



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

Audit Report

Department of Energy's
Interconnection Transmission
Planning Program Funded through
the American Recovery and
Reinvestment Act of 2009



OAS-RA-13-26

June 2013



Department of Energy
Washington, DC 20585

June 19, 2013

MEMORANDUM FOR THE ASSISTANT SECRETARY FOR ELECTRICITY DELIVERY
AND ENERGY RELIABILITY

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

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

SUBJECT: INFORMATION: Audit Report on "The Department of Energy's
Interconnection Transmission Planning Program Funded through the
American Recovery and Reinvestment Act of 2009"

BACKGROUND

Under the American Recovery and Reinvestment Act of 2009 (Recovery Act), the Department of Energy's Office of Electricity Delivery and Energy Reliability received about \$4.5 billion to modernize the electric grid. About \$80 million of this funding was designated for the Interconnection Transmission Planning Program to facilitate the development or strengthening of capabilities in each interconnection. The transmission infrastructure in the United States is separated into three distinct electrical networks, or interconnections – the Western, Eastern, and Texas interconnections. The Department allocated \$60 million to five organizations under cooperative agreements to perform work for the interconnections and \$20 million to the Department's national laboratories to provide technical support to those organizations.

The cooperative agreements covered two broad topics: (1) interconnection-level analysis and planning, and (2) coordination and cooperation among states on electric resource planning and priorities. Awardees were to work collaboratively in each interconnection to support and greatly expand ongoing resource assessment, and regional and interconnection-level transmission analysis and planning. As a result of these planning efforts, each of the awardees were to produce long-term resource and transmission planning studies in 2011, with updated documents in 2013, to provide critical information to stakeholders in developing a modernized electricity system.

This report is the third in a series of reports on the Department's funding to modernize the electric grid. Our January 2012 report, *The Department's Management of the Smart Grid Investment Grant Program* (OAS-RA-12-04, January 2012) identified weaknesses in financial management, and incomplete and insufficient cyber security plans, potentially jeopardizing achievement of Recovery Act goals. In addition, our January 2013 report, *The Department of Energy's \$700 Million Smart Grid Demonstration Program Funded through the American Recovery and Reinvestment Act of 2009* (OAS-RA-13-08) identified weaknesses in reimbursement requests, cost-share contributions, and coordination efforts with another Department program.

Because of the substantial Recovery Act funding and the national importance of an efficient and effective electricity delivery system, we initiated this audit to determine whether the Program has been efficiently and effectively managed.

RESULTS OF AUDIT

We found that the Department had generally established and implemented a system of internal controls for managing the announcement, review and selection of cooperative agreement funding recipients. Also, the recipients had released the required planning studies to the public in 2011. During our audit of the five recipients, however, we found that the Department had not adequately managed reimbursements to recipients for consultant compensation. As such, we questioned the payment of \$86,000 in payments to consultants.

Consultant Compensation

We found that the Department paid, in our opinion, excessive consulting compensation rates for two of the five recipients. Federal regulations state that in order for a cost to be allowable, it must be reasonable and not exceed the amount that would be incurred by a prudent person. However, we found that:

- The Department had reimbursed one recipient for a consultant at a flat fee of \$6,160 per month regardless of the number of hours worked on the project. The recipient stated the Department insisted that it hire a facilitator. In response, the recipient hired a consultant responsible for facilitating stakeholder input and involvement into activities related to the long-term interconnection planning studies. The recipient's contract with the consultant stated the flat fee would be for work up to 28 hours per month, with any additional work paid at the rate of \$225 per hour. However, the contract did not require a minimum number of hours to be allocated to the project. The Department had previously approved as reasonable budget plans submitted by the recipient that were based on hiring an employee to function as the project facilitator at a cost of \$52.29 an hour at a 40-hour per week level of effort.

