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United States General Accounting Office Washington, D.C. 20548

Resources, Community, and Economic Development Division

B-277024

July 21, 1997

The Honorable Duncan Hunter Chairman, Subcommittee on Military Procurement Committee on National Security House of Representatives

#### Subject: Department of Energy: Fiscal Year 1998 Budget Request

As agreed with your office, we are providing you with information on our review of the Department of Energy's (DOE) fiscal year 1998 budget request.<sup>1</sup> This report provides information on (1) fiscal year 1998 budget requests for funds that may not be needed and (2) funding balances remaining from prior years-carryover balances-that may be available to reduce the fiscal year 1998 funding requests. Our review of DOE's fiscal year 1998 budget request focused on requests to support two programs-Environmental Management (EM) and Defense Programs (DP)-which together account for over one-half of the Department's budget. Specifically, we examined requests for funds to support EM's "privatization" initiative,<sup>2</sup> specific projects at EM's Savannah River and Rocky Flats sites, and EM's Technology Deployment Initiative. We also examined DP's requests for specific projects managed by its Nevada Operations Office. Our review of carryover balances focused on operating and capital equipment funding for DOE's six major program areas-Environmental Management, Defense Programs, Energy Efficiency and Renewable Energy, Energy Research, Fossil Energy, and Nuclear Energy. We also examined potential carryover balances in EM construction projects and additional prioryear savings from DOE's overall Strategic Alignment and Downsizing Initiative.

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<sup>&</sup>lt;sup>1</sup>We previously provided this information to your office in briefings during Apr. 1997.

<sup>&</sup>lt;sup>2</sup>This approach does not involve the transfer (sale) of government-owned assets or functions to the private sector. Rather, it relies on the use of a competitively awarded fixed-price performance contract, through which DOE purchases waste cleanup services through a private contractor.

#### **SUMMARY**

As discussed in enclosure I, we questioned about \$400 million in funding requested for fiscal year 1998 that may not be needed or is based on questionable justifications. Specifically, EM's fiscal year 1998 privatization request included \$47.4 million in funding for five projects that is not needed. In addition, the justification for funding other privatization projects was questionable because (1) eight projects worth \$225.1 million had projected cost savings based on very preliminary assumptions and (2) three projects worth \$44.5 million were not required by any existing compliance agreements and could be postponed.<sup>3</sup> We also identified \$34.1 million in fiscal year 1998 requests for individual EM and DP projects that may not be needed. Finally, EM's \$50 million Technology Deployment Initiative request for fiscal year 1998 is not based on any detailed study of project needs.

In addition, our review found that DOE's major program areas may have \$1.1 billion in potentially available carryover balances for operating and capital equipment funding at the beginning of fiscal year 1998. Also, EM has \$19 million in potentially available carryover balances from construction line item funding. It is important to stress that the \$1.1 billion represents only a starting point from which to identify the amount that could actually be used to offset DOE's budget. Potentially available carryover balances in fiscal year 1998 may, in part, be a result of DOE's Strategic Alignment and Downsizing Initiative, which realized about \$223 million of additional savings above its planned savings for fiscal year 1996.

#### BACKGROUND

DOE's fiscal year 1998 budget request totals \$19.2 billion, of which EM's request (\$7.2 billion) and DP's request (\$5.1 billion) represent 64 percent of the total. EM is responsible for managing and addressing the environmental problems resulting from the production of nuclear weapons, nuclear energy activities, and

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<sup>&</sup>lt;sup>3</sup>EM is responsible for complying with numerous federal and state environmental requirements, including the Comprehensive Environmental Response, Compensation, and Liability Act; Resource Conservation and Recovery Act; and Clean Water Act. DOE has signed agreements with federal and state regulators to correct violations at its sites. These agreements identify activities–generally called milestones–and schedules for achieving compliance, many of which are legally binding and enforceable. About 65 percent of EM's budget is driven by schedules for completing milestones.

energy research activities. EM's fiscal year 1998 request includes \$1.006 billion for the Privatization Initiative, \$2.2 billion for the Savannah River and Rocky Flats sites, and \$50 million for the Technology Deployment Initiative. EM's Privatization Initiative seeks to identify and fund discrete cleanup projects through which DOE can share the risk with private-sector companies to reduce costs and accelerate project completion. EM's Technology Deployment Initiative is designed to increase the use of innovative technologies that will reduce the costs, time, and risks associated with cleanup projects. DP's mission is to maintain the safety, security, and reliability of the nation's nuclear weapons stockpile. DP's fiscal year 1998 request includes about \$226 million for activities at its Nevada Operations Office.

Carryover balances represent funding from prior years' budgets and consist of both unobligated balances and uncosted obligations. Each fiscal year, DOE requests obligational authority from the Congress to meet the costs of running its programs.<sup>4</sup> Once DOE receives this authority, it obligates funds by placing orders or awarding contracts for goods and services that will require payment during the same fiscal year or in the future. Unobligated balances represent the portion of its authority that the Department has not obligated. Uncosted obligations represent the portion of its authority that the Department has not yet incurred costs. The carryover balances are distributed among operating activities, capital equipment procurement, and construction projects. Over the last several years, the Congress has reduced DOE's budget request and recommended that the agency use carryover balances in lieu of new funding. In April 1996, we reported on DOE's efforts to analyze its carryover balances in developing its annual budget.<sup>5</sup>

DOE's Strategic Alignment and Downsizing Initiative is part of a broader set of efforts the agency uses to reduce its budget. In fiscal year 1996, DOE introduced five strategies to achieve savings of \$1.7 billion over 5 years-reduce federal staffing levels, travel budgets, and support service contracts, as well as improve information management and streamline the National Environmental Policy Act process. For fiscal year 1996-the most recently completed fiscal

<sup>&</sup>lt;sup>4</sup>Some appropriations do not restrict the time in which the funds must be obligated but state that the funds are "to remain available until expended." This is generally referred to as "no-year" authority. DOE receives no-year authority for most of its activities.

<sup>&</sup>lt;sup>5</sup><u>DOE Management: DOE Needs to Improve Its Analysis of Carryover Balances</u> (GAO/RCED-96-57, Apr. 12, 1996).

year-DOE planned to save \$206 million using these strategies and adjusted its budget request accordingly.<sup>6</sup>

#### EM'S PRIVATIZATION REQUEST RAISES CONCERNS

We identified several concerns with EM's Privatization Initiative and fiscal year 1998 request for \$1.006 billion. First, EM's request for this initiative included funding for five projects that is not needed. In addition, the justification for funding other privatization projects was questionable because (1) some projects proposed to be funded under privatization had projected cost savings based on very preliminary assumptions and (2) other projects were not required to be done by any existing compliance agreements and could be postponed.<sup>7</sup> Finally, EM's request does not include the total capital costs for some of the projects and does not include any operating costs for the projects. As a result, it is difficult to measure the full impact of the requested funding on the overall federal budget. <sup>8</sup>

We identified five privatization projects for which \$47.4 million in requested funding was not needed. For example, DOE officials told us that since the budget request had been prepared, they had reduced the scope of the Spent Nuclear Fuel Dry Transfer and Storage project at the Idaho National Engineering and Environmental Laboratory (INEEL) and that they would need \$21 million less for the construction of this project in fiscal year 1998. Table 1 identifies the five projects, the amount of funding not needed, and the reasons the funds are not needed.

<sup>&</sup>lt;sup>6</sup>While DOE planned for savings of \$206 million, DOE actually reduced its budget request by \$208 million. Additional savings may be realized through the sale of DOE assets, but these savings will not be used to reduce the budget because any proceeds from selling assets will be returned to the Treasury.

<sup>&</sup>lt;sup>7</sup>Some privatization projects fit in more than one category. For example, we found that the Power Burst Facility funding request was not needed in fiscal year 1998 and that the project was supported only by very preliminary cost savings estimates.

