



U.S. Department of Energy
Office of Inspector General
Office of Audits and Inspections

AUDIT REPORT

Selected Activities of the Office of Energy
Efficiency and Renewable Energy's Advanced
Manufacturing Office



OAS-RA-14-04

June 2014



Department of Energy
Washington, DC 20585

June 17, 2014

MEMORANDUM FOR THE ASSISTANT SECRETARY FOR ENERGY EFFICIENCY AND
RENEWABLE ENERGY

A handwritten signature in blue ink, appearing to read "Rickey R. Hass".

FROM: Rickey R. Hass
Deputy Inspector General
for Audits and Inspections
Office of Inspector General

SUBJECT: INFORMATION: Audit Report on "Selected Activities of the Office
of Energy Efficiency and Renewable Energy's Advanced
Manufacturing Office"

BACKGROUND

The Department of Energy's (Department) Office of Energy Efficiency and Renewable Energy's Advanced Manufacturing Office (Program) is committed to researching, developing and demonstrating new energy-efficient manufacturing processes and material technologies. To meet its mission, the Program distributed funding through financial assistance awards, contracts and inter-entity work orders to projects across various sectors of manufacturing. Specifically, between Fiscal Years 2009 and 2012, the Program funded 261 projects totaling over \$450 million, including over \$170 million in *American Recovery and Reinvestment Act of 2009* (Recovery Act) funding. As of August 2013, approximately \$300 million in Department funds had been spent by award recipients.

Previous Office of Inspector General reviews identified weaknesses in the Department's management of financial assistance awards. For instance, our audit report on the *Department of Energy's Industrial Carbon Capture and Storage Program Funded by the American Recovery and Reinvestment Act* (OAS-RA-13-15, March 2013), found that Department officials were not always sufficiently managing financial assistance awards. These problems occurred in part because the Department had not always provided effective monitoring or oversight of recipient activities. In light of previously identified concerns and the significant amount of Recovery Act funding awarded, we initiated this review to determine whether the Department had effectively and efficiently managed the Program and its award recipients.

RESULTS OF AUDIT

We found that the Department had not always effectively managed the Program awards. In particular, during our review of 10 projects awarded a total of \$107 million, including approximately \$95 million in Recovery Act funds, we discovered that:

- Although specifically required to obtain appropriate supporting documentation, Program officials approved and reimbursed approximately \$17 million to three recipients without reviewing detailed documentation to substantiate costs claimed. In addition, during site visits to two additional recipients, we examined a sample of supporting information and found that over \$16,000 in questionable and/or unallowable costs had been charged to the projects.
- Program officials had not maintained records of analyses or documentation supporting comprehensive pre-award desk reviews conducted on two of the projects we reviewed.

Unsupported and Unallowable Costs

The Department approved and reimbursed approximately \$17 million to three recipients without reviewing detailed supporting documentation to substantiate all of the costs claimed. To enhance controls and alleviate risk, the Department placed these three recipients on the "request for reimbursement method of payment" to allow the determination of the allowability and reasonableness of costs to a project prior to payment to the awardee. According to Federal regulations, this method is preferred for For-Profit entities because costs are paid based on actual, not estimated expenditures. Even though the Program placed these recipients on the reimbursement method, the terms and conditions for the awards we reviewed only required high-level summary tables that listed costs claimed by budget categories. Without requesting or reviewing adequate documentation for project costs, the Department cannot accurately determine the allowability and reasonableness of costs charged to the Program prior to reimbursement.

This issue is significant because, for one of the recipients previously mentioned, we noted that independent audits conducted for Calendar Years 2011 and 2012, which were completed in July 2013, identified significant deficiencies in accounting system controls. These deficiencies increased the risk that unallowable costs could be approved and reimbursed. Furthermore, the audits found that this recipient had not adequately reviewed and approved certain payroll costs prior to billing the project.

In addition, two other recipients in our review, charged over \$16,000 in questioned and/or unallowable costs to the project, of which approximately \$1,600 was Government share and \$14,400 was recipient cost share. Specifically, in reviewing additional supporting documentation that had not previously been provided to the Department, we found instances of questionable travel claims in the amount of \$13,000 that exceeded costs or appeared unreasonable based on Federal Travel Regulations. These costs included business class airfare, hotel accommodations over Federal per diem rates, and premium rental cars. Additionally, we noted one instance of two hotel rooms reimbursed for the same night at two different locations claimed by the same individual. Further, we found an instance in which a subcontractor was reimbursed almost \$3,000 for cancellation fees on a workshop unrelated to the project. As a result, we questioned over \$16,000 in costs claimed under the awards.

