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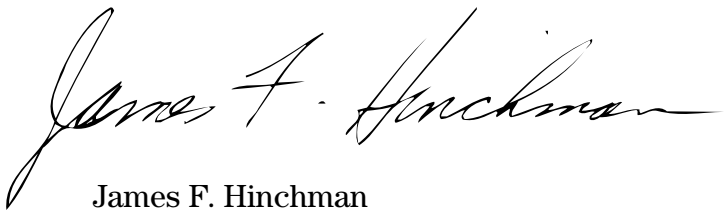
The President of the Senate
The Speaker of the House of Representatives

In 1990, the General Accounting Office began a special effort to review and report on the federal program areas its work identified as high risk because of vulnerabilities to waste, fraud, abuse, and mismanagement. This effort, which was supported by the Senate Committee on Governmental Affairs and the House Committee on Government Reform and Oversight, brought a much-needed focus on problems that were costing the government billions of dollars.

In December 1992, GAO issued a series of reports on the fundamental causes of problems in high-risk areas, and in a second series in February 1995, it reported on the status of efforts to improve those areas. This, GAO's third series of reports, provides the current status of designated high-risk areas.

This report describes our concerns about the Department of Energy's implementation of its contract reform initiative. It focuses on the Department's continued use of noncompetitively awarded contracts to operate its major facilities. The report also identifies some implementation problems that can affect the accomplishment of the Department's missions, compromise its authority, and result in cost inefficiencies.

Copies of this report series are being sent to the President, the congressional leadership, all other Members of the Congress, the Director of the Office of Management and Budget, and the heads of major departments and agencies.



James F. Hinchman
Acting Comptroller General
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Contents

Overview

As the largest civilian contracting agency in the federal government, the Department of Energy (DOE) generally fulfills its multiple missions with contractors who manage and operate its federally owned facilities. In fact, some of DOE's current contracts date back to the 1940s. Since then, DOE has continued a policy of "least interference," which left it unaware of many of its contractors' activities. Moreover, DOE paid nearly every cost that these contractors incurred. In fiscal year 1995, DOE contracted out about 91 percent of its $19.2 billion in obligations (or about $17.5 billion) to, among other things, maintain its weapons complex, fund its national laboratories, and clean up its legacy of environmental contamination.

The Problem

DOE's contracting practices and problems stem from the time of the Manhattan Project's development of the atomic bomb during World War II. This undertaking involved special contracting arrangements, such as least interference in the contractor's work and indemnification of a contractor's liability. Decades later, DOE continued to enter into contracts in which competition was the exception, reimbursement of virtually any cost to the contractor was the

practice, and lax oversight of contractors was the norm.

In 1990, we designated DOE contracting as a high-risk area vulnerable to waste, fraud, abuse, and mismanagement. This designation was precipitated by DOE's history of weak oversight of contractors coupled with heavy reliance on contractors to fulfill DOE's missions. We subsequently issued a series of reports and testimonies, identifying some of the costly effects of DOE's practices. These products have contributed to the Congress's budget deliberations and provided an impetus for DOE to reform its contracting.

Although past Secretaries of Energy have instituted various remedies and have moved in the direction of improved contracting, changing the way DOE does business has not come easily or quickly.

Progress to Date

A major contract reform effort now under way and receiving high priority and visibility at DOE raises expectations for improvement. Responding to continued criticism of DOE's contract management, in 1993 the Secretary of Energy established a Contract Reform Team. The Reform Team evaluated the

Department's contracting practices and, in its February 1994 report, recommended nearly 50 actions to fundamentally change DOE's contracting practices.

Often in direct opposition to DOE's historical contracting patterns, the recommendations included, among other things,

- increasing competition for contracts;
- using alternatives, such as performance-based contracts, to typical management and operating contracts;
- improving DOE's management and control of certain costs; and
- putting performance criteria and incentives into DOE's contracts.

The recommendations identified specific DOE actions to guide the agency's contracting. In response, DOE has made progress in developing an array of policies and procedures. For example, it has published a new regulation adopting a standard of full and open competition for the award of its management and operating contracts. In addition, DOE is including incentives to improve performance and control costs in its contracts. DOE also has initiated a new approach for some environmental cleanup

work in an attempt to shift much of the risk and responsibility onto the contractor.

Although DOE has made headway, most of the completed actions were delayed, which will push back the implementation of the final reforms accordingly. The new policies and guidance provide a framework for improved contracting.