<sup>&</sup>lt;sup>8</sup>After we raised questions about the lack of information on total costs for privatization in DOE's fiscal year 1998 budget request, DOE prepared detailed Project Data Sheets containing total cost information. These sheets were distributed to congressional staff in Apr. 1997.

#### Table 1: EM Privatization Project Requests Not Needed

Dollars in millions

Privatization project	Fiscal year 1998 requested funds that are not needed	Reason funding is not needed
TRU Waste Transportation	\$7.7	Error was made in calculating funds needed.
Low Activity Waste	2.6	Regulatory approval is not likely to be granted until fiscal year 1999.
Power Burst Facility	7.9	Facility will not be ready for deactivation until fiscal year 1999.
Silo 3	8.2	Site will not be ready to award contract until late in fiscal year 1998.
Spent Nuclear Fuel Dry Transfer and Storage	21.0	Project's scope was reduced.
Total	\$47.4	

While EM has justified its request for privatization funding on the basis that privatization will lead to significant costs savings, we identified eight projects representing \$225.1 million in requested funding whose projected cost savings were based on very preliminary assumptions. For example, for the Low Activity Waste Treatment project at INEEL, DOE simply reduced the cost estimate for the project prepared by the Management and Integration (M&I) contractor by 20 percent and assumed that this new estimate would represent the cost of the privatized contract. No detailed studies or market analyses have been performed to validate this estimate. Similar approaches were used for the other seven projects.<sup>9</sup> Another important reason justifying the funding for privatization projects is to help ensure that DOE meets the milestones in its compliance agreements. However, we identified three projects–Buildings 886 and 779 at Rocky Flats and the Power Burst Facility at INEEL–representing \$44.5 million in requested funding that are not required by existing compliance agreements and, therefore, could be postponed.

<sup>&</sup>lt;sup>9</sup>In commenting on our report, DOE said that it is continuing to refine its cost estimates to improve their accuracy.

In evaluating EM's fiscal year 1998 privatization request, it is important to recognize that EM's request does not include funding for the total capital costs for some of the projects over their lifetime. For example, EM is requesting \$427 million in fiscal year 1998 for its Tank Waste Remediation System (TWRS) project, but an additional \$853 million will be needed to complete the construction of the project. Furthermore, the privatization funding request does not include any of the long-term operating costs of these projects, which will be paid annually once the projects begin operations. The long-term impact of the operating costs, estimated at \$5.8 billion. As a result, assessing the long-term impact of EM's privatization projects is not include in the budget request.

#### SPECIFIC EM AND DP PROJECT REQUESTS MAY NOT BE NEEDED

Our review of EM's fiscal year 1998 request for specific projects at its Savannah River and Rocky Flats sites identified \$23.4 million for three projects that may not be needed. This amount includes \$4.9 million of a \$9.8 million request for well sampling at Savannah River that may not be needed. \$2.4 million for the conceptual design of a new interim plutonium storage vault at Rocky Flats that is not scheduled to be constructed, and \$16.1 million for lower-risk cleanup activities at Rocky Flats that could be postponed. In addition, our review of DP's fiscal year 1998 request for projects managed by its Nevada Operations Office identified \$10.7 million for two projects that may not be needed. This amount includes \$0.7 million for educational initiatives and \$10 million for operating and maintaining the Device Assembly Facility, which lacks a mission because the ending of the cold war reduced testing activities. In addition, up to \$40 million requested for four subcritical experiments at Nevada may not be needed because the need for these experiments is uncertain.<sup>10</sup> All fiscal year 1996 subcritical experiments were canceled, and none of the fiscal year 1997 experiments have been conducted to date. As a result, it is not clear how much, if any, of the fiscal year 1998 request is needed.

#### EM'S TECHNOLOGY DEPLOYMENT INITIATIVE HAS UNRESOLVED IMPLEMENTATION ISSUES

<sup>&</sup>lt;sup>10</sup>A subcritical experiment involves high explosives and nuclear materials such as plutonium. High explosives are detonated to create high pressures similar to those achieved in the early nonnuclear stages of a nuclear weapon.

The goal of EM's Technology Deployment Initiative is to move innovative technologies into more widespread use across DOE. These technologies are expected to reduce costs, speed cleanup, or reduce risks. To achieve this goal, EM has requested \$50 million to provide to sites for the first deployment of an innovative technology that has been tested and demonstrated. EM plans to use a competitive process to review and select proposals from sites. However, EM did not base its \$50 million request on any detailed study of project needs, and it is uncertain that additional sites beyond the first deployment will use the technologies selected for funding. In addition, under this program, sites may receive additional funding for doing what they should be doing anyway–selecting the best technologies for the job.

#### SOME CARRYOVER BALANCES MAY BE AVAILABLE

On the basis of DOE's program cost estimates for fiscal year 1997, we project that DOE will have about \$2.4 billion in carryover balances at the beginning of fiscal year 1998 for operating activities and capital equipment procurement in its six major programs.<sup>11</sup> Using the minimum goals for carryover balances discussed in our April 1996 report,<sup>12</sup> we estimate that DOE will need a minimum of \$1.3 billion to pay for commitments made in prior years that have not yet been completed-leaving a total of \$1.1 billion in potentially available carryover balances at the beginning of fiscal year 1998. DOE has proposed using \$53.5 million in carryover balances to offset its fiscal year 1998 budget request for its six major programs.

# <sup>11</sup>Five of DOE's six major programs–DP, EM, Energy Efficiency and Renewable Energy, Fossil Energy, and Nuclear Energy–were able to provide cost estimates for fiscal year 1997. The sixth program, Energy Research, accepted our cost estimates, which were based on actual costs through the first 4 months of fiscal year 1997. Also, because the cost estimate for DP was higher than the actual costs for fiscal year 1996, we used our cost estimate for this program.

<sup>12</sup>As discussed in enc. II, to develop goals for the minimum level of carryover balances needed to meet program requirements, we adopted goals that are based on an approach first developed by EM. For example, for operating funding, these goals assume a minimum of a 1-month lag between a commitment of funding and the actual expenditure of funding for that commitment. Thus, for a year's operating funding, a carryover balance goal of 1 month's funding (or 8 percent of the total obligational authority) would represent the minimum carryover balance needed to meet program requirements.

It is important to stress that the \$1.1 billion represents only potentially available balances—the amount of projected carryover balances that exceed the minimum goal for balances needed to meet program commitments. As we noted in our April 1996 report, this balance represents a starting point from which to identify the amount that could actually be used to offset DOE's budget. DOE should be able to quantify the unique program characteristics that determine the need for balances over the goal in order to determine the amount of the available balances.

In addition to analyzing the carryover balances in DOE's operating and capital equipment funding, we identified \$19 million in carryover balances available in EM construction projects at its Savannah River and Rocky Flats sites. (See table 2.) The balances included \$17.9 million from various projects at Savannah River. For example, from the F&H Canyon Exhaust project, we found \$6.4 million in funding that will be available at the completion of the project due to cost underruns. At Rocky Flats, we identified another \$1.1 million in existing funding for design work to support construction of a interim plutonium storage vault which, under current plans, will not be constructed.

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#### Table 2: EM Construction Projects With Available Carryover Balances

#### Dollars in millions

Construction project description /site	Available carryover balances	Reason balances are available
Tritium Loading Line Modification (SR)	\$0.831	Cost underrun.
Domestic Water Upgrade (SR)	0.8	Excess contingency funds.
Radio Trunking System (SR)	1.1	Cost underrun.
F&H Canyon Exhaust (SR)	6.4	Cost underrun.
Productivity Retention Program (SR)	0.068	Project completed.
Additional Separations (SR)	1.129	Cost underrun.
Plantwide Fire Protection (SR)	5.882	Cost underrun.
Disassembly Basin Upgrade (SR)	0.6	Cost underrun.
Tank Farm Services Upgrade (SR)	1.112	Cost underrun.
Interim Plutonium Storage Vault (RF)	1.1	Project not planned to be continued.
Total	\$19.022	

Note: Savannah River (SR); Rocky Flats (RF).

