United States General Accounting Office

GAO

Report to the Chairman, Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives

April 1994

FEDERAL RESEARCH

Additional Funds for Terminating the Super Collider Are Not Justified

GAO/RCED-94-153

GAO

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

Resources, Community, and
Economic Development Division

B-227295

April 8, 1994

The Honorable John D. Dingell
Chairman, Subcommittee on Oversight
and Investigations
Committee on Energy and Commerce
House of Representatives

Dear Mr. Chairman:

Your November 5, 1993, letter requested that we monitor the Department of Energy's (DOE) termination of the Superconducting Super Collider. The collider, intended to be the world's largest particle accelerator, was being constructed about 30 miles south of Dallas, Texas. After about $2 billion had been spent, in October 1993 the Congress voted to terminate the collider project because of escalating costs, continuing reports of management problems, and concern about the federal budget deficit. DOE was appropriated $640 million and instructed to begin an orderly termination of the collider project.[1] In terminating the project, the Congress also directed DOE to submit by July 1, 1994, a plan for maximizing the value of the investment already made in the project. The plan is to include recommendations on how to use the collider project's assets.

Adding about $95 million of carryover funds that were appropriated in fiscal year 1993 for the collider project to the $640 million appropriated in fiscal year 1994, DOE has about $735 million for conducting its termination activities. In October 1993, DOE officials told us that although no firm estimate had been made, terminating the project could take 5 years and cost about $1.1 billion.

Given the large amount of federal funds that DOE said it would need to terminate the project, you asked that we monitor termination activities. This report provides information on (1) DOE's latest estimate of the termination costs and (2) DOE's request for additional funds for fiscal year 1995.

Results in Brief

The $735 million available for terminating the super collider project exceeds DOE's latest cost estimate by $167 million. DOE's latest cost

[1]The Fiscal Year 1994 Energy and Water Development Appropriations Act, P.L. 103-126, Oct. 28, 1993, appropriated $640 million in no-year funds, which are available until expended. All costs presented in this report are expressed in current dollars. Current dollars express the value of a good or service in terms of the prices current at the time the good or service is sold.

estimate, made in mid-March 1994, is that termination will cost $568 million. The estimate does not include the costs of settling Texas' claim for its investment in the project. Texas has claimed that DOE owes the state a refund of $539 million. DOE has not yet determined what is owed to Texas and is currently negotiating with the state to reach a settlement.

DOE has requested an additional $180 million for fiscal year 1995 to cover termination costs and to potentially fund new uses of the collider's assets. Although DOE has not yet determined which future uses of assets to support, one idea Texas has recommended is a superconductivity center that may require $20 million to $40 million a year to operate. We do not believe the requested $180 million is adequately justified at this time. Additional funds are not needed for currently estimated termination activities, and it is premature to fund yet-to-be-determined future uses of the collider's assets.

Background

During fiscal years 1988-93, the United States expended about $1.6 billion on constructing the collider; Texas contributed $279 million, plus land and certain services. Although Texas has claimed that DOE owes the state a refund of $539 million, DOE has not agreed to that amount. Project assets include approximately 15 miles of underground tunnels and access shafts, construction sites, tooling and test equipment, and buildings. Completed facilities include a magnet development laboratory; very-low-temperature refrigeration facilities; and the project's Central Facility, which includes office and laboratory space.

DOE is currently taking steps to identify potential future uses of the collider's assets and report its recommendations to the Congress by July. The report is to include a plan for maximizing the value of the investment already made in the collider and minimizing the loss to the United States and to the states and persons involved in the project. In March 1994, DOE and the Texas National Research Laboratory Commission, which represents Texas, agreed on a process to solicit proposals for the future uses of the collider's assets that would maximize the return on the investment in the project.

DOE Has Estimated Termination Costs

In October 1993, the Fiscal Year 1994 Energy and Water Development Appropriations Act provided DOE with $640 million of no-year funds to terminate the collider project. In addition to the $640 million appropriated

for termination, DOE had available $95 million in fiscal year 1993 funds, giving DOE a total of $735 million to conduct the termination.

