DOE/IG-0499

AUDIT REPORT

DEPARTMENT OF ENERGY'S SUPER ENERGY SAVINGS PERFORMANCE CONTRACTS

APRIL 2001

U.S. DEPARTMENT OF ENERGY
OFFICE OF INSPECTOR GENERAL
OFFICE OF AUDIT SERVICES

April 2, 2001

MEMORANDUM FOR THE SECRETARY

FROM: Gregory H. Friedman (Signed)
Inspector General

SUBJECT: INFORMATION: Audit Report on "Department of Energy's Super Energy Savings Performance Contracts"

BACKGROUND

As you recently noted in both testimony before the Congress and in public statements, the United States is facing the most serious energy supply situation since the 1970s. And, current forecasts suggest that the demand for energy is increasing. As one of the largest energy consumers in the United States, the Federal Government has established several programs to reduce demand, specifically, by moderating energy consumption in Federal buildings. Private financing of energy improvements through what are referred to as Super Energy Savings Performance Contracts (super ESPCs) is one such mechanism. Under super ESPCs, energy service contractors use private financing to make energy-savings improvements in Federal facilities. As compensation for their investment, they receive a share of the cost savings. Thus, super ESPCs represent a way to achieve Federal sector energy savings at no capital cost to the Government.

The Department of Energy's Federal Energy Management Program (FEMP) promotes the use of super ESPCs, among several programs. FEMP assists other Federal agencies by assessing potential energy savings, providing training, monitoring progress and providing technical advice on energy-savings projects, and measuring and verifying energy savings. Under current statute, the Department should recover the cost of providing assistance to other Federal agencies and use the recovered funds to provide additional support for privately financed energy-savings programs such as super ESPCs. The appropriate use of the recovered funds allows the Department to finance the expansion of the program with all of the attendant energy-savings benefits.

The object of our audit was to determine whether the Department has used its cost-recovery authority to advance super ESPCs.

RESULTS OF AUDIT

The Department has not maximized the use of its cost-recovery authority to enhance the super ESPCs program. In fact, we noted that the Department did not:

- fully recover the cost of providing services to other Federal agencies; and,
- use recovered funds to achieve greater energy efficiency.

This occurred because the Department did not develop an appropriate pricing strategy for recovering costs and did not formulate a plan for spending the funds it recovered. As a result, the Department as well as other Federal agencies may not meet their long-term energy-savings goals because they will miss opportunities to use private financing mechanisms such as super ESPCs to fund energy-savings projects. To address these conditions, we recommended actions to ensure that the Department's costs for providing services to other agencies are fully recovered and that the costs are used to enhance the super ESPCs program.

MANAGEMENT REACTION

Management generally concurred with the finding and recommendations and identified a number of corrective actions which will, if successfully implemented, assist the Department in furthering energy-savings initiatives.

Attachment

cc: Director, Federal Energy Management Program

DEPARTMENT OF ENERGY'S SUPER ENERGY SAVINGS PERFORMANCE CONTRACTS

TABLE OF CONTENTS

OVERVIEW

INTRODUCTION AND OBJECTIVE

The Energy Policy Act of 1992 and Executive Order 13123, *Greening the Government Through Efficient Energy Management* (June 1999), require each Federal agency to reduce energy consumption in Federal buildings. This requirement takes on added importance considering the energy crisis recently described by the Secretary of Energy as the most serious energy shortage since the 1970s, which, without a solution, will threaten prosperity and national security and change the way Americans live. The Secretary advised that the demand for energy" is rising across the board" particularly for natural gas and electricity.

The Department of Energy's (Department) Federal Energy Management Program (FEMP) is tasked with working with Federal agencies to ensure that energy-reduction goals are met. To assist other Federal agencies, FEMP developed Super Energy Savings Performance Contracts (super ESPCs), which offer a means of achieving energy reductions at no capital cost to the Government. Under super ESPCs, energy service contractors use private financing to make energy-savings improvements in Federal facilities and, in exchange, receive a share of the cost savings. As of September 30, 2000, FEMP had initiated 85 projects on which Department employees and contractor-operated laboratories will assist Federal agencies to obtain energy savings through super ESPCs.

In Fiscal Year (FY) 2000, FEMP spent approximately $7.3 million to promote and implement super ESPCs. FEMP promotes the use of super ESPCs by assisting Federal agencies in areas such as assessing energy-savings projects at their sites, providing training on energy-savings programs, selecting approved contractors, monitoring the progress of each project, providing technical advice, and measuring and verifying the resultant energy savings after project completion.

To further develop and promote privately financed energy-savings programs such as super ESPCs, Congress provided the Department with an additional source of funding. Specifically, the Appropriations Act of 1998 permits the Department to recover the cost of providing guidance and technical assistance to other Federal agencies and to use the recovered funds to provide additional support for privately financed energy-savings programs.