#### STRATEGIC ALIGNMENT AND DOWNSIZING INITIATIVE'S SAVINGS WERE GREATER THAN PLANNED

In fiscal year 1996, DOE reduced its budget request by \$208 million to reflect anticipated savings of \$206 million under the first year of its Strategic Alignment and Downsizing Initiative. At the end of fiscal year 1996, DOE reported that actual savings under the Initiative were \$373

million. However, our calculation of actual savings for fiscal year 1996 is \$429 million. This amount represents an increase of \$223 million in savings above the original DOE-planned savings of \$206 million, which the fiscal year 1996 budget request was based upon. These additional prior year savings may, in part, contribute to potentially available carryover balances in fiscal year 1998. Unanticipated savings from this program may be an important consideration as the fiscal year 1998 budget and future budgets are developed over the 5-year life of this cost-savings program.

#### AGENCY COMMENTS

We provided a draft of this report to DOE for its review and comment. DOE said that there were no policy disagreements between us; however, DOE had some detailed concerns about five areas discussed in our report-EM's Privatization Initiative, specific DP projects, EM's Technology Deployment Initiative, carryover balances, and the Strategic Alignment and Downsizing Initiative. Where appropriate, we made changes to the report in response to specific agency comments. (See enc. III for DOE's comments.)

With respect to EM's Privatization Initiative, while DOE agreed that it did not need \$39.2 million for the TRU Waste Transportation, Low Activity Waste, Power Burst Facility, and Spent Nuclear Fuel Dry Transfer and Storage privatization projects in fiscal year 1998, it disagreed with our conclusion that \$8.2 million in funding for the Silo 3 project was not needed in fiscal year 1998. DOE noted that the Silo 3 funds were needed to provide full up-front funding prior to the contract award to comply with the Office of Management and Budget's policy for capital leases. However, in offering this comment, we do not believe DOE is being consistent. Specifically, as we note in our report, DOE is not requesting full funding for its largest privatization project—the TWRS project. DOE officials told us that they did not request full funding for TWRS because they did not think their budget request could absorb the full amount of \$1.445 billion.

The officials also expressed concerns about our statement that assessing the long-term impact of EM's privatization projects on the overall federal budget is difficult because the full cost of these projects is not included in the budget request or in agency budget justifications. DOE noted that it has distributed detailed Project Data Sheets, which include the total costs, to congressional staff. We note that the Project Data Sheets were prepared at the request of congressional staff after we raised questions about the total cost of these projects and that the sheets were not distributed until April

1997. However, we have made changes to the report to reflect the fact that the agency's justifications-the Project Data Sheets-do include the total cost.

Regarding the specific DP projects, in general, DOE's comments reflect corrective actions taken since we completed our work and clarifications on why questionable funds are needed. Specifically, regarding educational initiatives, at the time of our review DOE had \$670,326 in uncosted obligations and had requested an additional \$700,000 for fiscal year 1998 for educational initiatives. After our review, DOE said that it has committed these uncosted obligations and has reduced its fiscal year 1998 budget request to \$315,000. We agree that, if appropriately committed, the uncosted obligations are no longer available for funding DOE's fiscal year 1998 budget request and that the reduced request should be considered on its own merits. Regarding the Device Assembly Facility, we recognize that DOE is proposing various possible future missions for the facility once it becomes operational. However, the facility is not vet operational and currently lacks authorized, defined missions with specific time frames. Furthermore, DOE has not considered the alternative of temporarily closing the facility since its original mission is no longer viable.<sup>12</sup> We believe that the absence of a mission for the facility raises questions about whether all of the \$10 million requested for fiscal year 1998 may be needed. Finally, although none of the six subcritical experiments planned for fiscal year 1996 or 1997 have been conducted to date, DOE says that two experiments are still planned for fiscal year 1997. Furthermore, DOE claims that significant funding is required to plan for these experiments even if they are not actually conducted. However, since all of these postponed experiments were fully funded in fiscal years 1996 and 1997, we believe that it is appropriate to question whether some funding may remain that may reduce the need for all of the \$40 million requested for fiscal year 1998.

Regarding EM's proposed Technology Deployment Initiative, DOE acknowledged that a formal detailed study was not performed to arrive at its funding request. According to DOE, the \$50 million figure was based on past experience and the agency's belief that a sufficient number of proposals should be funded to represent a majority of EM's cleanup problems. DOE provided updated information on the anticipated number of projects, which we have incorporated. Regarding the possibility that

<sup>&</sup>lt;sup>12</sup>The facility's original mission was to assemble nuclear test devices. This mission is no longer viable because underground testing was banned with the signing of the Nuclear Test Ban Treaty of 1992.

additional sites beyond the first deployment might not use the innovative technologies, DOE commented that the initiative requires the identification of additional deployment opportunities; however, as noted in our May 1997 testimony,<sup>13</sup> additional sites are required to submit only letters of interest.

Regarding carryover balances, DOE noted that there are significant methodological differences in how we and the Department analyze carryover balances that could yield substantially different results. In particular, DOE cited (1) our application of the goal for operating and capital funding to the total obligational authority, versus its preference for applying the goal to the total resources that can be costed, and (2) its use of a 50-percent goal for operating funds associated with management and operating contractor's subcontracts and nonmanagement and operating prime contracts. DOE also said that the analysis of carryover balances only identifies areas where the balances should receive greater scrutiny and does not mean that the balances could actually be used to offset DOE's budget.

We recognized and discussed our views on the first difference in our April 1996 report on carryover balances. We noted that DOE's approach assumed that a percentage of the uncosted balances existing at the beginning of the vear would again be carried over for an additional fiscal year. We stated that this assumption was inconsistent with the assumption made in developing the goal in the first place, that is, that uncosted obligations would be needed for only a certain amount of time. We continue to hold this view. Regarding the issue of the 50-percent goal for certain types of contracts, we found that DOE did not have data available to quantify how much its balances were affected by this issue. Therefore, we did not make an adjustment to our analysis to reflect this issue. We did make adjustments to reflect other unique program requirements, such as an adjustment to the capital equipment carryover balance goal for the Energy Research program that removes the funding for major items of equipment that have the characteristics of construction projects. (See table II.1 for a discussion of the adjustments we did make in our analysis.) Finally, we agree that the analysis of carryover balances is a tool for focusing on balances that should receive greater scrutiny and does not necessarily mean that all balances are available to offset DOE's budget. We have included wording in the report to emphasize that this analysis represents only a starting pointing from which to analyze carryover balances.

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<sup>&</sup>lt;sup>13</sup><u>Cleanup Technology: DOE's Program to Develop New Technologies for</u> <u>Environmental Cleanup</u> (GAO/T-RCED-97-161, May 7, 1997).

Regarding our finding that DOE exceeded its Strategic Alignment and Downsizing Initiative's savings goal, DOE noted that it had taken a conservative approach in reporting these savings. It also noted that the actual higher saving estimates were known to its offices and taken into account when preparing budget submissions. However, we reported these additional amounts as potentially available because DOE could not document the extent to which they were considered during its budget preparation process.

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We performed this work from October 1996 through June 1997 in accordance with generally accepted government auditing standards. We did not, however, verify the accuracy of the information contained in DOE's Financial Information System, which we used to analyze the carryover balances. We did not verify the accuracy of this information because of the limited time available to effectively review the system while still achieving our primary objectives of reviewing DOE's fiscal year 1998 budget. Enclosure II describes our objectives, scope, and methodology.