Further Action Needed

The changes proposed in DOE's current reforms, which are unprecedented in scope within DOE, provide a comprehensive plan to address the problems resulting from the Department's past contracting practices. However, the real test of DOE's success will occur as DOE implements, monitors, corrects where needed, and standardizes "best practices" for a totally new way of doing business. This effort will require time as the current contracts are either competitively awarded or noncompetitively renewed with the reform provisions incorporated into the contracts.

When we recently completed a review of the status of all of DOE's contract reform actions,[1] we noted that competition now may be the

[1]Department of Energy: Contract Reform Is Progressing, but Full Implementation Will Take Years (GAO/RCED-97-18, Dec. 10, 1996).

rule but that DOE has a long way to go before it realizes the benefits of competition. Most of DOE's contract decisions continue to be noncompetitive. In addition, we found that problems are emerging in early implementation. For example, the contracts' goals are not always linked to those of the Department. Given the magnitude of these reforms, implementation problems are to be expected. However, they must be identified and corrected for contract reform to succeed.

Also, it is critical that DOE not lose its momentum and priority in implementing contract reform. Therefore, continued high-level monitoring and oversight by DOE will be needed to identify problems, standardize the best practices, and make needed corrections as DOE makes its way through these changes.

DOE also needs to make the specific changes we identified in our recent review of its early implementation of contract reform. For example, DOE should competitively award its management and operating contracts to the greatest extent possible and link the contractors' goals to DOE's strategic goals.

Finally, when the new contracts and regulations produce the desired results, the high-risk designation can be lifted.

Background

Over the last 50 years, DOE and its predecessor agencies have spent billions of dollars for its management and operating contractors using contracting policies that were developed during the crisis of World War II. In fact, some of DOE's current contracts date back to the 1940s. DOE continued a policy of "least interference," which left it unaware of many of its contractors' activities. Moreover, DOE paid nearly every cost that these contractors incurred. Contracting in DOE accounted for $17.5 billion, or 91 percent of its fiscal year 1995 obligations, employing about 120,000 contractor staff, compared to 19,600 federal staff.

Almost all of DOE's contract obligations (82 percent, or $14.35 billion worth) are with its management and operating contractors and are generally extended every 5 years. DOE's own unique procurement regulations cover many of the activities performed under these contracts, which are for operating, maintaining, or supporting government-owned research, development, production, or testing facilities, both nuclear and nonnuclear. These regulations differ from those applicable to typical government contracts and other DOE contracts, which are primarily governed by the Federal

Acquisition Regulation. For example, noncompetitive procurement has been the normal practice for DOE's management and operating contracts, while competitive contracting is the normal practice for other contracts.

We have issued numerous reports relating the effects—unnecessary costs and contractors' poor performance—of DOE's practices. Similarly, we reported how DOE's most significant projects, called major system acquisitions, have had limited success under DOE's management.[2] Of the 80 projects initiated in the last 16 years, only 15 have been completed—most of which were behind schedule and over cost; after billions of dollars had been invested, 31 were terminated before completion.

For example, a project to solidify high-level radioactive waste for long-term storage had grown from a cost of about $446 million to over $1 billion and was more than 7 years behind schedule. Another project, the Superconducting Super Collider, had an original cost estimate of $5.9 billion, but as we reported, the project's expected costs had ballooned to more than $11 billion.

[2]Department of Energy: DOE Has Had Limited Success With Major System Acquisitions (GAO/RCED-97-17, Nov. 26, 1996).

Concerned about the cost increases and the federal budget deficit, the Congress finally terminated this high-energy physics project.

We believe that four key factors underlie the problems with these projects. Two are contract related—a flawed system of incentives for contractors and insufficient DOE personnel with the appropriate skills to effectively oversee the contractors' operations. The other two factors relate to DOE's unclear or changing missions and to the incremental funding of projects.

Although DOE began to take action to improve it contracting practices in l990, reform has been an elusive goal. In May 1993, the Secretary of Energy told the Congress that DOE was not adequately in control of its contractors and, as a result, was not "in a position to ensure effective and efficient expenditures of taxpayer dollars. . . ." As a result, the Secretary initiated a complete review of DOE's contracting practices by a Contract Reform Team.

DOE's Reform Actions Are Under Way

After reviewing the agency's contracting practices, the Secretary's Contract Reform Team issued, in February 1994, its report entitled Making Contracting Work Better and Cost Less. The Team focused its efforts on management and operating contracts and identified numerous problems that needed correcting. The 48 recommendations (47 in the report and 1 directed by the Secretary) for specific actions sought to make sweeping changes in DOE's policies and practices, often completely contrary to the way DOE has done business.