The Department expects privately financed investments in super ESPCs to reach $1.2 billion by 2010. As of September 30, 2000, investments were about $171 million. Thus, the Department has a considerable way to go to meet its goal. To help ensure the success of Government energy reductions, the Department needs to use all available resources, such as its cost-recovery authority, to promote privately financed energy-savings opportunities.

The objective of our audit was to determine whether the Department has used its cost-recovery authority to advance super ESPCs.

CONCLUSIONS AND OBSERVATIONS

The Department has not used its cost-recovery authority to advance super ESPCs. Specifically, the Department did not fully recover the cost of providing services to other Federal agencies and did not use recovered funds to achieve greater energy efficiency. This occurred because the Department did not develop an appropriate pricing strategy for recovering cost and did not formulate a plan for spending the funds it recovered. As a result, Federal agencies may not be able to meet their long-term energy-savings goals because they will have less opportunity to use private financing mechanisms such as super ESPCs to fund energy-savings projects. Furthering these types of energy-savings programs will assist Federal agencies in reducing their future energy demands.

Management should consider the issues discussed in this audit report when preparing its yearend assurance memorandum on internal controls.

(Signed)
Office of Inspector General

Department Has Not Used Cost-Recovery Authority

The Department has not used its cost-recovery authority to advance super ESPCs. Specifically, the Department did not recover the full cost of providing assistance to other Federal agencies and did not use the funds it recovered from other Federal agencies to achieve greater energy efficiency.

The Department did not recover its full cost. Even though most projects are in the early phases of work, cost overruns, which cannot be recovered from other Federal agencies, have already occurred. To recover its costs, the Department had entered into fixed-price interagency agreements for its 85 energy-savings projects that will use super ESPCs. For these projects, the Department tracked only the cost of technical support provided by its contractor-operated laboratories. Generally, projects are divided into four phases with phase I for assessing work to be done, providing training, and selecting a contractor; phase II for issuing delivery orders under super ESPCs; phase III for installing energy-savings equipment; and, phase IV for measuring and verifying resultant energy savings for one year. As of September 30, 2000, for 18 of the 85 projects, the cost of technical support provided by laboratories was overrun by $142,000, or 47 percent. For these 18 projects, overruns will likely increase significantly because 7 projects were still in phase I, 9 were in phase II, and only 2 had progressed as far as phase III.

For the other 67 projects, we could not determine whether costs will be overrun because the projects were still in the early phases of work. Likewise, the full cost of all projects is unknown, as the Department does not track the cost of technical assistance provided by Department employees. However, based on discussions with FEMP representatives and reviews of project status reports, the trend of overruns will likely continue.

In addition, the Department had not spent any of the funds recovered from other Federal agencies. As of September 30, 2000, Federal agencies reimbursed the Department about $2 million. Although FEMP representatives indicated that additional resources for energy-savings investments are needed to increase training, monitoring, and other contract support efforts, the Department did not use the recovered costs for energy-savings investments.

Authority Was Granted by the Appropriations Act of 1998

The Appropriations Act of 1998 allows the Department to recover the cost of energy-savings assistance provided to other Federal agencies. Under the Act, the Department can retain the reimbursements received, but can only use these reimbursements to assist Federal agencies in achieving greater energy efficiency, water conservation, and use of renewable energy by means of privately financed mechanisms such as super ESPCs. The Act does not direct the Department in specific expenditures, but rather provides for the Department's use of these reimbursements for efforts such as advising, training, and providing contractor support.

Department Did Not Develop Pricing Strategy or Spending Plan

The Department did not recover its full cost of providing assistance to other Federal agencies because it did not develop a pricing strategy based on actual cost experience or detailed work estimates. Instead, the Department generally relied on a 3-tier fixed-price strategy for interagency agreements. The Department priced agreements at $10,000, $30,000, or $50,000 depending on the level of technical support estimated to be provided. The $10,000 price was for projects on which the Department would provide minimal assistance, and the $30,000 and $50,000 prices were for projects requiring greater levels of technical support. When initiating projects, the Department did not prepare detailed cost estimates and, in most cases, strictly followed its 3-tier fixed-price strategy regardless of the uniqueness of the project or the specific conditions at the site where the project would be undertaken.

Furthermore, the Department did not have a tracking system to permit comparisons of prices to actual cost. FEMP depended on the National Renewable Energy Laboratory (NREL), a Department contractor, to track project costs. However, NREL only tracked the cost of technical support provided by laboratories and did not track the cost of technical assistance provided by Department employees. Moreover, actual effort expended, such as hours, was not tracked for laboratory or Department employees. At the time of our audit, the Department was considering a new pricing strategy based on hourly rates. The Department would have to track actual hours on each project in order to use hourly rates.