As agreed with your office, unless you publicly announce it contents earlier, we plan no further distribution of this report until 10 days after the date of this letter. At that time, we will send copies of the report to the appropriate congressional committees and the Secretary of Energy. We will also make copies of this report available to others upon request. Please contact me on (202) 512-3841 if you or your staff have any questions. Major contributors to this report included Chris Abraham, Gene Barnes, Linda Chu, Jim Crigler, Mark Gaffigan, Ron Guthrie, Jeffery Heil, Rachel Hesselink, John Hunt, Anne McCaffrey, James Noël, Tom Perry, Ilene Pollack, Robert Sànchez, Bill Swick, and Charles Sylvis.

Sincerely yours,

Victor S. Rezendes) Director, Energy, Resources, and Science Issues

Enclosures - 3

GAO

### Department of Energy's Fiscal Year 1998 Budget Request

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ENCLOSURE I

GAO Objectives

- Identify Department of Energy (DOE) fiscal year 1998 requests for funds that may not be needed.
- Identify carryover balances that are potentially available.

### GAO Scope

- Environmental Management (EM) program, including
  - Privatization Initiative
  - Projects at Savannah River and Rocky Flats sites
  - Technology Deployment Initiative
- Defense Programs (DP)--Nevada
  Operations Office

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### GAO Scope, Continued

- Carryover balances in DOE's major programs
- Strategic Alignment and Downsizing Initiative (SAI)

### GAO Summary

- EM's fiscal year 1998 privatization request contains at least
  - five projects that do not need the \$47.4 million requested for fiscal year 1998,
  - eight projects worth \$225.1 million that have very preliminary cost savings assumptions, and

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 three projects worth \$44.5 million not required by compliance agreements.

### GAO Summary, Continued

- EM and DP have requested \$34.1 million for specific projects that may not be needed.
- EM's \$50 million Technology Deployment Initiative has unresolved implementation issues.
- \$1.1 billion in potentially available carryover balances exist in DOE.
- SAI produced more savings than anticipated.

### GAO EM's Privatization Request Some projects do not need requested funds

Dollars in millions

Project	Amount not needed
TRU Waste Transportation	\$7.7
Low Activity Waste	2.6
Power Burst Facility	7.9
Silo 3	8.2
Spent Nuclear Fuel Dry Transfer and Storage	21.0
Total	\$47.4

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GAO/RCED-97-171R DOE's Fiscal Year 1998 Budget Request

ENCLOSURE I

- GAO EM's Privatization Request, Continued Some projects' cost savings are based on very preliminary assumptions
  - TRU Waste Transportation, Low Activity Waste Treatment, Power Burst Facility, Spent Fuel Dry Transfer and Storage, Waste Pits Remedial Action, Silo 3, and Buildings 886 and 779.
  - Total requested--\$225.1 million.

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- GAO EM's Privatization Request, Continued Some projects are not required by existing compliance agreements
  - Buildings 886 and 779 and the Power Burst Facility.
  - Total requested--\$44.5 million.

- GAO EM's Privatization Request, Continued Scoring issues
  - EM is requesting \$1.006 billion for 11 new projects and 1 existing project.
  - EM is not requesting budget authority for the total capital costs for some projects, e.g., the Tank Waste Remediation System (TWRS).
  - DOE's capital funding request is not always related to a useful segment of a project, e.g., TWRS.

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### GAO EM's Privatization Request, Continued Scoring issues

- DOE's privatization projects do not fit the scoring approach in the Office of Management and Budget's Circular A-11 very well.
- Because budget authority is requested for only the capital portion of projects, operating costs are not addressed in the budget request.

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ENCLOSURE I

### GAO EM's Privatization Request, Continued Scoring issues

- Operating costs exceed capital costs--\$5.8 billion vs. \$2.8 billion.
- The long-term impact of operating costs on outlays will be significant.

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### GAO EM's Privatization Request, Continued Budget Outlays by Fiscal Year

#### **Dollars in millions**



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### GAO EM's Specific Requests

- EM has requested fiscal year 1998 funds for specific projects that may not be needed.
  - \$4.9 million for well sampling at Savannah River.
  - \$2.4 million for the interim storage vault at Rocky Flats.
  - \$16.1 million for lower-risk cleanups at Rocky Flats.



### GAO DP's Specific Requests

- DP has requested funds for specific projects that may not be needed.
  - \$0.7 million for educational initiatives at the Nevada Operations Office.
  - \$10 million for operating and maintaining the Device Assembly Facility, which lacks a mission.



### GAO DP's Specific Requests, Continued

- \$40 million was requested for four subcritical experiments in fiscal year 1998 at Nevada.
  - All fiscal year 1996 experiments were canceled.
  - None of the fiscal year 1997 experiments have been conducted.
- All of the \$40 million requested may not be needed.



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### GAO EM's Technology Deployment Initiative

- Initiative's goals:
  - To move innovative environmental technologies into more widespread use across DOE.
  - To use innovative technologies to reduce costs, speed cleanups, or reduce risks.

### GAO EM's Technology Deployment Initiative, Continued

- Process for achieving goals:
  - The Technology Deployment Initiative would provide \$50 million to sites for the first deployment of an innovative technology that has been tested and demonstrated.
  - The Technology Deployment Initiative will use a competitive process to review and select proposals from sites.



ENCLOSURE I

### GAO EM's Technology Deployment Initiative, Continued

- Sites will issue a request for proposal for each project.
- The Army Corps of Engineers will help develop data on cost savings from the use of innovative technologies.
- Projects may run from 1 to several years.
- Sites may retain any cost savings from the first deployment.



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### GAO EM's Technology Deployment Initiative, Continued

- Issues:
  - Sites will receive additional funds to do what they should do anyway--select the best technology for the job.
  - EM did not arrive at its \$50 million request through a detailed study.

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### GAO EM's Technology Deployment Initiative, Continued

- It is uncertain whether additional sites (beyond the first deployment) will use the innovative technologies.
- The number of projects that should be funded is uncertain.
  - EM recently selected 16 projects to fund in FY 1998, pending appropriations decisions.

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## GAO Status of Carryover Balances for Operating and Capital Equipment Funding

DOE program Energy and Water	Fiscal year 1997 beginning balances	Projected fiscal year 1998 beginning balances	Carryover balance goal for fiscal year 1998	Potentially available balance	Proposed use of carryover balances in DOE's fiscal year 1998 request
Development Defense	\$597,705,435	\$376,514,966	\$330,670,692	\$45,844,274	0
Programs	-	φ07 0,0 (- <del>1</del> ,000	4000,070,002	<b>\$10,011,27</b>	0
Environmental Management	960,455,457	659,666,594	529,810,518	129,856,076	0
Nuclear Energy	112,768,365	55,964,365	28,478,831	27,485,534	\$3,535,000
Energy Research	474,617,166	487,189,315	242,390,688	244,798,627	15,000,000
Energy Efficiency and Renewable Energy	237,054,288	146,305,094	21,855,174	124,449,920	15,000,000
Total	\$2,382,600,711	\$1,725,640,334	\$1,153,205,903	\$572,434,431	\$33,535,000

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GAO/RCED-97-171R DOE's Fiscal Year 1998 Budget Request

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# GAO Status of Carryover Balances for Operating and Capital Equipment Funding, Continued

DOE program	Fiscal year 1997 beginning balances	Projected fiscal year 1998 beginning balances	Carryover balance goal for fiscal year 1998	Potentially available balance	Proposed use of carryover balances in DOE's fiscal year 1998 request
Interior					
Fossil Energy	\$598,577,883	\$515,681,575	\$67,493,760	\$448,187,815	0
Energy Efficiency and Renewable	356,823,127	177,847,063	48,370,042	129,477,021	\$20,000,000
Energy					

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# GAO Status of Carryover Balances for Operating and Capital Equipment Funding, Continued

	Fiscal year 1997 beginning balances	Projected fiscal year 1998 beginning balances	Carryover balance goal for fiscal year 1998	Potentially available balance	Proposed use of carryover balances in DOE's fiscal year 1998 request
Energy and Water Development	\$2,382,600,711	\$1,725,640,334	\$1,153,205,903	\$572,434,431	\$33,535,000
Interior	955,401,010	693,528,638	115,863,802	577,664,836	20,000,000
Grand total	\$3,338,001,721	\$2,419,168,972	\$1,269,069,705	\$1,150,099,267	\$53,535,000

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## GAO DOE's Carryover Balances

- Carryover balances from line item funding are also potentially available.
  - \$17.9 million in various line items at Savannah River.