Our review found that the recipient generally lacked support for the number of hours worked by the consultant. We noted that during a month in which the consultant submitted support for hours, the consultant reported working 7.5 hours (which equated to \$820 per hour) on the project, which was substantially less than the level of effort the Department had used as a basis for its reasonableness determination. Department officials had not requested or reviewed the contract between the recipient and consultant to ensure the charges corresponded to the budgeted amount. The consultant stands to receive over \$160,000 over the 26-month contract without any minimum time stipulations. Although Department officials told us that there was a value associated with having guaranteed technical expertise available on a monthly basis, as previously noted, the Department had essentially based its reasonableness determination on a 40-hour work week. As of July 2012, the consultant had been paid about \$86,000, an amount we questioned because it was not supported by adequate documentation and was based upon a level of effort significantly less than that previously used by the Department to determine reasonableness.

- The Department had accepted excessive consultant rates without negotiation with another recipient. We noted the following examples of excessive consultant rates at this recipient:
 - The recipient claimed and was reimbursed for consultant rates up to \$650 per hour. During the initial award phase, the recipient submitted an estimated budget that contained hourly rates ranging from \$147 to \$578 per hour for technical modeling work by a consulting company. Department officials accepted the rates based on the rationale that the consultant's work was highly specialized and that this specific consulting company was the only one capable of performing such work. However, according to the recipient, while there were other contractors with the ability to perform this kind of work, the consultant was selected because it had a more user friendly model than other companies. Even though the recipient stated that other qualified contractors were available, the Department had not questioned or attempted to negotiate the rates with the recipient. Further, Department officials stated they had not reviewed the rates of the consultant since the start of the project. For the period we reviewed, over \$1 million of the \$1.8 million spent by the consulting company was for labor rates between \$475 and \$650 per hour. Department officials stated that this rate included various items, such as overhead and access to proprietary software and databases. However, the Department did not provide a breakdown with respect to the composition of the categorized rates and based the determination of reasonableness on the number of labor hours per category.
 - In addition, we were informed by the recipient that the Department's approved hourly rate for another consultant hired as the project manager included compensation for the cost of business insurance, an allowance which we found far exceeded the actual cost of the insurance. By approving the hourly rate that included an 8 percent cost element for business insurance, the Department allowed the consultant to receive about \$60,000 in reimbursements for insurance costs even though costs were only about \$20,000 according to documentation we received from the recipient during our review. Department officials told us that they did not have information about the insurance cost element built into the approved hourly rate. In our view, the lack of information about the insurance cost element in the approved hourly rate demonstrates the importance of the Department obtaining sufficient information about the components of rates in making reasonableness determinations.
 - Finally, the same project manager's rate was significantly higher than the rates paid to other project managers working on the other interconnection cooperative agreements. The hourly rate of \$231 paid to the project manager exceeded the rate of the next highest compensated project manager by over \$100 per hour.

Although Department officials told us that they considered factors such as the level and difficulty of the work performed, the qualifications of the consultant, and pay rates of comparable individuals doing similar work, consideration of such factors was not documented.

Instead, the documented record shows that during the award process the Department concluded that \$231 per hour was reasonable based on an online salary inquiry. We were unable to duplicate the results of the online survey given the search parameters provided by the Department. When we asked for clarification on the review of the hourly rate, Department officials stated that the project manager's rate was reasonable based on the individual's prior experience and a comparison of rates found online ranging from \$72 to \$967 per hour. Although the interconnections each have unique aspects and different challenges, the basic project deliverables, responsibilities and duties of the project managers are very similar. These factors would have made a direct comparison of project manager rates both logical and reasonable.

Given that the Department had accepted and determined the project manager's rates to be allowable, we are not questioning the reimbursements made to the recipient. However, the Department should take action in the future to ensure that rates to consultants are reasonable.

Monitoring Financial Transactions

These issues occurred, in part, because the Department had not always effectively monitored the financial transactions of the recipients. In one of the examples, Department officials had not reviewed the contract or the facilitator's invoices and were unaware of the contract's terms and conditions because the recipient had not been required to submit supporting documentation as stated in the award agreement. Department officials stated that because the overall budgeted amount for the facilitator had not been exceeded, and the terms and conditions had not required Department approval, the recipient was within its authority to negotiate and approve this contract. However, Department officials also stated that corrective actions had recently been taken by the project management center to implement a sub-award/subcontract change notification provision into all financial assistance awards. Specifically, the provision states that recipients must notify the Department in writing prior to the execution of new or modified sub-awards/subcontracts not originally proposed in the application. We find these actions responsive to the identified weakness.