In addition, the Department did not spend any of the $2 million reimbursed by other Federal agencies because FEMP had not developed a plan on how to use these funds.

Department Is Spending More Than Necessary, and Federal Agencies May Not Meet Their Goals

Because the Department did not recover its full cost or use the funds that it recovered, it spent more funds than necessary to support super ESPCs. The Department is consuming resources for cost overruns on super ESPCs that would otherwise be available for other ESPC projects or other Department programs. For example, cost overruns will limit the amount of resources available to advise and train other Federal agencies about the advantages of super ESPCs. As a result, Federal agencies may not be able to meet their long-term energy-savings goals because they will have less opportunity to use private financing mechanisms such as super ESPCs to fund energy-savings projects. Super ESPCs enable agencies to fund projects without using appropriated funds.

Additionally, Executive Order 13123 requires that, by 2010, each Federal agency improve energy efficiency by 35 percent compared to 1985 levels, reduce greenhouse gas emissions by 30 percent compared to 1990 levels, and improve energy efficiency in Federal industrial and laboratory facilities by 25 percent compared to 1990 levels. Furthering energy-savings programs, such as ESPC projects, will assist Federal agencies in reducing their future energy demands.

RECOMMENDATIONS

We recommend that the Director, FEMP:

1. Implement a cost-recovery strategy that includes estimating, tracking, billing and collecting all costs for each project; and,

2. Develop and implement a plan to use recovered funds to aggressively promote super ESPCs.

MANAGEMENT REACTION

Management generally concurred with the findings and recommendations. In responding to the report, management stated that although the report is accurate in its description of the Department's use of recovered funds authority during the audit, the Department has recently made substantial progress in implementing the report's recommendations both during and after the closing of the report. For example, management advised that during the audit, FEMP and the Office of Chief Financial Officer (CFO) worked closely to develop guidance on a cost recovery strategy to recover costs on a program basis. That guidance was issued on January 16, 2001.

Further, management stated that they are currently implementing a plan to use the recovered funds. Management explained that FEMP has recently taken steps to ensure that recovered funds will be used to provide technical assistance to agencies and to fund limited term appointment personnel who will assist agencies in achieving greater energy efficiency, water conservation, and renewable energy by implementing ESPCs.

In response to the issue of cost overruns, management stated that through regular reviews and implementation of CFO guidance, the Department will fix the problem of cost overruns to a reasonable degree, and FEMP expects to recover full costs over the life of the program. Management explained that FEMP, together with the Golden Field Office, plans to monitor costs to ensure actual costs are recovered. The cost of Federal FTEs will be accounted for via a 3-percent federal administrative charge, which will be separately identified and accounted for.

Management stated that the ability of Federal agencies to meet their energy reduction goals is not dependent solely upon DOE expending its recovered funds to assist agencies in implementing alternative financed energy projects. Management stated that agencies can also use their own appropriated funds to implement energy savings projects and super ESPCs represent one of several tools available to help agencies achieve their goals.

Management also advised that during the later part of FY 2001, FEMP plans to revisit the entire pricing policy for charging agencies for technical assistance due to the concerns several large agencies have expressed. Management explained that agency resistance to reimbursing the Department may have a substantial impact on the quantity of ESPCs being implemented, which in turn would merit a review of the benefits of continuing a pricing policy. Management indicated that it intends to conduct a comprehensive evaluation of the ESPC program in conjunction with the review of the FY 2003 budget.

AUDITOR COMMENTS

Management's comments and proposed actions are responsive to our recommendations.

Appendix

SCOPE

The audit was performed from May 2000 to January 2001 at Headquarters, the Golden Field Office, and NREL. The audit covered super ESPCs and reimbursements from October 1997 through September 2000.

METHODOLOGY

To accomplish the audit objective, we:

- Reviewed laws and regulations relating to super ESPCs, cost recovery, and energy-savings goals;

- Interviewed representatives of FEMP, Golden Field Office, and NREL regarding private financing mechanisms, super ESPCs, and cost recovery;

- Interviewed representatives of other Federal agencies who had issued delivery orders under super ESPCs or received technical assistance;

- Reviewed cost tracking records maintained by NREL, interagency agreements, super ESPCs, delivery orders, and monthly status reports; and,

- Assessed performance measures relating to super ESPCs and cost recovery.

The audit was performed in accordance with generally accepted Government auditing standards for performance audits. It included tests of internal controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective. Because our audit was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. In performing this audit, we did not rely significantly on computer-generated data. Also, FEMP established performance measures under the Government Performance Results Act of 1993. For FY 2001, FEMP's performance measures established goals for advancing the use of super ESPCs.

We discussed the audit finding and recommendations with representatives from FEMP and CFO on February 26, 2001.

IG Report No. :DOE/IG-0499

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