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• \$1.1 million for the interim storage vault at Rocky Flats.

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## GAO SAI's Savings Greater Than Planned

- DOE reduced its fiscal year 1996 budget request to deal with an anticipated savings of \$206 million under SAI.
- We calculated the savings for fiscal year 1996 at \$429 million.
- Therefore, about \$223 million of additional savings have resulted.



## GAO Sources of SAI's Savings

Dollars in millions

Area	DOE planned savings	DOE reported savings	GAO calculated savings	Total additional savings
Support Service Contracts	\$90	\$184	\$208	\$118
Staff	45	55	71	26
Information Resources Management	30	88	88	58
Travel	35	40	56	21
National Environmental Policy Act	6	6	6	0
Total	\$206	\$373	\$429	\$223

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#### OBJECTIVES, SCOPE, AND METHODOLOGY

Our objectives in this review were to identify (1) the Department of Energy's (DOE) fiscal year 1998 budget requests for funds that may not be needed and (2) funding balances remaining from prior years-carryover balances-that may be available to reduce the agency's fiscal year 1998 funding requests.

To identify fiscal year 1998 budget requests for funds that may not be needed, we focused on DOE's requests for funding to support the Environmental Management (EM) program's Privatization Initiative, specific EM projects at DOE's Savannah River and Rocky Flats sites, EM's Technology Deployment Initiative, and Defense Programs' (DP) requests for specific projects managed by its Nevada Operations Office. In reviewing privatization, we interviewed officials in EM's Privatization Initiative office at headquarters as well as the managers of specific projects slated for privatization at various facilities in the field. We obtained and reviewed program guidelines, budget request justifications, project plans and cost estimates, and other pertinent documents related to privatization. For our review of specific EM projects at Savannah River and Rocky Flats and DP projects managed by the Nevada Operations Office, we reviewed supporting documentation that justified specific project requests for funding. We also interviewed local DOE field office staff and management and operating (M&O) contractors with responsibility for managing these projects and developing the fiscal year 1998 budget request. For the Technology Deployment Initiative, we interviewed program managers at headquarters and reviewed the fiscal year 1998 budget justification. We also reviewed the implementing program guidance and policy that describe the initiative's process for deploying technologies at different sites.

To identify carryover balances that may be available to reduce fiscal year 1998 funding requests, we estimated potentially available carryover balances for operating

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activities and capital equipment procurements for DOE's six major program areas-EM, DP, Energy Efficiency and Renewable Energy, Energy Research, Fossil Energy, and Nuclear Energy. We also examined potential carryover balances in EM construction projects and additional prior year savings from DOE's overall Strategic Alignment and Downsizing Initiative.

To estimate potentially available carryover balances for operating activities and capital equipment procurements at the beginning of fiscal year 1998 for DOE's six major program areas, we (1) projected the six major programs' carryover balances at the beginning of fiscal year 1998, (2) set carryover balance goals for each program, and (3) analyzed the difference between the goals and the projections to identify potentially excess balances.

We developed our projected total carryover balances for DOE's six major programs by adding carryover balances at the beginning of fiscal year 1997 and new funding in fiscal year 1997 to calculate the total resources available for operating and capital equipment activities. We then developed fiscal year 1997 cost estimates based on the actual costing rate for the first 4 months of fiscal year 1997 as compared with the costing rate for fiscal year 1996. We then subtracted fiscal year 1997 cost estimates from the total resources available to arrive at projected carryover balances for the beginning of fiscal year 1998. We then provided these cost estimates and the resulting carryover balances to DOE program officials. Five of the program offices provided their fiscal year 1997 cost estimates—EM, DP, Energy Efficiency and Renewable Energy, Fossil Energy, and Nuclear Energy. Energy Research accepted our projected fiscal year 1997 costs. For EM, Energy Efficiency and Renewable Energy, Fossil Energy, and Nuclear Energy, we used their costs to arrive at the final projected carryover balance for the beginning of fiscal year 1998. Because DP's fiscal year 1997 cost estimates were higher than actual fiscal year 1996 costs, we used our fiscal year

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#### ENCLOSURE II

1997 cost estimates to arrive at its projected carryover balance for the beginning of fiscal year 1998.

To develop goals for the minimum level of carryover balances needed to meet program requirements, we adopted goals based on an approach first developed by EM that we discussed in our April 1996 report on DOE's carryover balances. Specifically, for operating funding, these goals assumed a minimum of a 1-month lag between a commitment of funding and the actual expenditure of funding for that commitment. Thus, for a year's operating funding, a carryover balance goal of 1-month's funding (or 8 percent of the total obligational authority) would represent the minimum carryover balance needed to meet program requirements. For capital equipment, these goals assumed a minimum of a 6-month lag between a commitment of capital equipment funding and the actual expenditure of funding for that commitment. Thus, for a year's capital equipment funding, a carryover balance goal of 6-month's funding (or 50 percent of the total obligational authority) would represent the minimum carryover balance needed to meet program requirements. However, in fiscal year 1997, operating and capital equipment activities are no longer funded as separate categories. Thus, we used the fiscal year 1996 ratios of funding for operating and capital equipment activities for each program to estimate the type of funding it received in fiscal year 1997. This allowed us to determine carryover balance goals that were consistent with this approach.

We then compared projected fiscal year 1998 beginning balances to a goal for the minimum level of carryover balances needed to meet program requirements for fiscal year 1998. The difference between the projected balances and the carryover balance goal represents the pool of potentially available carryover balances for fiscal year 1998. In analyzing the differences, we adjusted the goals, where possible, to account for individual programs' characteristics that would affect the amount of the

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#### ENCLOSURE II

carryover balances needed to meet unique program requirements. Table II.1 summarizes the areas where we made adjustments to DOE's programs.

Table II.1: Adjustments to Carryover Balance Goals for DOE Programs

DOE program	Specific program adjustment
Environmental Management	EM privatization funding: Not included in the analysis because it consists of unique financing for long-term, construction-related projects.
Energy Research	All programs: The carryover balance goal for capital equipment procurement was adjusted to remove funding for major items of equipment that have the characteristics of construction projects.
Energy Research	Small Business Innovative Research program: Not included in the carryover balance analysis because it is not funded by a specific appropriation but by an assessment on all government research and development funding.
Nuclear Energy	Naval Reactors program: Excluded because these activities are not controlled by Nuclear Energy.
Nuclear Energy	International Nuclear Safety program: Not included in the analysis because funding is for construction-related projects in the former Soviet Union.
Nuclear Energy	Isotope Production and Distribution fund: Fiscal year 1997 beginning uncosted obligations were reduced to reflect revenues and reimbursements. The fiscal year 1997 new obligational authority was adjusted to reflect the net appropriation and cash collected from the sale of isotopes.
Fossil Energy	Clean Coal Technology program: Not included in the analysis because funding is primarily for long-term, construction-related projects.
Defense Programs	Weapons Activities and Other Defense Activities appropriations: Adjusted to subtract funds for nuclear nonproliferation, worker training, and inventory because these funds are not managed by DP.

We did not develop carryover balance projections and goals to identify potential excess funding for DOE's construction projects. As we noted in our April 1996 report, there is no need to establish a goal for carryover balances for construction projects because each one is unique, and its level of carryover balances can be easily measured

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#### ENCLOSURE II

against the remaining scope of work, milestones, and specific budget request. Therefore, we reviewed line item funding for specific EM construction projects at Savannah River and Rocky Flats to identify any carryover balances that may be available. We examined project cost and budget plans, actual cost data, scope information, and scheduled milestones for completion. We interviewed DOE and contractor officials at the site to determine if any projects have carryover balances that are in excess of project needs.

