U.S. Department of Energy
Office of Inspector General
Office of Audit Services

Audit Report

Progress in Implementing the Advanced Batteries and Hybrid Components Program under the American Recovery and Reinvestment Act

OAS-RA-L-10-04 April 2010

DOE F 1325.8
(4/93)

United States Government **Department of Energy**

memorandum

DATE: April 27, 2010 Audit Report Number: OAS-RA-L-10-04

REPLY TO
ATTN TO: IG-32 (A10RA025)

SUBJECT: Report on "Progress in Implementing the Advanced Batteries and Hybrid Components Program under the American Recovery and Reinvestment Act"

TO: Deputy Assistant Secretary, Energy Efficiency and Renewable Energy

INTRODUCTION AND OBJECTIVE

The American Recovery and Reinvestment Act of 2009 (Recovery Act) was enacted to stimulate the U.S. economy, create jobs and make infrastructure investments in energy and other areas. The Department of Energy's (Department) Advanced Battery and Hybrid Components Program (Program) received almost $2 billion to support the construction of U.S. based manufacturing plants to produce batteries and electric drive components. While the Department had funded some vehicle battery research in the past, this Program adds a new manufacturing component that the Department must administer. The Program is managed by the Office of Energy Efficiency and Renewable Energy's (EERE) Vehicle Technologies Program and is being implemented and monitored primarily by the National Energy Technology Laboratory (NETL). As of March 17, 2010, NETL had made 20 grant awards from the 30 selections made from its Advanced Batteries and Hybrid Components Funding Announcement. The 20 awards represent almost $1.7 billion of the planned $2 billion allotted to the Program.

As noted in our *Special Report on the American Recovery and Reinvestment Act at the Department of Energy* (OAS-RA-09-01, March 2009), the Department's grant-making authority is critical to achieving the desired Recovery Act-related economic stimulus. In that report, we suggested that the Department take steps to develop aggressive safeguards to ensure that performance is monitored throughout the life-cycle of the grants. Because of the importance of this Program to stimulate the economy, create jobs and establish a U.S. capability to manufacture transportation batteries, we initiated this audit to evaluate the Department's progress in soliciting, reviewing, awarding and administering the grants.

CONCLUSIONS AND OBSERVATIONS

Our audit revealed that the Department had made significant progress in implementing the Advanced Battery and Hybrid Components Program. Specifically, the Department had:

- Issued a Funding Opportunity Announcement that included defined selection criteria and established a grantee selection process that incorporated review of all aspects of applicant proposals;

- Awarded funding to 20 grantees, obligating 85 percent of the available Recovery Act funding for projects such as construction of factories that will build lithium-ion batteries for hybrid and electric vehicles and facilities that will produce materials and components to supply battery manufacturers; and,

- Established conditions on the use of funds awarded until such time as grantees can demonstrate, for example, that they have completed environmental reviews.

During our audit, nothing came to our attention to indicate that the Department had not followed its predetermined award process and selection criteria. Finally, the Department developed a comprehensive monitoring program plan that, if successfully implemented should reduce the financial, technical, and marketing risks associated with the projects. The following information discusses the Department's progress to date in implementing the program.

Solicitation and Merit Review

The Department followed its established process for soliciting and reviewing applications for grants under the Advanced Battery and Hybrid Components Program. Specifically, on March 19, 2009, shortly after the Recovery Act was passed, the Department issued a detailed Funding Opportunity Notice that included defined areas of interest and selection criteria. As part of the application process, the Department required recipients to submit detailed project management plans, comprehensive budgets, and other descriptive planning documents.

The Department used merit review panels comprised of Government officials; peer review panels comprised of private sector experts in advanced batteries, construction, manufacturing, and finance; and, a National Environmental Policy Act (NEPA) compliance review team to evaluate the 119 applications received in response to the Funding Opportunity Announcement. The merit review panels defined the technical specifications that had to be met by all successful applicants. The peer review panels reviewed all aspects of proposed projects, including battery technology, construction and manufacturing plans. The NEPA team evaluated significant environmental considerations. All reviews were completed by July 2009.

Additionally, Department officials required revisions to application materials and met in person with company representatives during site visits to gain a complete understanding of the details of the proposed projects. Further, NETL project officers conducted independent risk assessments of individual projects. Further, as discussed below, the Department established conditions as part of the awards in response to projects that were considered at greater risk for encountering difficulties.

Most applications meeting the required specifications were awarded funding. Awards were not made to applications that did not meet the minimum technical standards established by the merit review panels, lacked needed private funding to support the project, or other considerations such as the applicant's participation in another funded project.