DOE Is Developing a Contracting Policy Framework

DOE is making headway in developing policies, procedures, and guidelines in response to the Reform Team's recommendations. Along with the recommendations, the Reform Team assigned to a specific DOE office the responsibility for completing each action and established deadlines for them. As of August 1996, DOE reported completing 47 of the 48 recommended actions; the last one is nearing completion. Specifically, DOE has

- published a policy adopting a standard of full and open competition,
- developed guidance for contract performance criteria and measures,

- created incentive mechanisms for contractors, and
- developed training in performance-based contracting for DOE personnel.

These steps, as well as others, are crucial to improving DOE's contracting and represent a framework upon which the actual implementation of reforms will take place in contracts.

Delayed Actions Postpone Implementation

Although DOE's efforts are significant, most of the actions were completed later than expected and consequently delayed the implementation of the final reforms. DOE missed the deadlines for 45 of 47 completed reforms by an average of 11 months. Moreover, nearly one-half of the reform actions have just been completed in the last fiscal year. The recency of the contracting policies and guidance will subsequently push implementation further into the future. Thus, DOE's contract reform may not realize all of its expected benefits for some time.

DOE Continues to Miss the Benefits of Competing Contracts

Possibly DOE's most important reform initiative—to open its management and operating contracts to competition—has become policy. However, DOE continues to award the majority of its contracts noncompetitively.

DOE's new policy adopts a standard of full and open competition and directs that DOE competitively award its contracts to the fullest extent possible. Also, the Contract Reform Team's report recommended that the terms of the contract be negotiated before existing contracts were extended. The recommendation is intended to improve DOE's bargaining position with respect to contract costs and deliverables and encourage new contractors to submit bids.

DOE Continues Noncompetitive Awards

DOE continues to award most of its contracts noncompetitively. Of the 24 decisions made from July 5, 1994, to the end of August 1996, DOE decided to extend 16 contracts on a noncompetitive basis and to competitively award the other eight.[3] DOE had had long-term relationships with many of the contractors whose contracts it decided not to compete. The average age of the 16

[3]According to DOE's Procurement and Assistance Data System, DOE had 42 active management and operating contracts as of July 1, 1996.

contracts was about 35 years, and 12 of them had never been competitively awarded.

Second, although contrary to a recommendation by the Contract Reform Team, DOE may have weakened its bargaining position when it conditionally decided to extend the contracts for three of its laboratories before negotiating with the contractor. As a result, DOE placed itself in the same weak negotiating position it has maintained for years.

DOE officials maintain that they are improving existing contracts without the benefit of competition. However, DOE is still negotiating in a noncompetitive environment and will not gain the full benefits of competition.

DOE's Implementation of the New Competition Policy Could Be Beneficial

DOE adopted in 1996 the provisions of the Competition in Contracting Act that provide for specific exceptions to full and open competition.[4] One of the exceptions authorizes noncompetitive procurements for federally funded research and development centers that maintain an essential engineering, research, or development

[4]Because DOE did not adopt these provisions until 1996, they did not apply to DOE's earlier decisions to extend the 16 contracts.

capability. DOE has 18 research centers; under this exception, it could justify its noncompetitive procurements with the management and operating contractors operating the centers.

In the past, DOE has successfully competed contracts to operate research centers at two national laboratories and within the last few months has decided to competitively award another similar contract. We believe that DOE needs to continue to compete its research center contracts to the greatest extent possible.

In the event that DOE does need to use this exception to justify a noncompetitive procurement, it should do so only for the research work, which should be segregated from the other activities of its management and operating contractors. For example, in a recent review of DOE's contracts with research centers, we reported that only about half of the funds the contractors spent was for research and development activities.[5] The remainder was spent on such activities as the environmental restoration of facilities contaminated with hazardous and nuclear waste and did not involve research and

[5]Federal Research: Information on Fees for Selected Federally Funded Research and Development Centers (GAO/RCED-96-31FS, Dec. 8, 1995).

development. Therefore, DOE could get the most value from its competitive awards by separating and competitively awarding the portion of the work that is not research-related.