Independently of our analysis of carryover balances for DOE's major programs, we also examined DOE's Strategic Alignment and Downsizing Initiative to identify any savings above planned budget reductions that may have been realized in prior years. To measure the savings under DOE's initiative, we reviewed the areas designated for savings and DOE's fiscal year 1996 amended budget request. We checked the status of each of the 45 implementation plans, including the six key strategies for achieving cost savings, and calculated actual fiscal year 1996 savings under the initiative. We discussed procedures for claiming and reporting savings with officials at the Offices of the Chief Financial Officer and the Chief Information Officer.

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#### COMMENTS FROM THE DEPARTMENT OF ENERGY



Department of Energy Washington, DC 20585

June 18, 1997

Mr. Victor S. Rezendes Director, Energy, Resources, and Science Issues Resources, Community and Economic Development Division U. S. General Accounting Office Washington, D.C. 20548

Re: GAO draft report "Department of Energy: Fiscal Year 1998 Budget Request," June 1997, GAO/RCED-97-171R.

Thank you for the opportunity to provide agency comments on the referenced draft report. We have reviewed the subject report and held discussions with General Accounting Office (GAO) representatives. We believe that there are no policy disagreements between us, but only questions of timing and execution.

The Department's detailed comments are provided in the enclosure to this letter. A summary of the major issues is provided as follows:

- We believe that the characterization of the Department's carryover balances by GAO as "potentially available" (based on GAO's goals for carryover balances) may be misleading. We request that GAO further highlight its finding that these "potentially available" balances merely represent a starting point by which to identify amounts of balances that might be available to offset DOE's budget. Additionally, there are significant methodological differences between the Department and GAO in the analysis of carryover balances which may yield substantially different results.
- GAO has indicated that the Department has exceeded its Strategic Alignment Initiative (SAI) savings goals and should take full advantage of these savings in future budget requests. We agree with that conclusion, and it is our planning objective. The Department does consider a variety of costing changes/reductions to on-going programs, including SAI, and expects its budgets to reflect such savings.
- GAO has characterized requested funding for the Device Assembly Facility (DAF) and selected subcritical experiments as potentially surplus to the needs of the Department. While the end of the Cold War and the Comprehensive Test Ban Treaty have reduced some testing activities, DAF remains a valuable facility with several planned missions. Additionally, two subcritical tests are planned for fiscal year 1997 with more planned for

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the future. These tests serve as a critical component of our Science Based Stockpile Stewardship program and will reinforce and demonstrate our readiness to conduct a nuclear test if required. Therefore, these funds continue to be required to meet the Department's evolving missions. Additionally, subcritical tests are planned in fiscal year 1998 and, as a critical component of our Science-Based Stockpile Stewardship program, serve to reinforce and demonstrate our readiness to conduct a nuclear test if required. Therefore, these funds continue to be required to meet the Department's evolving missions.

- GAO suggests that the Environmental Management Technology Development budget request was not based on a detailed study of project needs. While a detailed study was not performed, a reasonable estimate was developed based on past experience and anticipated future technological requirements. The projects that we plan to select will have to meet these requirements and demonstrate multi-application potential.
- The GAO report has concluded that a small percentage of the privatization funds requested in fiscal year 1998 will no longer be needed in fiscal year 1998 for those projects because of project deferrals which have arisen since the time the fiscal year 1998 budget was formulated, reductions in project scope or cost reestimates. The Department will keep the Congress informed of developments in our budget request, and when significant changes are warranted, the Department will propose budget amendments, supplementals, or reprogrammings to recognize these changes.
- We share GAO's view that privatization cost savings estimates are important and we are committed to making available detailed cost estimates prior to contract award. This information will supplement other contractual information which the Secretary has committed to provide to key Congressional committees prior to contract award.

We are available to discuss these matters with you at your convenience. If you have any questions, please call me or have your staff contact Mr. Richard Sweeney (301) 903-2551.

Elizabeth E. Smedley

Acting Chief Financial Officer

Enclosures

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#### Enclosure 1

The following comments are prepared to assist GAO in understanding the Department's detailed concerns or explanations related to the various issues which GAO has raised in its report.

#### 1. <u>Carryover Balances</u>

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a. The Department believes that the GAO report should make clear that the GAO model for uncosted balances identifies areas where balances should receive greater scrutiny; that does not mean that the balances could actually be used to offset DOE's budget.

b. The Department does not agree with the methodology applied by the GAO in its development of "potentially available" uncosted balances. GAO's projected numbers were based on percentages of total obligational authority (TOA). The Department currently uses actual cost as a basis for analyzing uncosted balances rather than TOA. We believe GAO should recognize "actual costs incurred" as the basis for the development of their "potentially available" uncosted balances cost (i.e., past performance) is more indicative of future performance in ongoing program execution than total obligational availability.

c. There are significant methodological differences between the Department and the GAO in the analysis of carryover balances which may yield substantially different results. In response to the April 1996 GAO Report, the Department initiated a new systematic approach for the analysis of uncosted balances. This approach differs from the GAO approach as follows: GAO applies a flat 8% goal to operating funds, while the Department applies a 50% goal (threshold) to those operating funds associated with M&O/IMC subcontract (external) costs and non-M&O (prime) contracts. The Department's threshold of 50% is based on the current operational procurement practices of the Department and its M&O/IMC contractors. The normal execution of prime contracts and subcontracts of M&Os/IMCs is to award them throughout the fiscal year. The even distribution of awards throughout the fiscal year supports the expectation that approximately 50% of the costs will occur in the next fiscal year: The GAO threshold of 8% of total obligational authority suggests that awards for all annual contracts would occur in the first month of the fiscal year, thereby generating an uncosted balance of about one month (8%) at year end. Under current operations, neither the Department nor its M&O/IMC contractors could award all contracts in such a short period.

d. We believe the GAO approach may foster the false perception that the Department's uncosted balances are not being managed effectively. In fact, the Department's uncosted balances are at the lowest point in over 15 years, dropping \$4.2 billion since FY 1993. We believe the Department has been working diligently with GAO to develop a methodology for analyzing uncosted balances which will yield results in the form of reduced uncosted balances. As the Department's performance over the last three years has shown, we are moving in the right direction. We believe the DOE approach is more consistent with the realistic expectations for program execution, and more closely reflects the Department's performance in reducing uncosted balances over the last several years.

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#### 2. Strategic Alignment Initiative

We are pleased that the GAO has reported that the Department has exceeded its Strategic Alignment Initiative (SAI) target goals. In order to avoid charges that savings were not real, the Department has taken a conservative approach to reporting these savings. However, any actual higher savings estimates were known to field and HQ offices long before the publication of year-end savings reports, and these offices routinely take all such actual execution information into account when preparing budget submissions such as the FY 1998 submission. There is no way of knowing whether or not these additional savings contributed to FY 1996 year-end uncosted amounts.

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#### 3. Defense Programs

#### a <u>Defense Programs Education Initiatives - Page 8</u>

(1) The FY 1998 budget request for the Education program for Nevada is \$315,000, not \$700,000 as stated in the GAO report. The uncosted balances as of March 31, 1997, were \$670,326, of which \$479,124 has since been costed. The remaining uncosted balance, as of May 31, 1997, is \$191,202, which has been committed and will be costed once the grants are closed out.

