on, you have no way to keep them on track.

Mr. WAXMAN. Well, if they are making some progress in implementing some of these new tools, these reforms, even without all the data, why are there still so many projects with delays and cost overruns? How do we explain this?

Ms. NAZZARO. Specifically on the use of performance-based contracts, for example, they have put this provision in the contracts, but they haven't identified appropriate measures. They are measuring process rather than results.

Another example would be in using these performance-based contracts, often they are changing the baseline, you know, without justification. So, again, you are not measuring it from what your first costs were, but you are changing it and now they are saying, you know, they met their objectives. Well, they met revised objections, they didn't meet their baseline objectives. So, again, it is the use of these performance measures that need to be improved.

Mr. WAXMAN. Are there other factors beyond the contract and project management problems you have identified that explain the persistent acquisition management failures?

Ms. NAZZARO. There are many functions that contribute to the acquisition problems, and they are at a number of different levels within the organization. So, yes, beyond just the project management level, DOE has systemic problems that we have reported on in the past, some being they are changing missions; you know, the fact that they have multiple missions; they have a confusing organizational structure. So there are systemic issues, certainly, that contribute to these problems as well.

Mr. WAXMAN. I would like to ask you about some of the cleanup projects you singled out in your testimony. You mentioned a $4 billion waste retrieval and treatment project at Hanford, WA, which

after less than a year is apparently 10 months behind schedule and subject to huge cost increases. Can you talk about the Hanford project and its problems, and explain why the Department's contract management there appears to be so unsuccessful?

Ms. NAZZARO. I don't have any specifics as to why that is any different than any other project. That is relatively new data that we just found out that this is occurring. We do have ongoing work looking at this project; however, these are systemic problems that occur, it is not just project-specific, that one is any different than the others.

Mr. WAXMAN. Well, what about the cleanup plan for Paducah, KY? As I mentioned in my opening statement, Paducah is a public health and environmental catastrophe, the extent of which is still unknown. Is GAO taking steps to ensure that the long-overdue Paducah cleanup plan is on track?

Ms. NAZZARO. We do have a legislative mandate that was just included in the omnibus appropriation bill for us to look at Paducah, so that will be a project that we will be undertaking very shortly.

Mr. WAXMAN. Mr. Rispoli, could you tell us what the Department is doing to ensure the effectiveness of the Hanford and Paducah cleanup operations?

Mr. RISPOLI. Mr. Waxman, I can tell you that in general, including Hanford and Paducah, we now have an industry standard set of performance measures that give us a monthly health check on all projects of the Department; those are but two. The Hanford project is one of those which surfaced last May as being a difficult challenge for the Department, for specific example. We have done several independent reviews at Hanford since then to try to assist the responsible line organization to improve its management. We believe that the latest indicators are that the problems are being quantified and addressed in an appropriate way.

I would have to take the rest of that question on Hanford, in particular, for the record since, as you know, environmental management actually manages the site.

Mr. WAXMAN. My time is up, but I would hope that you would be able to provide details about both of these cleanup efforts. And I would like to ask if you would agree to brief the committee about your operations at those sites so that we can get into more of the details about them.

Mr. RISPOLI. Yes, sir.

Mr. WAXMAN. Thank you.

Thank you, Mr. Chairman.

Chairman TOM DAVIS. Who is next with questions? Mr. Tierney.

Mr. Bell, any questions?

Mr. Ruppersberger.

Mr. RUPPERSBERGER. He is far senior.

Mr. BELL. Thank you very much for your testimony here today. I want to try to get a handle on how this situation has evolved and followup on some of Mr. Waxman's and the chairman's line of questioning.

Ms. Nazzaro, based on your testimony, the Inspector General's Office and GAO reported these problems long ago; these were not recent findings. Is that accurate?

Ms. NAZZARO. Yes, that is. For example, on the issue of technical expertise, our work goes back to the 1980's in identifying problems, and we have had work as recent as 2002 where we reported on the National Ignition Facility. We talked there about the reason for the cost overruns and the schedule delays, and attributed that in part to technical expertise issues. And the National Research Council has recently done work along the same line, as far as training.

Mr. BELL. Now, I assume, after the problems were first reported, that certain reforms were implemented. Is that fair?

Ms. NAZZARO. These reforms that we referred to today?