Some Problems Emerge in Early Implementation

As DOE begins to implement the contract reforms, some implementation problems are occurring. The contracts' goals are not always clearly linked to those of the Department; some contract language could affect DOE's authority to determine the total amount of available incentives; and DOE does not have guidance for its contracting officers to reach reasonable prices on its incentive contracts. These problems, which relate to the use of the new performance-based management contracts, can affect the accomplishment of DOE's missions, compromise DOE's authority, and result in cost inefficiencies. In trying to put contract reforms in place quickly, DOE officials said that some inconsistencies occurred and that they see these early implementation stages as a learning process.

Contracts' Goals Are Not Always Consistent With DOE's

First, the goals in the management and operating contracts are not always clearly linked to those of the Department. A strong linkage is important because most of DOE's missions are performed under such contracts. DOE's contract reform guidance stated that a top-down approach should be used to link DOE's strategic plan to subordinate plans and ultimately to specific goals in a contract.

In a review of several contracts awarded after DOE's strategic plan was published, we had difficulty linking the contracts' goals to the Department's goals. For example, DOE's strategic plan lists five business lines and four key success factors. One contract we reviewed contained goals listed under seven different categories. However, the seven categories were not related to the nine DOE goals. As a result, it was difficult to match the contracts' goals to those of the Department. Clear linkage would help DOE in directing the performance of its missions and the results of its contracts.

Some Contract Language May Compromise DOE's Authority

In addition, some DOE contracts authorized the contractors to dispute DOE's determination of the total amount of available contract incentives or the available incentive amounts that can be applied to specific goals in the contracts. For example, in two contracts we reviewed, the contractors could legally dispute the available amount of an incentive. By providing contractors with the authority to question its decisions, the language in these contracts could hinder DOE's ability to determine the priority of its work, motivate the contractors, and fulfill its mission.

DOE's Regulations Do Not Address Cost-Control Incentives

Finally, as DOE attempts to use incentive contracts to control costs, it is apparent that its management and operating procurement regulations do not provide the necessary direction for its contracting officers. For these incentive to be effective, the contracting officer must price the contract to motivate the contractor to effectively manage costs. The Federal Acquisition Regulation provides guidance and procedures for pricing contracts, but DOE's procurement regulations do not. However, for management and operating contracts, DOE's contracting offices are not required to follow the governmentwide procurement regulation.

In the absence of procedures, two DOE contracting officers obtained different results from the cost incentives they developed for their contracts. One contracting officer used aspects of the governmentwide regulation, while the other did not. When the governmentwide regulation was applied, DOE was able to favorably affect the contractor's performance.

DOE's Recent Privatization Approach Raises Some Concerns

In another move away from its traditional contracting, DOE has recently initiated a "privatization" approach for some of its environmental cleanup work. However, it is important to note that DOE's privatization is not a divestiture, which involves the sale of government-owned assets or functions. (For all practical purposes, DOE's activities are already privatized—contractors conduct DOE's programs at its major sites.) What sets this initiative apart from DOE's traditional approach is its attempt to shift the responsibility for financing and much of the risk onto the contractor. It requires DOE's management and operating contractors to competitively award portions of the work that they would normally have done themselves and make the subcontractors bear the risks.

DOE has begun several projects this year under the new approach and has more planned. Although it is too early to assess the success of this approach, we have questioned the accuracy of DOE's cost-savings estimates and ability to provide the necessary oversight.[6] Instead of DOE's historical approach—awarding

[6]Environmental Protection: Issues Facing the Energy and Defense Environmental Management Programs (GAO/T-RCED/NSIAD-96-127, Mar. 21, 1996) and Hanford Waste Privatization (GAO/RCED-96-213R, Aug. 2, 1996).

cost-plus-award-fee contracts, owning the facility that the contractors operate, and paying the contractors' costs regardless of what was accomplished—DOE's privatization approach uses a fixed-price, competitive contract; requires the contractors to finance, design, build, and operate the facilities; and pays the contractors only for successful results. DOE expects this approach to save billions of dollars because of the potential for greater efficiencies and improved performance in the marketplace.

Uncertainties Exist in Cost-Savings Estimates

Because DOE's cost-savings estimates have a wide margin of error and limited technical data to support them, we believe that the estimates should be viewed with caution. DOE's cost-savings estimates for privatization are based on a comparison of the estimated cost of the privatization approach compared to DOE's historical noncompetitive approach for projects. DOE's recent cost-savings estimates are listed in its 1997 budget submission, identifying six projects it considered highly successful in reducing costs. DOE reported that savings from these projects would range from about 45 to 95 percent.