(2) The FY 1998 budget requirement of \$315,000 is needed to continue support to the Historically Black Colleges and Universities (HBCU), Hispanic Association of Colleges and Universities (HACU), and educational partnerships. Specifically, the funding requested for the HBCU will provide support to the Fort Valley State College 3+2 program through which students are recruited into Fort Valley State College for three years and then transfer to the University of Nevada-Las Vegas for two years and earn dual degrees in health physics/mathematics or environmental engineering/mathematics. The HBCU funding will also fund an ongoing research and development project at Fisk University. The HACU funding also will provide support to a Hispanic serving institution in support of the Department's Hispanic Outreach Initiative. The requirements funding will also provide support to continue our ongoing education activities in local communities. These educational partnership activities include the Science Bowl, Science Now, and Spanish Bowl.

#### b. Device Assembly Facility (DAF) - Page 8

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(1) Although the end of the Cold War and the nuclear test moratorium that led to the Comprehensive Test Ban Treaty have reduced some testing activities, the Nevada Test Site remains a key experimental facility for Stockpile Stewardship. Defense Programs plans the following missions for the Device Assembly Facility (DAF), once it becomes operational: 1) Subcritical Experiments - the assembly of subcritical experiments; 2) Test Readiness - maintain the capability to assemble physics packages for a series of one to three nuclear tests in the event the President declares a "Supreme National Interest" test; 3) Damaged Nuclear Weapons - maintain the capability to accept and disable a damaged nuclear weapon (assume one exercise every other year to maintain skills, capabilities, facilities, and to maintain and develop processes and procedures); 4) Replacement of Able Site, A-27 - the assembly/staging of High Explosives (HE) and radioactive materials in support of LLNL/LANL activities previously performed in Able Site, (examples in FY 1996 & FY 1997 included Raincoat, Raincoat III, Nellie 10, 11, 12, 13; Jigsaw and Monarch).

(2) Possible future missions for DAF include: I) Training - in general, this area would include lab hands-on practice on nuclear weapons trainers, and "off-line" work by laboratory personnel with one of a kind components or assemblies. The most developed of these initiatives is the Joint Nuclear Explosives Training Facility, a Los Alamos sponsored initiative to provide formalized, structured training to laboratory personnel in a realistic

setting. This initiative is currently structured to use either Area 27, or DAF when it is available, as an extension of training facilities at Los Alamos; ii) Enhanced Surveillance - the DAF could be used for field testing and demonstration of advanced techniques for the surveillance program; iii) Advanced Manufacturing, Design and Production Techniques (adapt) - the DAF could be used for field testing and demonstration of these techniques prior to full implementation; iv) Weapons Modifications/Life Extension Programs - the DAF is well suited to weapon modifications and life extension programs which, if conducted at Pantex, could significantly disrupt the ongoing assembly and disassembly operations being conducted there. DOE/NV developed a model for DAF contribution to a life extension program which could be adapted to a variety of weapon systems needs. The activities associated with getting DAF operational by the end of fiscal year 1997 are estimated to cost \$14 million. Beginning in fiscal year 1998, operational costs of the facility will be approximately \$11 million per year for maintenance and operation, excluding project activity costs.

#### c. Subcritical Experiments - Page 8

(1) The Department of Energy is planning to conduct two "subcritical" high explosive experiments underground at the Nevada Test Site in fiscal year 1997. These scientific experiments will involve subcritical configurations of high explosives and nuclear weapon materials, such as plutonium, and will provide technical information important for the Stockpile Stewardship and Management Program. These will be the first in a continuing series planned for the future at the Nevada Test Site.

(2) Even though no subcritical experiments have been conducted to date, significant funds have been required to prepare for their execution. When the Secretary determined that it was necessary to postpone these experiments in fiscal year 1996, actions were taken to put the first two planned experiments in a semi-operational state so they could be restarted and completed when the go-ahead was given without significant additional technical delay, or rebuild and restart costs. Rather than abandoning the experimental site, the diagnostic and other scientific equipment for the experiments was preserved in a way that damage would not result from the hiatus, and the underground complex was also maintained. In addition, in this time period, the Department conducted two overall operational exercises for the experimental teams and several other "dry-runs" and trials have taken place to assure that staff and equipment are in good condition. Not only will these activities benefit future experimental efforts at the NTS, but they have also served to reinforce and demonstrate our readiness to conduct a nuclear test if that were required by the President. Finally, planning work and diagnostic development was begun on the technical aspects of future experiments to optimize their value in expectation that the go-ahead for them would be forthcoming.

#### ENCLOSURE III

#### 4. Environmental Management

#### a. \$50 Million Technology Deployment Initiative

I. The GAO draft report has suggested that "sites will receive additional funds to do what they should do anyway—select the best technology for the job." However, we believe additional factors need to be considered. There are regulatory barriers and perceived business risks associated with the use of new technology. Often an existing, albeit less efficient, technology is proposed to the regulator since it represents the surest opportunity for acceptance. The proposed Technology Deployment Initiative (TDI) would eliminate the business risks by helping fund the first implementation of competitively selected alternative technology projects that meet a multi-site performance specification. This approach is intended to spur widespread application of alternative technologies, thereby accelerating cleanup schedules and ultimately reducing costs.

ii. The GAO draft report also states that: "EM did not arrive at its \$50 million request through a detailed study." While a formal detailed study was not performed, the \$50 million figure is based on our past experience and the belief that sufficient funding to support proposals that represent a majority of the EM problem set should be supported in order to demonstrate the viability of the multi-application model. We believe that 10 to 20 projects annually, resulting in an estimated 50 TDI projects over a four-year period of this program, would be sufficient to institutionalize the concept in EM.

iii. GAO's briefing charts include a statement that, "The number of projects that should be or will be funded is uncertain." The TDI approach calls for DOE Operations Offices to compete for funding of prospective projects. We have selected 16-projects for funding through the TDI in fiscal year 1998, subject to available appropriations.

iv. Finally, the GAO draft report states that, "It is uncertain that additional sites (beyond the first deployment) will use the innovative technologies." Participation in the TDI requires identification of specific deployment opportunities beyond the initial application. Prior to selection of a project for funding, Field Office Managers will be required to submit letters of commitment that cite the site/operational funding to be allocated to the proposed deployment. The TDI process will require all participating sites to work cooperatively during the qualification and implementation stages to ensure that barriers to deployment are defined and resolved. The initiative enables early resolution to these barriers, including regulatory, stakeholder, and/or operational concerns.

v. The Department's environmental management technology development program has sponsored over 700 alternative technologies since its inception. Over 200 are already commercially available. Over 100 new technologies have been implemented

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#### ENCLOSURE III

or have been selected for implementation. Half of these have occurred since just 1995; but it is only through widespread deployment that the full potential of our investment in new technologies can be realized. We are confident that the TDI will spur multiple applications of alternative technologies that reduce risks to people and the environment and reduce cleanup costs.

#### b. Privatization

GAO specifically addressed funds requested in the fiscal year 1998 budget for projects EM is targeting for privatization. Environmental Management has worked very closely with the GAO on the privatization issues during the last several months with a focus on explaining the complexities and opportunities of this new program and to improve our own efforts.

In an effort to foster this continuing dialogue, we recommend the following changes in your report. First, we suggest a modification of page 2 (and supporting pages 5 and 6) relating to fiscal year 1998 funding requirements. We agree with your conclusion that \$39.2 million in funding relating to four projects is not needed in fiscal year 1998. These funds will not be needed for these projects because of project deferrals which have arisen since the time the fiscal year 1998 budget was formulated, reductions in project scope, or re-estimates of cost. These projects will require \$10.5 million of the \$39.2 million in funding in fiscal year 1999. However, we disagree with your conclusion that the \$8.2 million in funding for the Fernald, Ohio Silo 3 project is not required in fiscal year 1998. We believe these funds are needed to comply with the Office of Management and Budget's policy for budgeting of capital leases, which requires full up-front funding for the project at contract award, and to avoid the risk that Congress might not follow through in funding a project in 1999 if the project was partially funded in 1998.