Mr. BELL. No, other reforms. Was any action taken after the complaints were first raised or the problems were first pointed out?

Ms. NAZZARO. Certainly after the mid-1990's I am told that they implemented a program to update the expertise of all of their staff. This came out after a body of work that we did on major systems acquisitions in 1996.

Mr. BELL. And is it safe to assume, based on the testimony we are hearing today, that whatever reforms were implemented were not successful?

Ms. NAZZARO. That is what we are seeing, that in 2000 we found problems. The National Research Council recently found problems. You know, it is our understanding that DOE is still working to put in place the appropriate training for their employees and the expertise to manage these projects.

Mr. BELL. And, Mr. Rispoli or Ms. Nazzaro on this, I mean, you have talked about a number of things that will be in place now, but how can we have any assurance that we won't be back here in a couple of years talking about the same problems?

Mr. RISPOLI. May I?

Mr. BELL. Sure.

Mr. RISPOLI. I think it is important to note that the directive that set out the new requirements was issued in October 2000, and although we don't at all disagree with GAO's findings in 2001 and the National Academy of Science's findings in 2001, there had not really been a chance to have projects under construction that had already complied with the requirements.

For example, we now send a baseline to the Congress only after my office does an independent review. Well, none of those projects that were assessed by either of those two, the GAO or the National Academy's committee in 2001, were projects that had that validated baseline. Additionally, that baseline, if it is broken and we have to come back to the Congress, the Deputy Secretary must approve that new decision personally if that decision will involve a breach of more than $5 million.

So we have installed a very tight set of controls, but those controls were not in place when the projects looked at in 2001 were generated in the years before, in the budget years. Those controls were put in place only since October 2000. And now we are beginning to build a body of data where we can go back to assess, look for common causes, reasons projects succeed, reasons they fail. We are about to do that this year, now that we have about 2 years under our belt, to find what are the common causes, the best management practices for success, and what are the things that cause

failure; and we are doing that this year, now that we have a couple of years of history available to us.

Mr. BELL. And the data would be available.

Mr. RISPOLI. The data is now available, and that was not available before for projects under the new processes.

Mr. BELL. Also, I want to go back to something the Chair was asking about as far as outsourcing and moving more functions in-house. And you talked about project managers, but is that the only function that you all are really focusing on as far as bringing more in house?

Mr. RISPOLI. Our main focus in my office is the entire project management process. Our belief is that if you don't have qualified Federal staff, you can cover that either of two ways, depending upon your time demands. One is to get your people certified through our new program, but also we have successfully used consultants who are not part of the M&O community, when needed, to help with things like cost control, configuration control, the installation of this earned value management system, which is a national standard that we now mandate as the standard metric for success.

The monthly reports are based upon a nationwide industry standard that is an ANSI standard. And we have had some trouble implementing that because our people were not used to it. So we either train Feds to know how to do it or we bring in special consultants to help the Feds to be able to do that.

Mr. BELL. Thank you, Mr. Chairman.

Chairman TOM DAVIS. Thank you very much.

Mr. Ruppersberger.

Mr. RUPPERSBERGER. First thing, I thank you all for being here. I know this has been a long-term problem, and sometimes it amazes me how long a problem can go until we really get to the point where we are here now in an attempt to fix it.

And I know that Mr. Rispoli, you know, you have inherited this problem, and I think if you look at how we work in this Government and how we resolve these issues, I think it has got to come from the top. And I think when the top, when the secretary has a responsibility and then he gives that responsibility to whoever is going to perform or who is going to have oversight, that there has to be accountability. And I applaud you for having the Assistant Secretary, if that is going to be the job, and I don't know. Do you think the Assistant Secretary will be able to change this culture and to make sure that the people involved trying to resolve the problem, the oversight on the contracts, will that be able to deal with the problem?

Mr. RISPOLI. Sir, I believe so. It is actually even much higher than the various Assistant Secretaries. Our senior-most acquisition official is our Deputy Secretary, Kyle McSlaro; and he is the one who has put out the policy, he is the one who has demanded that the reports be submitted monthly on metrics. He is the one who has initiated quarter reviews. He has reporting to him two Under Secretaries, of course, the Administrator of the NNSA and the Under Secretary for Environment, Science, and Engineering, Mr. Bob Cart. And so it emanates from the very top; it embraces the whole organization.