During the course of our review, the Program conducted a comprehensive review of its grants management procedures and identified a need to strengthen, centralize and standardize its invoice review process. According to Program officials, this process is scheduled to be deployed in late Fiscal Year 2014. Additionally, subsequent to our review, the Department indicated that it had reviewed the \$16,000 in questioned costs previously noted and determined that over \$13,000 was unallowable, of which approximately \$1,200 was Government share and the remaining \$11,800 was recipient cost share. Program officials stated that as of May 2014, they had recouped the identified costs.

Records Maintenance

Our review found that the Program was unable to provide records of comprehensive desk reviews that, according to award documentation, had been conducted to evaluate two recipients in our sample. Both of these recipients were investment type entities with the majority of the project costs being passed through to a subcontractor. The Department, due to unique circumstances, conducted comprehensive desk reviews to ensure that the Government's interests were protected. However, when requested, the Program was unable to provide us with any documentation that would have supported the analyses used in the decision process for both awards. Even though we were informed that the desk reviews had been performed, documentation supporting the desk review analyses had not been maintained by the Contract Specialist in the Department's official record-keeping database, nor was it available in records retained by the Program when the official retired. Although management did not agree that documentation supporting the desk review analyses was not maintained by the Contract Specialist, we found that documents cited by management to support its assertion contained only the conclusions from such analyses, not support for the actual conduct of the analyses.

It is the Department's policy to require the maintenance of complete and accurate records documenting activities and decisions of the Department. Further, the Department's Records Management Handbook requires that officials maintain complete and accurate records that adequately document the organization, functions, policies, decisions, procedures and essential transactions of the agency. Without records documenting the analysis or decision process used in the desk reviews, the Program is unable to demonstrate whether funding the projects was in the best interest of the taxpayer. During the course of our audit, the Department became aware of opportunities to enhance its project management processes in the area of project documentation. In response, the Department issued guidance in August 2013, requesting project records of analysis and significant decisions be entered into appropriate Department databases.

Performance Monitoring and Oversight

The issues we identified occurred, in part, because the Department had not consistently provided effective monitoring and oversight of recipient activities. Specifically, at the time of our review, the Department had not developed criteria or defined a standard level of documentation needed to ensure an efficient/consistent review of project costs. For example, for seven of the recipients included in our review that had been placed on the reimbursement method of payment, Program officials requested varying levels of supporting documentation to substantiate project costs. In

some cases, they received summary spreadsheets listing budget cost categories. According to one Program official, the extent of backup documentation required to substantiate reimbursement requests is determined jointly by the Project Officer and Contract Specialist at the onset of each award. However, these discussions and decisions are not typically documented, and not all Program officials were available to explain the basis for the amount of documentation requested for recipients.

Additionally, we found that the lack of documentation on the desk reviews was caused by weaknesses in the Program's record-keeping practices. Specifically, the Program lacked internal controls to ensure policies and procedures requiring analysis and significant decisions be adequately documented and maintained were followed. We have found similar issues in other Departmental programs. For example, in our report *The Department of Energy's Industrial Carbon Capture and Storage Program Funded by the American Recovery and Reinvestment Act* (OAS-RA-13-15, March 2013), we found that the Carbon Capture Program had not maintained records related to significant program decisions that could have supported the approval and rationale used to select projects to receive funding. Due to the unique circumstances of the awards, we believe the Department's analyses and decision process used in the comprehensive desk reviews should have been documented and maintained.

To their credit, we noted that various Program officials had implemented other oversight techniques when managing projects. Specifically, we identified instances in which Program officials questioned reimbursement requests and obtained explanations from recipients to clarify amounts claimed. We also found a number of Program officials that rejected payment requests for reasons such as unapproved items, invoice errors, incorrect rate usages, rounding errors, and differing dollar figures between the reimbursement requests and provided support. Further, at least one Program official incorporated financial reviews of purchase order detail into the site visits. Finally, in certain instances, Program officials obtained additional external audits to ensure adequate accounting systems were in place at some recipients.