On October 28, 1993, the day that the appropriations bill was enacted, no firm estimate of the cost of terminating the project had been made. At that time, DOE officials advised us that although the cost of terminating the project was not yet known, the costs could amount to about $1.1 billion. They identified four major "cost drivers"—items that could have a major impact on costs. These cost drivers included closing subcontracts, severing the employment of the contractors' staffs, restoring the construction sites, and settling Texas' claim for its investment in the collider.

In February 1994, DOE issued its first cost estimate for terminating the collider project. Excluding the costs of settling with Texas, DOE estimated termination costs at $695 million. In mid-March 1994, still excluding any settlement with Texas, DOE revised its estimate to $568 million. According to DOE officials, as they have progressed with termination activities, uncertainties have been reduced and less costly approaches have been identified.

Estimate Includes Amounts for Three Cost Drivers

DOE's latest estimate of $568 million includes costs for the three major cost drivers—subcontract closeouts, severance packages, and site restoration.[2] Table 1 shows a breakout of the major cost drivers and other anticipated costs that are included in the estimate.

[2]DOE did not include the costs for the fourth major cost driver—the settlement with Texas—because of uncertainties about the settlement.

Table 1: DOE's Mid-March 1994 Estimate of Major Cost Drivers and Other Costs for Terminating the Collider Project

Current dollars in millions

Description	Amount
Subcontract closeouts	$173
Severance packages	78
Site restoration	25
Other costs[a]	292
Total[b]	**$568**

[a]Other costs include $41 million for contingencies to cover unexpected costs. Also, other costs include amounts for administration and support; the closeout of the collider laboratory's scientific and technical activities; the disposal of physical and other property; compliance with environmental, safety, and health rules and regulations; studies and evaluations of the use and disposition of assets and facilities; and facility maintenance and security.

[b]Estimate is for all project termination activities, excluding a settlement with Texas, and includes amounts for activities already in process or completed. From October 1993 through January 1994, DOE spent about $129 million on termination activities. The balance, $439 million, is expected to be spent by the end of fiscal year 1997.

Source: Prepared by GAO from DOE's documents.

DOE Has Reduced Uncertainties for Three Cost Drivers

According to DOE officials, including the Project Director and his staff, the uncertainties about the amounts estimated for three of the major cost drivers have been reduced, as follows:

- The subcontract closeout costs are now fairly certain. Of the 1,278 subcontracts considered for termination, all but 2 had been terminated as of February 1994. Once terminated, subcontractors must stop work and place no orders for materials, facilities, supplies, and services. Terminated subcontractors can incur additional costs needed only for orderly termination, as specified by the prime contractor. Examples of costs specified include those for work already performed and for subcontract settlement expenses, such as administrative and legal costs, and the costs of disposing of the government-furnished equipment and inventories. DOE officials advised us that, on the basis of past experience, these costs were adequately provided for in the estimate. Two fixed-price contracts for collider components were continued because the contracts were cheaper to finish than to terminate. One subcontract for $3.1 million needed an additional $544,000 of work in process to complete. If terminated, the settlement would have cost an estimated $632,000, including costs for work in process plus the administrative and legal costs incurred. Similarly, the second subcontract for $16,000 needed $5,000 of work to complete, but settlement costs were estimated at $10,000.