And, yes, I think that this is the appropriate level. When people in the field know that the Deputy Secretary is looking at the status of their projects on a monthly basis, which ones are within the bounds and performing well and which ones are not, I can guarantee you that there is a much greater level of interest in getting on with the improvements as opposed to paying them lip service.

Mr. RUPPERSBERGER. Well, those are the basic fundamentals of management.

Mr. RISPOLI. Yes, sir.

Mr. RUPPERSBERGER. Giving someone their mission, holding them accountable.

Now, also with management, it is the issue of giving people the resources to do the job; training. Also, do we have the people that can do the job? If not, do we have training in progress, or are we going to go out and seek those individuals that can do this type of job? Because a lot of it, it seems to me, has to do with up-front planning.

Mr. RISPOLI. Yes, you are absolutely correct again. I think that, to answer parts of your question, it is mixed. I believe that some of our project locations have the adequate Federal staff to provide the oversight. We would like to think that they are qualified, but, you know, we have provided this career development program to give them access to training at no cost at their level; we would pay for that training, essentially. Again, it is only $2 million a year to do this entire program. So I think that the mix of numbers of people and qualifications of the people can be improved as we go through this process.

Mr. RUPPERSBERGER. Let me ask you this. Has there been a time, throughout this process, when the performance has been low, that the Department has terminated a contractor? Sometimes you need to send a message. Has that been done? And I think it is something we need to look at, the termination. Or is it because we don't want to terminate because we can't get anybody else to do the job?

Mr. RISPOLI. I am not personally familiar with the termination, but you mentioned earlier the up-front planning. We do require an evaluation of acquisition alternatives, and I can tell you that the performance of the M&O is considered during that evaluation of alternatives. So when you are looking at adding a project, let us say a $100 million project or $200 million, where it could either go to the M&O or directly to another contractor, I can answer you directly that, yes, I am familiar with cases where it is not going to the incumbent M&O but, rather, going to another contractor because the evaluation of performance was part of that evaluation of alternatives.

Mr. RUPPERSBERGER. Have you considered in your planning competition contracts?

Mr. RISPOLI. I might clarify that my purview does not include the selection of the contractors but, rather, the performance in the project arena, the performance metrics and the proper management of the projects.

Mr. RUPPERSBERGER. The reason for a lot of my questioning is basically there is a problem. We need to dissect what is going on and make sure that we have the right people and the right re-

sources, also the right systems, and to make sure that at the very top, that the Secretary takes care of this issue. $16 billion is a lot of money to be mismanaged, and I think it is time that we have to really focus on this. And I hope Mr. Chairman and our ranking member will continue to focus on this, because we have to deal with it; and it should be. There are other agencies in this Government that are doing well, and GAO is identifying it and you are making recommendations.

OK, thank you. That is it.

Chairman TOM DAVIS. Thanks for your questions.

Mr. Rispoli, you have done very well for today's preparation. You have done a good job, I think, trying to explain the Department. You know, this is a lot of money, when you take a look. It is a lot of money. And I don't think these problems are just in the Department of Energy, I think a lot of them are systemwide, but because of the fact that you are the largest non-defense agency to contract out, and because you have had some very notable and high-profile contracting failures, we thought we would kind of use you as an example here of what has gone wrong and how do you correct it. But it is a lot of money that could be spent a lot more efficiently.

I am going to turn to Ms. Nazzaro and ask her a few questions.

Your testimony makes the point that implementing contract and project management reforms is not a good measure of the results of those reforms. Could you elaborate on that a little bit?

Ms. NAZZARO. Yes. The reforms themselves, as I referred to with Mr. Waxman, are the tools by which DOE could better manage their contracts and their project management. Where we have seen the downfall is in the implementation of those reforms. And it is not an issue of that we feel that DOE doesn't have the capability to do it, it is more do they have the will to do it; and that is where we have seen the change of late, that we really feel that there is a difference in the attitude.

It is really an issue over, you know, measuring process, which is all these reforms are, versus results. And what we are really saying is we want to see the results of the reforms; and that is where there has been a problem and that there is very little data to show us the results, are the projects now coming in on time and within cost.