Impact and Path Forward

The lack of financial monitoring of projects placed the Department at a higher than necessary risk of reimbursing questionable and/or unallowable recipient costs. Funds spent on questionable and/or unallowable costs may reduce the amount available to complete project objectives and represent wasted and misused taxpayer dollars. Further, by not documenting project reviews/evaluations, the Department cannot demonstrate that it made informed decisions, or that these decisions had not adversely affected project objectives. In light of existing budget challenges facing the Department, it is critical that the Program ensures that the limited resources available are used to advance its mission in the most effective and efficient manner possible. Of the \$450 million in funding obligated to projects under the Program, approximately \$155 million, or about 34 percent, remains to be spent. Given the significant amount of funding remaining to be spent, the Department has an opportunity to ensure a successful path forward.

RECOMMENDATIONS

To help achieve the objectives of the Recovery Act and the Program, we recommend that the Assistant Secretary for Energy Efficiency and Renewable Energy direct Program officials to ensure that:

1. Newly established criteria and invoice review processes are applied and performed on all project costs claimed; and
2. Records of analysis and significant decisions supporting the Program are adequately documented and maintained.

MANAGEMENT REACTION

Management generally concurred with the report's recommendations and indicated that it would take or had already implemented actions to address them. Specifically, management stated that it had begun a comprehensive review of its grants management procedures in April 2012. The review identified a need to strengthen, centralize and standardize the invoice review process. The resulting central invoice review has established criteria and defined the standard level of documentation necessary to perform a review of project costs claimed. In addition, management indicated it had determined the allowability of questioned costs in our report and began the process to recover unallowable costs from recipients. Subsequently, management informed us that as of May 2014, it had recouped these costs. Further, to enhance existing project management processes, guidance was issued which requested that project records of analysis and significant decisions be entered into appropriate databases and the project file.

AUDITOR COMMENTS

Management's comments and planned corrective actions were responsive to our recommendations. Management's comments are included in Attachment 2.

Attachments

cc: Deputy Secretary
Chief of Staff

OBJECTIVE, SCOPE AND METHODOLOGY

OBJECTIVE

The objective of this audit was to determine whether the Department of Energy's (Department) Office of Energy Efficiency and Renewable Energy's Advanced Manufacturing Office (Program) had effectively and efficiently managed the Program and award recipients.

SCOPE

This audit was performed between March 2013 and June 2014, at the National Energy Technology Laboratory (NETL) in Pittsburgh, Pennsylvania. Also, the audit team held teleconferences with Program officials at the Golden Field Office, in Golden, Colorado. In addition, we conducted site visits to three recipients in Shoreview, Minnesota and Tarrytown, New York. Our review covered projects funded between Fiscal Years 2009 and 2012. The audit was conducted under the Office of Inspector General Project Number A13RA022.

METHODOLOGY

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 the financial assistance award administration.
- Reviewed the Funding Opportunity Announcements for the Program, as well as merit review information and selection documentation.
- Identified a universe of 261 projects funded between 2009 and 2012 under the Program. We judgmentally selected 10 projects for review based on award dollar value, total payments made by the Department, and Funding Opportunity Announcements. We also selected projects based on funding source, type of award made, and two Department field offices overseeing awards. We performed a full file review on the 10 projects in our sample including a review of the awards' Strategic Integrated Procurement Enterprise System and Vendor Invoice Approval System files to assess level of award progress and cost documentation reviewed by Program officials prior to reimbursement. Because our samples were not statistical, we could not project the sample results to the population of financial transactions. However, after identifying insufficient documentation for subcontractor costs in our sample of certain recipients, we determined that the lack of documentation was systemic. We also interviewed project managers and contract specialists overseeing these projects to determine their roles and responsibilities related to monitoring of awards.
- Based on our full file reviews, we selected and conducted site visits to three recipients to discuss management of the projects, discuss recipients' policies and procedures for

tracking project costs, and analyze financial transactions related to the projects. We judgmentally selected invoice and other backup documentation to support costs claimed. However, because our samples were not statistical, we could not project the sample results to the population of financial transactions.

- Conducted interviews with NETL and Golden Field Office officials to discuss management of the 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 findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. Accordingly, we assessed internal controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective. In particular, we assessed the Department's implementation of the *GPRA Modernization Act of 2010* and determined that it had established performance measures for the Program. 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. Finally, we conducted an assessment of computer-processed data relevant to our audit objective and determined the data to be sufficiently reliable to achieve our audit objective.