- The severance costs for employees are also firm, now that the size of the packages and the number of persons eligible to receive them have been decided. In late November 1993, DOE announced its severance package, which provided 60 days' severance pay, a dislocation allowance of $15,000, and a continuation of life and health insurance benefits. DOE initially decided to provide the package to its prime contractor, Universities Research Association, and its major on-site subcontractors—EG&G, Sverdrup, Lockheed, and Parsons Brinckerhoff/Morrison Knudsen. In January 1994, DOE extended severance benefits to include employees working in the magnet manufacturing plants of three subcontractors—General Dynamics, Westinghouse, and Babcock and Wilcox. DOE does not anticipate extending benefits to other subcontractors. (The estimated severance costs are shown by contractor in app. I.)
- DOE has revised its planned approach to site restoration and reduced the estimated cost for this cost driver. DOE's mid-March 1994 estimate of $25 million for site restoration activities is $85 million less than its February estimate of $110 million. The February estimate was determined by the architect and engineering/construction subcontractor, which DOE recently replaced. DOE expects that the new subcontractor will use less costly methods for site restoration. For example, the former subcontractor planned to refill the tunnel, although technical consultants advised DOE that it is preferable and cheaper to allow the tunnel to fill with water.

With the uncertainties for three of the cost drivers reduced, DOE reduced to $41 million the amount for covering unexpected costs—down from the $55 million included in the February estimate. Excluding the settlement with Texas, DOE officials told us that the $41 million should be sufficient to cover any unexpected costs.

DOE's Request for Additional Funds Is Not Justified

DOE has not adequately justified its request for an additional $180 million in its fiscal year 1995 budget for the continuation of termination activities and for the future uses of the project's assets. The funds already available exceed DOE's estimate of termination costs. Furthermore, the request would expand termination funding to include unrelated activities that use the collider's assets.

Available Funds Are Sufficient

DOE has sufficient appropriated funds to carry out its termination activities, excluding its settlement with Texas. According to DOE officials, DOE has no documentation supporting the need for $180 million, but that

amount was included in the budget request as a "placeholder." The DOE officials told us that the request was prepared before the completion of the termination cost estimate, which they expected to be higher than the available $735 million. They also expected that funds would be needed for settling with Texas. However, negotiations are still ongoing with Texas, and the latest estimate, which excludes potential settlement costs, sets the total costs at $568 million.

Budget Request Could Expand Termination Activities to Include Undetermined Future Uses

DOE's budget request for fiscal year 1995 could expand the termination activities to unrelated activities—funding future uses of the project's assets, for example. The termination funds currently available can be used to collect and evaluate proposals, but not to fund future uses of the project's assets. DOE officials advised us that if the Congress appropriates the additional funds requested for fiscal year 1995 without restrictions, they would use those funds to fund new activities that would utilize the collider's assets.

Although DOE is seeking to fund future uses of the assets, the future uses have not yet been determined. A state of Texas advisory panel has already explored about 60 ideas received by the project's laboratory for using the assets. In February 1994, the panel recommended three ideas for further study. One idea was to create a center for superconductivity, which would take advantage of the superconducting magnet and refrigeration facilities at the site. Another would take advantage of the project's computing capabilities to create a regional center for high-performance computing. A third idea was to develop a facility for cancer treatment and research on radioactive isotopes. Although the costs of pursuing such ideas are not yet known, estimates for operating one proposed facility, the center for superconductivity, range from $20 million to $40 million a year.[3]

On March 1, 1994, the Texas National Research Laboratory Commission endorsed the panel's recommendations. On that date, the Commission and DOE reached an agreement in principle under which DOE agreed to provide funds to further develop the ideas endorsed by the state of Texas.[4] The two parties agreed to work together to further define potential uses of the assets and the costs of those uses.

[3]Amounts cited by the Chairman, Texas National Research Laboratory Commission, during March 15, 1994, hearings before the Subcommittee on Science, House Committee on Science, Space, and Technology.

[4]On March 30, 1994, DOE granted Texas $6 million to further develop ideas for the use of the collider project's assets.

Although DOE had received about 80 unsolicited ideas by early March 1994, it had not yet decided which future uses should be pursued. In the Commerce Business Daily, dated March 4, 1994, DOE and Texas formally solicited expressions of interest in utilizing the project's assets. The two parties will jointly collect and evaluate the responses. DOE plans to formally recommend any future uses that have merit, including those that DOE and Texas jointly agree upon, to the Congress and the President in its July 1994 report. That report will also include information on the benefits and costs of the recommended uses, according to DOE officials.