Chairman TOM DAVIS. Why do these things go bad? I mean, is it lack of appropriate oversight; is it lack of appropriate training to understand before the product comes through? Sometimes these things get so far down the line and they are just out of hand and it is hard to pull them back. Is there a coziness or reluctance to question a contractor when they come before you?

Ms. NAZZARO. On the project basis, we have identified a number of problems historically. One certainly is with up-front planning. Another is the use of an approach that DOE calls a concurrent design and build, that they start building the project while they are still designing the project. The other has to do with the technical complexities of some of these projects. Technical designs are incorporated into the plan before they have reached maturity or have been fully developed. So on a project basis it is those kinds of things.

Chairman TOM DAVIS. And in theory, I guess, they think you could speed it up if it works up, but if it doesn't, if the design ends up not being what they thought it was, it just gets more expensive.

Ms. NAZZARO. Correct. And we have seen instances where, you know, they have had to undo things.

Chairman TOM DAVIS. And we end up paying for both, right?

Ms. NAZZARO. Yes.

Chairman TOM DAVIS. And that is the difficulty. That is where you need contracting vehicles that limit the Federal Government's exposure when a contractor comes and says, hey, I can do A, B, C.

Now, sometimes we don't tell them exactly what we want, and that is a different issue, and that goes to training and also closeness to the customer.

Mr. Rispoli, do you want to respond to that?

Mr. RISPOLI. Yes, Mr. Chairman. I agree with Ms. Nazzaro, especially on her point about the up-front planning. We have put a lot of emphasis on this.

I should tell you that up until the new directive was issued in 2000, October 2000, and there was a chance to implement it, our commitments with Congress were made based upon no design. That is a generalization, but that is absolutely true. One of the recommendations of the National Academy of Science is that we ought to move more toward DOD modeling, where they have an engineering design, they call it preliminary design, finished before we give the Congress that commitment. We implemented that in the budget. We now are in our third year of doing that.

If we don't do the up-front planning right, the evaluation of alternatives and the definition of scope and cost and performance up front, before the commitment is made to you, then it is a recipe for failure because you have based it on nothing. It would be like trying to build a house without even having a drawing.

So now we do have processes in place. As I mentioned, we are in our third year of using a dedicated design fund that is in the budget for these projects such that by the time the project data sheet comes to the Congress with the commitment, we have preliminary engineering accomplished. That is the new norm for the Department, but it is only in place for the past three budget cycles, including the current one.

So, again, when I say that we didn't have enough experience yet to the other Congressman's question, we are just now getting enough to be able to do this.

Chairman TOM DAVIS. OK.

Let me just ask Ms. Nazzaro. I mean, there are a lot of causes, obviously, for a contract gone awry. I mean, for the most part, where do you fix the blame proportionally, the Government for lack of oversight or maybe not giving the requirements appropriately or communication; the contractor for kind of overselling, buying in, saying what they want to keep it going?

I don't want to go back to the days where we would have regulations that apply to every contract. I want to trust the buyers out there, the procurement officers, and give them a whole stable full of contracting vehicles and find the right vehicle to get the best value for the Government. Ideally, that is what works. And we will still have failures; people are going to make mistakes, and we have

to understand that, but it is more efficient in the long-term. But when you see these, it kind of makes you wonder.

If you could proportionally fix fault on these.

Ms. NAZZARO. I don't know that you can proportionally fix fault. We certainly have identified problems at both the DOE management level as well as with the contractors as far as lack of accountability.

Chairman TOM DAVIS. And if you would just indulge me one more question. We have rules right now. When a contractor has a bad contract, they can face everything from given consideration in the next contract to debarment, depending on what happens. We have a range of issues. When a contractor doesn't perform, that word gets out, how is that handled so that everybody is warned that they have failed once or twice? And is that taken into account when we give them another job?

Ms. NAZZARO. I mean, I can respond in one of the more recent examples now with the University of California. In this case, they are managing federally funded research and development centers. They have held the contract for over 50 years, and they have been the only contractor to ever hold that contract. Those contracts are not competed, you know, they are just extended.

Chairman TOM DAVIS. Any problems with it?

Ms. NAZZARO. Certainly after Los Alamos, which is one of the areas in which they manage, as well as Lawrence Livermore, but certainly the recent issues with Los Alamos.