Second, we share the view that cost savings estimates are very important and plan to make available detailed cost estimates prior to contract award. This information would supplement contractual information which the Secretary has committed to provide to key Congressional Committees thirty days prior to contract execution. (See enclosure 2)

At the same time, it should be noted that the use of fixed-price, competitive contracts that shift performance risk to the contractor have been found in many cases worldwide to offer significant cost savings potential over traditional cost reimbursement contracts, which provide little incentive for strong cost, schedule, or quality performance. In addition, the GAO report fails to recognize the fact that most of the privatization cost estimates are currently being, or already have been, refined and upgraded to be much more accurate. For example, one of the eight projects cited by GAO is the Fernald, Ohio Waste Pits project. DOE has developed an independent government estimate and has obtained several fixed price competitive bids for this project which are currently being evaluated. Although the detailed information is procurement sensitive, these bids support DOE's savings estimate for this project. In addition, for the Low Activity Waste project at Idaho, a contract was awarded in April 1997 with Fluor-Daniel (for completion in October) to study the project and to prepare detailed life-cycle cost and schedule estimates.

Third, the GAO report fails to explain that there were important reasons (apart from

compliance) to include three decontamination and decommissioning projects in its privatization request. DOE agrees that these three projects worth \$44.5 million were not required by any existing compliance agreements and could be postponed" (page 2). However, we believe that this language should be clarified (as well as supporting page 7) because GAO's conclusion implies that Environmental Management should only receive privatization funding for compliance-driven activities. These three projects, for which \$44.5 million in fiscal year 1998 funds were requested, were chosen for their mortgage reduction potential; that is, by completing the early decommissioning of these facilities, the life-cycle carrying costs for these facilities could be reduced significantly.

Fourth the GAO report states that "EM's privatization request does not include the total capital costs for some of the projects and does not include any operating costs for the projects. As a result, it is difficult to measure the full impact of the requested funding on the overall federal budget" (page 5). Also, on page 7, the statement was made that "assessing the long-term impact of EM's privatization projects on the overall federal budget is difficult because the full cost of these projects is not included in the budget request or in agency budget justifications." The Department has widely distributed, fully and openly, a detailed accounting of all costs related to the proposed privatization projects. Briefings on numerous occasions by the Assistant Secretary for Environmental Management to Members of the Congress and their staffs, which commenced in February, provided detailed capital, operating and support costs. Further, detailed Project Data Sheets for each of the twelve fiscal year 1998 Privatization Projects were given wide distribution, including the House and Senate authorizing and appropriations committee staffs and the GAO staff. These same Project Data Sheets, which provide a full accounting of all project costs on a year-byyear basis, were formally provided to the House Energy and Water Development Subcommittee of the House Appropriations Committee in April.

Fifth, we do not agree with GAO's conclusion on page 6 that "EM.... did not review savings estimates for these projects." In fact, the cost savings estimates and cost effectiveness analyses were subject to detailed reviews at both the field and Headquarters level. The management review process for the fiscal year 1998 projects started in September 1996 and continues to the present. The fiscal year 1998 projects were subjected to a formal "murderboard" cost review process. Intensive interaction between Headquarters and the field offices resulted in numerous improvements to the cost estimates and cost effectiveness analyses. At the same time, we intend to continue strengthening this process.

GAO should make clear that there is some double counting of projects among the three funding amounts cited in the report (\$47.4 million, \$44.5 million, and \$225.1 million).

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The EM program is implementing numerous measures to improve our accountability and effectiveness in managing the Privatization Program. These include:

- The establishment of regular reviews of the Tank Waste Remediation System and Advanced Mixed Waste Treatment projects, the Department's two largest privatization projects. These reviews are being conducted by the Assistant Secretary for Environmental Management and other Headquarters officials.

- The review, and evaluation during source selections, of contractor project managers' qualifications and experience in large, fixed-price environmental work.

- The review, by DOE Headquarters, of privatization Requests For Proposals and contracts and the inclusion of DOE Headquarters privatization team members on Source Evaluation Boards.

- The development of the Privatization Program Management Plan and the Privatization Handbook to describe organizational roles and responsibilities and to promulgate lessons-learned in managing the fiscal years 1997/1998 privatization projects.

- The independent review of privatization project team qualifications and staffing by the Department's Office of Field Management.

- The issuance of guidance in March 1997 for EM-wide use in developing privatization cost estimates and conducting cost-effectiveness analyses.

In addition, Secretary Peña has directed the appointment of a senior official to head the Office of Contract Reform and Privatization and report to the Deputy Secretary. That Office will coordinate the implementation of privatization policies and oversee the overall privatization effort across the Department, including the EM privatization program.

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#### ENCLOSURE III

Enclosure 2



The Secretary of Energy Washington, DC 20585

June 6, 1997

The Honorable Bob Livingston Chairman Committee on Appropriations U.S. House of Representatives Washington, D.C. 20515

Dear Mr. Chairman:

I am writing to express the Department of Energy's (DOE) concern about possible large reductions in the funding level included in the President's budget request for Defense Environmental Management Privatization projects for fiscal year 1998. The Department is particularly concerned that funding for these projects may be totally eliminated in fiscal year 1998. At the same time, we recognize that Congress has raised some serious issues about the implementation of our privatization program. This letter outlines the importance of our fiscal year 1998 budget request for privatization and several major steps that the Department is taking to address issues raised by the Congress.

Insufficient funding for privatization in fiscal year 1998 would increase both the short- and long-term costs of the Environmental Management program, would disrupt the progress that has been made in accelerating the cleanup of many of the Department's contaminated sites, and could subject the Department to significant fines and penalties for failure to meet milestones in compliance agreements and other legal requirements in 1998 and later years. Moreover, deferral of substantial funding for the Department's privatization program from fiscal year 1998 would be expected to cause serious problems because of the difficulty of obtaining major increases in outyear funding under the statutory caps on discretionary spending under the Bipartisan Budget Agreement. This situation will be exacerbated significantly if the Committee also rejects the Department's request for full up front funding for construction projects in the Defense Assets Account.

The Federal Government is legally obligated to conduct eight of the projects for which privatization funding is requested in fiscal year 1998. The Department must perform these activities, either as privatized projects or through traditional contracting mechanisms. These projects are in various States, including Idaho, New Mexico, Ohio, Tennessee, and Washington. The Department does not have sufficient funding in its base budget request to accommodate the compliancerelated privatization projects in addition to other required Environmental Management activities.

Privatization will enable the Department to conduct the environmental cleanup program at our sites faster and at lower cost than under the Department's traditional contracting approaches. Private sector firms, however, will be unwilling to invest their capital without a commensurate commitment to privatization from the Federal Government.

At the same time, I recognize the need to strengthen the management of the privatization program to assure that the Department delivers its important benefits. I also believe that the Department must increase its accountability to the Congress concerning its privatization projects. To advance both of these goals, I will:

(1) Appoint a senior individual to guide and coordinate the implementation of the Department's privatization initiatives. This individual will direct the Department's Office of Contract Reform and Privatization and will report directly to the Deputy Secretary/Chief Operating Officer,

(2) Support legislation providing a 30-day waiting period for key Congressional Committees to review planned privatization contracts funded under the privatization account, as well as the next phase of the Hanford Tank Waste Remediation System contract. The Department will not sign these privatization contracts without providing the opportunity for review under these legislative provisions; and

(3) Direct the Office of Environmental Management, in coordination with other appropriate DOE offices, to strengthen training programs for DOE personnel involved in privatization initiatives, enhance DOE cost estimating capabilities for privatization projects, and expand and supplement DOE expertise in reviewing privatization contract solicitations and contracts.

The Department has made significant progress in recent years in improving the efficiency of Environmental Management projects, and we are intensifying our efforts in this area. We believe that privatization is an important element of this strategy and is essential to assure implementation of our environmental compliance agreements. I strongly urge you to support this critical Environmental Management initiative.

Sincerely.

Federico Peña

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