Conclusions

The $735 million of termination funding available exceeds by about $167 million the currently estimated $568 million cost of project termination activities. Therefore, additional funds are not needed for currently estimated termination activities. Furthermore, it would be premature to provide additional funds in fiscal year 1995 for yet-to-be-estimated costs of utilizing the project's assets. DOE is to recommend future uses of the project's assets in its July 1994 report to the Congress. In that report, DOE also expects to identify the benefits and costs of further pursuing proposed future uses as well as any additional funding needs. At this time, those future uses, as well as any associated costs, have not yet been determined.

Matters for Congressional Consideration

In considering DOE's fiscal year 1995 budget request for $180 million to terminate the Superconducting Super Collider, the Congress may wish to consider that DOE has not yet justified its need for the funds. If the Congress decides to fund future uses of the collider project's assets, it may wish to defer funding decisions until it has an opportunity to consider the benefits and costs of DOE's recommended uses of the project's assets.

Agency Comments

As requested, we did not obtain written agency comments on a draft of this report. However, we discussed the information presented in this report with DOE officials, including the Special Assistant to the Secretary of Energy and the DOE Project Director, and with the Director of the Texas National Research Laboratory Commission. The DOE officials generally agreed with the accuracy of the facts presented and provided us with DOE's mid-March cost estimate for terminating the project. The Director of the Texas Commission also generally agreed with the information and noted that Texas claims that DOE owes the state a refund of $539 million. We

revised the report to reflect DOE's latest cost estimate and to disclose Texas' claim.

Scope and Methodology

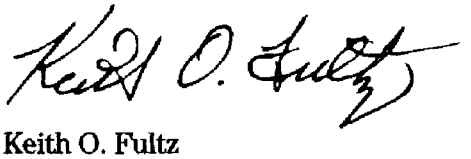
To provide information about DOE's February 1994 cost estimate, we examined the cost estimate and supporting documents provided by DOE. We interviewed DOE officials at Department headquarters in Washington, D.C., and DOE's Superconducting Super Collider Project Office in Waxahachie, Texas. We also discussed the Texas settlement and future uses of assets with officials of the Texas National Research Laboratory Commission. To provide information on DOE's fiscal year 1995 budget request, we reviewed DOE's Congressional Budget Request and interviewed DOE officials.

We performed our review from November 1993 to March 1994 in accordance with generally accepted government auditing standards.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies of the report to the Secretary of Energy and make copies available to others on request.

This work was conducted under the direction of Victor S. Rezendes, Director, Energy and Science Issues, who may be reached at (202) 512-3841. Other major contributors to this report are listed in appendix II.

Sincerely yours,



Keith O. Fultz
Assistant Comptroller General

Estimated Cost of the Superconducting Super Collider Project's Severance Packages, by Contractor

Dollars in thousands

Contractor/subcontractor	Estimated no. of employees	Estimated cost
Universities Research Association	1,241	$37,470
EG&G	609	18,388
Sverdrup	10	302
Lockheed	71	1,546
Parsons Brinckerhoff/ Morrison Knudsen	249	8,000
General Dynamics	176	5,700
Westinghouse	166	4,600
Babcock & Wilcox	73	2,000
Total	**2,595**	**$78,006**

Source: DOE.

Major Contributors to This Report

Resources, Community, and Economic Development Division, Washington, D.C.	Jim Wells, Associate Director Robert E. Allen, Jr., Assistant Director Sumikatsu J. Arima, Assignment Manager
Office of General Counsel	Susan W. Irwin, Attorney Advisor
Dallas Regional Office	Joe D. Quicksall, Regional Management Representative Hilary C. Sullivan, Evaluator-in-Charge Lisa W. Scribner, Staff Evaluator

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are $2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20884-6015

or visit:

Room 1000
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC

Orders may also be placed by calling (202) 512-6000 or by using fax number (301) 258-4066.