We also found that the Department lacked a defined negotiation strategy with the recipients for determining the reasonability of consultants' rates. In fact, in an interview with Department officials, a project officer stated that she had initially expressed surprise regarding the high hourly rates proposed for consultants, but did not question or attempt to negotiate the rates.

Finally, we identified about \$3,000 in expenses claimed by two recipients prior to their authorized spending date. To their credit, the recipients took prompt action to reverse the expenses once we notified them that the expenses did not appear to be permissible under the terms of their award.

RECOMMENDATIONS

The Recovery Act provided an unprecedented amount of funding to the Office of Electricity Delivery and Energy Reliability to modernize our Nation's energy infrastructure. Although three of the five recipients stated the projects will likely end under budget with a surplus of funds, it is

imperative that the Department effectively and efficiently manage each project to ensure that taxpayer dollars are being protected. Accordingly, we recommend that the Assistant Secretary for Electricity Delivery and Energy Reliability direct program officials to:

1. Develop and document negotiation strategies relating to consultants' rates.

Additionally, we recommend that the contracting officers for the Interconnection Transmission Program:

2. Resolve the questioned costs discovered during our review totaling about \$86,000.

MANAGEMENT COMMENTS

Management partially concurred with Recommendation 1. Management responded that it is the responsibility of recipients to exercise their business judgment in determining the reasonableness of the consultant requirements. However, the Department acknowledged that it has an important oversight role in evaluating estimated budgets in this area to determine whether the consultant cost is reimbursable as an allowable cost. Department officials indicated a revision to their best practices guide will be initiated by August 2013, to assist staff in enhancing the quality of their cost analysis techniques related to consultants' rates.

Management did not concur with Recommendation 2, to resolve the questioned costs identified in our report. Officials asserted that the recipient was within its authority to negotiate and approve sub-awards and had not exceeded the approved budgeted amount. Officials also noted that the Department would consider providing additional oversight and guidance to recipients on sub-award fee structures such as the one identified in our report. Finally, officials stated the contracting officer determined the questioned costs would not be disallowed based on unreasonableness.

AUDITOR RESPONSE

We found the corrective actions proposed by management to Recommendation 1 to be responsive. Additionally, although management did not concur with Recommendation 2, we found that the Contracting Officer's determination on the allowability of the questioned costs in effect resolved them. Therefore, we consider this recommendation to be closed. However, we do not agree with the Department's assertion that the question of whether the recipient took maximum advantage of the fee structure was outside the Department's purview. As noted in our report, because the hourly rate and level of effort changed from what was originally determined to be reasonable and the amounts were not adequately documented, we believe the Department was well within its authority to question the sub-award. However, as previously noted, the Department recently took action to include a sub-award/subcontract change notification provision in all future financial assistance awards. Recipients must now notify the Department in writing prior to the execution of new or modified sub-awards/subcontracts not originally proposed in the application. This action should alleviate concerns about recipients changing terms of their sub-awards/subcontracts without the Department's knowledge.

Management's comments are included in their entirety in Attachment 3.

Attachments

cc: Deputy Secretary
Acting Under Secretary of Energy
Acting Chief of Staff

OBJECTIVE, SCOPE AND METHODOLOGY

OBJECTIVE

The objective of the audit was to determine whether the Interconnection Transmission Planning Program funded through the American Recovery and Reinvestment Act of 2009 (Recovery Act) had been managed efficiently and effectively.