Management officials waived an exit conference.

MANAGEMENT COMMENTS



Department of Energy

Washington, DC 20585

MAY 01 2014

MEMORANDUM FOR: RICKEY R. HASS
DEPUTY INSPECTOR GENERAL
FOR AUDITS AND INSPECTIONS
OFFICE OF INSPECTOR GENERAL

FROM: KATHLEEN B. HOGAN 
DEPUTY ASSISTANT SECRETARY
FOR ENERGY EFFICIENCY
ENERGY EFFICIENCY AND RENEWABLE ENERGY

SUBJECT: Response to Office of Inspector General Draft Audit Report on
"Selected Activities of the Office of Energy Efficiency and Renewable
Energy's Advanced Manufacturing Office"

The Office of Energy Efficiency and Renewable Energy (EERE) appreciates the opportunity to respond to the Office of Inspector General's (OIG) draft report and welcomes the opportunity to work with OIG to improve award administration.

As part of the Department's commitment to protecting taxpayer interests, EERE is committed to effective grants management and strives to implement sound grants management practices. The OIG audit has made two recommendations with which EERE concurs. Responses to the OIG recommendations are provided below with detailed responses to the findings provided in Attachment 1.

OIG Recommendation 1: To help achieve the objectives of the Recovery Act and the Program, we recommend that the Assistant Secretary for Energy Efficiency and Renewable Energy direct Program officials to ensure that newly established criteria and invoice review processes are applied and performed on all project costs claimed

EERE Response: EERE concurs with the OIG recommendation to ensure that newly established criteria and invoice review processes are applied and performed on all project costs claimed. EERE began a comprehensive review of its grants management procedures in April 2012. The review identified a need to strengthen, centralize, and standardize the invoice review process. The resulting EERE central invoice review unit (CIRU) has established criteria and defined the standard level of documentation necessary to perform a review of project costs claimed. EERE plans to implement the new invoice review process late in fiscal year 2014.

DOE implements financial assistance award payments in accordance with 10 CFR§ 600.122, 221, and 312. For recipients placed on the reimbursement method of payment, an Office of



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Management and Budget (OMB) Standard Form 270, Request for Advance or Reimbursement, is required in order to seek payment. Recipients may also be requested to include supporting documentation along with the request to assure the expenditures are allowable, allocable, and reasonable in accordance with 10 CFR § 600.127, 222, 317 and applicable cost principles for each type of entity.

Recipients are subject to the independent audit requirements set forth in 10 C.F.R. § 600.126, 226, and 316. These annual audits verify that the recipient has an internal control structure capable of managing federal awards and also involve a review of a sample of project costs. If an audit identifies significant findings, the recipient is required to develop corrective action and provide the plan of corrective action to DOE for approval.

EERE would like to point out that the statement that review of detailed supporting documentation to substantiate costs claimed is not required and notes that detailed reviews were not required within the award terms and conditions or Office of Management and Budget (OMB) Standard Forms for seeking reimbursement.

OIG Recommendation 2: To help achieve the objectives of the Recovery Act and the Program, we recommend that the Assistant Secretary for Energy Efficiency and Renewable Energy direct Program officials to ensure that records of analysis and significant decisions supporting the Program are adequately documented and maintained.

EERE Response: EERE officials are required to document analysis and significant decisions in the award negotiation memorandum and analysis and significant decisions must also be archived in the Strategic Integrated Procurement Enterprise System (STRIPES) contractual award file. These items document a comprehensive due diligence review of information by procurement and technical project management representatives, as well as legal counsel, national environmental policy act experts, and cost/price analysts depending on the nature of the information. The resultant analysis, significant comments, suggestions, concerns, concurrence or non-concurrence, and actions resulting from the due diligence review are then entered into the STRIPES file. In the event the contractual grant agreement includes deliverables for analysis to support the information review process, those documents are also entered into the STRIPES file.

EERE became aware that there may be opportunities to enhance existing project management processes in the area of project documentation in calendar year 2013. In response, the Assistant Secretary for EERE proactively issued guidance which requested that project records of analysis and significant decisions be entered into appropriate Department databases, including the project file. The guidance was issued in August 2013.

FEEDBACK

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Office of Inspector General (IG-12)
Department of Energy
Washington, DC 20585

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