Awards and Conditions

As of March 2010, the Department had determined that it would fund 30 projects and had made 20 grant awards. As previously mentioned, the 20 awards represent almost $1.7 billion of the planned $2 billion for the Program. The remaining 10 projects selected were in various stages of negotiation and were anticipated to be awarded by April 30, 2010. Further, as of March 2010, the Department had reimbursed grantees about $36 million for their incurred costs, exceeding its performance measure of expending $20 million by March 31, 2010. Because many of these projects are large construction efforts that have required environmental assessments, the Department anticipates funding to be expended primarily in Fiscal Years 2011 and 2012. These grants required cost sharing, with almost every grantee matching the Government's investment in these manufacturing plants through an at least 50 percent cost share.

As part of the award process and to protect the Government's interest, the Department established conditions on all but three of the awards to address risks identified during the application review process. For example, in order to mitigate the risks associated with the time it takes to address environmental requirements, the Department limited the expenditure of grant funds until required environmental assessments had been completed for any proposed manufacturing plant. To mitigate the risks associated with inadequate financial controls, the Department also required recipients to obtain a satisfactory audit from the Defense Contract Audit Agency as to the adequacy of their accounting systems. We reviewed the audit findings, comparing them to award conditions, and found that the conditions appropriately reflected the results of the audits. The conditions, if diligently enforced throughout the life-cycle of the grant, should help to ensure that the tax payers' investment in the funded projects is protected.

Monitoring

The Department had developed a comprehensive monitoring program to oversee funded projects. Specifically, NETL, which will be responsible for monitoring, planned to have project officers conduct monthly status calls and quarterly on-site visits to each manufacturing plant in addition to reviewing quarterly technical progress reports. Officials informed us that project officers had been assigned to the Program and that existing staff resources were adequate to meet planned monitoring requirements. Additionally, Department officials told us that they will be able to closely monitor project costs since the grants had been awarded on a cost reimbursement basis, rather than advancement of funds basis. We noted that, although recipients had submitted a limited number of invoices as of the time of our review, NETL had required line-item support for all costs, and refused to reimburse recipients until the desired details had been submitted.

Path Forward

The Department had made significant progress in making grant awards for the Advanced Battery and Hybrid Components Program. It also had established conditions as part of the awards and designed a monitoring program to mitigate risks associated with the program. Success of these measures, however, will depend on the effectiveness of their enforcement and implementation.

In the past, we have observed that the Department had not always enforced conditions placed on financial assistance awards and had not effectively monitored project performance. Specifically, in our report on *Management of Fossil Energy Cooperative Agreements*, (DOE/IG-0692, July 2005), we concluded that NETL had not always adequately monitored its research project financial assistance awards. For example, NETL had not always enforced certain conditions, such as annual cost certifications or funding limitations, originally imposed on some awards to protect the Government's interest. Another report on *Selected Energy Efficiency and Renewable Energy Projects*, (DOE/IG-0689, May 2005), disclosed that project managers had not always made site visits and that EERE had not resolved serious accounting and solvency issues in two cases. Although management had taken action to address the recommendations contained in these reports, continued vigilance is necessary to avoid the same or similar problems with this grant program.

Since recommendations are not being made in this report, a formal response is not required. We appreciate the cooperation of your staff during the conduct of our audit.

Joanne Hill
Director, Energy Audits Division
Office of Inspector General

Attachment

cc: Assistant Secretary, Energy Efficiency and Renewable Energy
Team Leader, Audit Liaison Team, CF-80
Audit Resolution Specialist, Office of Risk Management, CF-80
Team Leader, Energy Efficiency and Renewable Energy
Audit Liaison, National Energy Technology Laboratory

SCOPE AND METHODOLOGY

This review was performed between November 2009 and April 2010 at the Department of Energy's (Department) National Energy Technology Laboratory in Pittsburgh, Pennsylvania and Morgantown, West Virginia; and the Department's Headquarters in Washington, D.C.

To accomplish the objective, we:

- Obtained and reviewed relevant laws and regulations related to implementation of the American Recovery and Reinvestment Act of 2009 and grants administration;

- Reviewed programmatic and planning documents such as the Funding Opportunity Announcement and Program Operating Plans;

- Obtained access to the Department's Strategic Integrated Procurement Enterprise System and reviewed individual grant award files; and,

- Interviewed Project Officers and Contract Specialists for all grants made under the Department's Advanced Battery and Hybrid Components Program.

We conducted this performance audit in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our finding and conclusions based on our audit objective. We believe the evidence obtained provides a reasonable basis for our finding and conclusions based on our audit objective. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. We also assessed performance measures in accordance with the *Government Performance and Results Act of 1993* and determined that performance measures were established for the Advanced Batteries and Hybrid Components Program. We conducted an assessment of computer processed data relevant to our audit objective and found it to be reliable.

An exit conference was held with Department officials on April 23, 2010.

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