However, in reviewing an earlier cost estimate, we identified several weaknesses in DOE's calculation. DOE estimated that it could save 30 percent to treat the highly radioactive tank wastes at DOE's Hanford site. However, the estimate is actually based on a range of values with a margin of error of plus or minus 40 percent. That is, the privatized approach could range from $5.8 billion to $13.4 billion, and the noncompetitive, from $8 billion to $18.6 billion. Because of the large margin of error in the cost estimates, the privatization approach could be more costly. Such broad estimates occur because little is known about the technical process to be used, and little data are available from feasibility or engineering studies.

DOE acknowledges that the estimates are subject to a wide margin of error and that actual savings will be affected by such factors as the extent to which competition is achieved. In fact, DOE may not be obtaining the degree of competition that it expected. For example, although DOE expected three or more bids for the first phase of work to be conducted at Hanford, it had received two bids as of August 1996.

Other uncertainties exist, as our previous work has demonstrated. The contents of the tanks and the effectiveness of many of the technologies needed to be successful are uncertain. Therefore, the compensation that a private contractor may require to cover such uncertainties, called the "risk premium," could offset the efficiencies that might be gained by privatization. Furthermore, the actual savings will not be known until the projects, which are either in the planning phase or only recently under way, are completed.

Approach Requires a Different Oversight Role for DOE

Under privatization, oversight could become more complex and demanding. For example, in the past, DOE has not regulated the nuclear waste-processing facilities that are owned and operated by private companies. Consequently, DOE does not have the procedures or the staff in place to carry out this role. DOE will also have to oversee the competitive contracting process as well as the contractors' activities.

DOE acknowledges that even under its traditional contracting approach, it has had difficulty overseeing contractors. DOE officials emphasized that they are taking steps to assume this new role but recognize

that DOE is not fully prepared. It remains to be seen whether DOE can effectively deal with this expanded role.

Because privatization is in its very early stages, these and other aspects of this approach will bear watching. One such aspect is liability. Has DOE adequately defined what liability the private firms should assume? Given the substantial risk involved, indemnification bears close scrutiny to ensure that the government does not assume so much of the risk that the effort becomes privatized in name only.

Further Action Needed

Because DOE's contract reform and related "privatization" initiative are in such early stages, it is too soon to assess their overall effectiveness. DOE's contract reform thus far has established the parameters in the form of policies, guidance, and plans. The real test—the implementation of these reforms in contracts—will occur in future years. With the magnitude of policy changes such as these, implementation problems are to be expected. However, they must be identified and corrected during implementation for contract reform to succeed.

To ensure success, adequate oversight and prompt responses to problems that occur during this important phase are needed. In addition, it is important that the Secretary of Energy keep contract reform as a high-level priority within the Department. Otherwise, DOE's contract reform could lose its momentum during this critical stage.

DOE's privatization approach also consists of many uncertainties at this point. Furthermore, this approach will require a different oversight role for DOE, for which DOE has neither the procedures nor the staff in place.

Because DOE's missions heavily depend on contractors, successful contracting is critical to the success of DOE as a federal department. Once DOE has identified and corrected the problems that occur in these early stages of contracting changes—and subsequently shown that it can work within the contracting framework that it has set up we can remove DOE's contracting from the high-risk area.

Related GAO Products

Department of Energy: Contract Reform Is Progressing, but Full Implementation Will Take Years (GAO/RCED-97-18, Dec. 10, 1996).

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Hanford Waste Privatization (GAO/RCED-96-213R, Aug. 2, 1996).

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Federal Research: Information on Fees for Selected Federally Funded Research and Development Centers (GAO/RCED-96-31FS, Dec. 8, 1995).

Nuclear Facility Cleanup: Centralized Contracting of Laboratory Analysis Would Produce Budgetary Savings (GAO/RCED-95-118, May 8, 1995).

DOE Management: Contract Provisions Do Not Protect DOE From Unnecessary Pension Costs (GAO/RCED-94-201 Aug. 26, 1994).

Energy Management: Modest Reforms Made in University of California Contracts, but Fees Are Substantially Higher (GAO/RCED-94-202, Aug. 25, 1994).

High-Risk Series: Department of Energy Contract Management (GAO/HR-93-9, Dec. 1992).

Energy Management: Vulnerability of DOE's Contracting to Waste, Fraud, Abuse, and Mismanagement (GAO/RCED-92-244, Apr. 14, 1992).

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