Chairman TOM DAVIS. I mean, that is, again, competition sometimes will get you a better result, even if you give it to the same people. They have to retool it and come back. That is why we use competitive sourcing in Government.

Mr. Waxman.

Mr. WAXMAN. Mr. Friedman and Ms. Nazzaro gave us, I think, excellent testimony in raising serious concerns about DOE's contract and project management. It is easy to blame the DOE, but Congress has some responsibility for doing our oversight to see that the Department makes sure that its contract reforms are on track.

Are there particular ongoing projects or contracts that the committee should monitor as part of its oversight mission, Ms. Nazzaro or Mr. Friedman?

Ms. NAZZARO. There are a number of ongoing projects that we would certainly put into that category, one being the Hanford vitrification program; another would be Yucca Mountain; and a third the development of the separation technologies at Savannah River.

Our reason for identifying these as possible candidates would be they are all large projects, they have all had problems in the past, they continue to have problems, and particularly with Hanford, it is one of these, under the example that I gave to Mr. Davis, where they are using the concurrent design and build approach to it.

Mr. WAXMAN. Well, I hope that Chairman Davis will join us in ensuring that the committee takes an active role in monitoring the projects you have mentioned, with the assistance of GAO. To that end, I am going to ask my staff to sit down with the majority staff and see if they can come up with an oversight plan we can all agree on.

Mr. Rispoli, can you assure us that the Department will work with this committee by providing documents and information as we try to monitor the success of DOE's ongoing contract management reforms?

Mr. RISPOLI. Yes, Congressman Waxman, we would be very pleased to work with your staff to share what we are doing, to take suggestions. We believe that we are well on the way, but we would appreciate consulting with them to show and share what we are doing.

Mr. WAXMAN. Thank you very much.

Thank you, Mr. Chairman.

Chairman TOM DAVIS. Thank you very much.

I haven't had a shot at Mr. Friedman yet. He is sitting there patiently.

Mr. FRIEDMAN. I feel, Mr. Chairman, like I have just gotten a call from my dentist to say the root canal therapy is not going to happen today, it will happen sometime in the future. But go right ahead.

Chairman TOM DAVIS. Many of your reviews of individual DOE projects finds problems with adhering to cost, schedule, technical baselines. Based on your experiences with these reviews, are these problems due to unrealistic estimates in the project baselines, inadequate oversight by project managers, or is it possible that the technical complexities of these projects is such that it is just nearly impossible to develop accurate baseline estimates?

Mr. FRIEDMAN. Well, frankly, I think the answer to your question is all of the above. There is no question that in many respects, especially in the environmental remediation arena and some of the leading-edge technologies, some of the projects undertaken by the Department are challenging, very challenging from a technology point of view. So I think it is, frankly, all of the above. But we do find significant problems in terms of baselining and change control systems as the projects proceed.

Chairman TOM DAVIS. OK. Over the past several years, DOE has taken steps to identify skill gaps in its acquisition and project management work forces, and we have had this conversation. In your opinion, have these efforts led to the development of an adequate training program to give these work forces proper skills or not?

Mr. FRIEDMAN. Well, one historical note, if I can. Ironically, in the 1950's, 1960's, and 1970's, the Department of Energy, in part under the Atomic Energy Commission, had the gold standard in terms of internships and programs to bring along Federal managers into the management arena, and, unfortunately, there was a 15, 20-year gap in which that has not taken place, and the Department has suffered as a result of it.

In 2001, we identified human resources as a significant management challenge, and we dropped it in the 2002 management challenge report because we think progress has been made, and you have heard some of the aspects today. There have been a number of intern programs that have been developed, so we think we are making progress and on the right track.

Chairman TOM DAVIS. We passed legislation in the last Congress on the tech corps. I don't know if you are familiar with this, but this would allow people from Government to go out into industry

for a year or two, get some up-to-date training on some of the latest innovations technically and come back into Government. For the extent they go out, they owe additional time to the Government, and vice versa.

Is this the kind of program that could be helpful sometimes in getting people trained and understanding leading-edge technologies? Any thoughts on that?

Mr. FRIEDMAN. Well, I think it is a perfect example of what could be done, frankly. One of the things that we found over time is that frequently the Federal managers, very well intentioned, do not have an entrepreneurial mind-set and do not completely understand how the business world works, in a sense. So I think the sort of interchange that you are referring to might in fact give Federal project managers the opportunity to see the process from the other side, might help them actually in the long-term in their Federal responsibilities.

Chairman TOM DAVIS. From both sides. The other thing is we are never going to pay Federal employees enough and comparable to what they are getting on the outside, but the ability to be the best at what you do and to go out and get training on the leading edge of these things is an exciting thing.

Mr. FRIEDMAN. It is.

Chairman TOM DAVIS. And I think it adds to morale, as well.

Anything else anyone wants to add?

Mr. RISPOLI. Yes, sir, if I may, Mr. Chairman.

Chairman TOM DAVIS. Yes, please.

Mr. RISPOLI. Again, we agree with the comments that Mr. Friedman just made. Our career development program, I couldn't give you a complete summary.

Chairman TOM DAVIS. Do you like the Tech Corps too? That was my bill.

Mr. RISPOLI. But it does include a 1-year rotation with industry and it does provide for up to a 15 percent annual increase in pay for those who are in the Corps and performing well.

Chairman TOM DAVIS. Good.

Mr. RISPOLI. So we have tried to address those things.

Chairman TOM DAVIS. I like that. OK, thank you very much.

Mr. RISPOLI. Yes, sir.

Chairman TOM DAVIS. Mr. Waxman, any additional questions?

Mr. WAXMAN. No.

Chairman TOM DAVIS. I want to thank Mr. Waxman again for calling this to our attention. This has been helpful to us. Obviously we are going to keep close eyes on it.

I want to thank the GAO, as always, for their good work in this area. We have a number of other areas we are going to work with you on these procurement areas.

Mr. Friedman, thank you for your work on this.

Mr. Rispoli, you have responded quickly for not having a long time to work on it and up-to-date.

But, as you know, it is a long way from having the program as we talked about to implementing it and getting the final results, and so we are going to continue to monitor this closely.

If anyone has anything they would like to add in the next 2 weeks, before the close of the hearing, please feel free to supplement it.

I just want to thank all of you for attending today's important oversight hearing. I want to thank our witnesses and, again, Congressman Waxman and other Members for participating. I apologize we don't have anyone else from our side, but, as I said, they are in a mandatory conference right now. They are getting beat up on the budget, so I came here.

I want to thank my staff and Mr. Waxman's staff for organizing this. I think it has been very productive.

And these proceedings are adjourned.

[Whereupon, at 12:20 p.m., the committee was adjourned, to reconvene at the call of the Chair.]

[The prepared statement of Hon. Wm. Lacy Clay follows:]

Statement of the Honorable William Lacy Clay
Before the
Government Reform Committee
Thursday, March 20, 2003

"Breathing Fumes: A Decade of Failure in the Energy Department Acquisitions"

Mr. Chairman, the Department of Energy's (DOE) financial statistics are startling. The DOE budget outlays at 28 major sites costs American taxpayers approximately 21 billon dollars in operational costs, 18 of the 21 billion is spent for contracting activities annually, 16 of the 18 billion is expended on outside contracts leaving 2 billion to support a full time workforce of approximately 16,000.

The Government Accounting Office (GAO) and the DOE Inspector General's Office have rightfully charged the DOE with mismanagement. Over the last ten years, DOE has developed a questionably poor performance record not only on how it spends its funding running day-to-day operations, but also in the cleaning up radioactive waste often left behind by reckless contractors in our communities.

Why is it that the DOE's Inspector General Office (IG), consistently pointing out the poor acquisition practices of the DOE? Inadequate contract management, cost over-runs, and a

failure to have accountability plague the DOE. I suspect that part of the reason is poor fiscal and managerial control.

I hope today that we will be able to be enlightened to the underlying cause of the problem and develop a better understanding of the so-called reform plan at DOE.

Mr. Chairman as you already know last night the President spoke to the American people informing them that American missiles were launched on Iraq. In these perilous times it is incumbent that agencies such as the DOE be more responsible with their resources. The DOE is responsible not only to safeguard energy facilities against terrorism, but to also protect America's communities against accidental mishaps. My constituents expect more accountability for their money.

I look forward to hearing from today's witnesses and urge them to speak freely about the challenges that lie ahead.

Mr. Chairman, I ask unanimous consent to submit my statement into the record.

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