SCOPE

This audit was performed between July 2012 and June 2013, at the Department of Energy's (Department) Headquarters in Washington, DC, and the National Energy Technology Laboratory (NETL) in Morgantown, West Virginia and Pittsburgh, Pennsylvania. The audit included a review of the \$60 million awarded through cooperative agreements to five organizations and did not include the \$20 million in funding distributed to the national laboratories through a research call. We conducted reviews of all six projects performed by five organizations, both on-site and remotely.

METHODOLOGY

To accomplish the audit objective, we:

- Obtained and reviewed relevant laws and regulations related to implementation of the Recovery Act and financial assistance award administration.
- Reviewed the Funding Opportunity Announcement, merit review information and selection documentation.
- Interviewed officials and analyzed financial transactions and implementation of financial assistance requirements as prescribed by the terms and conditions of the awards.
- Performed a complete review of invoices submitted for reimbursement for five of the six projects to determine that costs were allowable, allocable and reasonable. After a preliminary review of 54 percent of invoiced amounts for the sixth project revealed no issues, we selected a judgmental sample of 42 of the remaining 692 invoices, based on dollar amount, unique contractors or vendors not previously reviewed transaction description and bonuses. Because this sample was selected judgmentally, results could not be projected to the universe of invoices for that project.
- Obtained access to the Department's Strategic Integrated Procurement Enterprise System and reviewed individual award files for the six projects.
- Interviewed project officers and contracting personnel for each of the six awards.
- Conducted interviews and meetings with Program officials.

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 that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. The audit included tests of controls and compliance with laws and regulations necessary to satisfy the audit objective. We also assessed compliance with the *GPRA Modernization Act of 2010*. We examined the established performance measures related to 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 found it to be reliable.

We conducted an exit conference with the Department on June 11, 2013.

PRIOR REPORTS

- Audit Report on [*The Department's Management of the Smart Grid Investment Grant Program*](#) (OAS-RA-12-04, January 2012). The audit revealed several opportunities to enhance management of the Smart Grid Investment Grant (Smart Grid) Program. The problems that were discovered could jeopardize achievement of the American Recovery and Reinvestment Act of 2009 (Recovery Act) goals. In particular, auditors found that the Department of Energy (Department) officials approved Smart Grid projects that used Federally-sourced funds to meet cost-share requirements. In addition, one recipient was reimbursed twice for the same costs related to transportation. Furthermore, three of the five cyber security plans (required to be submitted by grantees) that were reviewed were incomplete, and did not always sufficiently describe security controls and how they were implemented. Issues identified in the audit report were due, in part, to the accelerated planning, development, and deployment approach adopted by the Department for the program. In particular, the Department had not always ensured that certain elements of the program were adequately monitored. The audit also found that the Department was so focused on quickly disbursing Recovery Act funds that it had not ensured personnel received adequate grants' management training.
- Audit Report on [*The Department of Energy's \\$700 Million Smart Grid Demonstration Program Funded through the American Recovery and Reinvestment Act of 2009*](#) (OAS-RA-13-08, January 2013). The audit found that the Department had not always managed the \$700 Million Smart Grid Demonstration Program effectively and efficiently. A review of 11 projects, awarded \$279 million in Recovery Act funding and \$10 million in non-Recovery Act funding, identified weaknesses in reimbursement requests, cost-share contributions and coordination efforts with another Department program. The problems identified occurred, in part, because the Department had not adequately reviewed financial transactions, and planned for or monitored recipient cost-share provisions. In total, \$12.3 million in costs claimed by the recipients were questioned. Auditors noted that without improvements in project management, the success of the efforts awarded under the Recovery Act were ultimately at risk. The Department concurred with the recommendations and indicated that corrective actions have been taken or would be initiated to improve the management of the Program and to resolve questioned costs.

MANAGEMENT COMMENTS



Department of Energy
Washington, DC 20585

May 30, 2013

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

FROM: PATRICIA A. HOFFMAN *PAH*
ASSISTANT SECRETARY
ELECTRICITY DELIVERY AND ENERGY RELIABILITY

SUBJECT: Response to Office of Inspector General's (IG) Draft Audit
Report "The Department of Energy's Interconnection
Transmission Planning Program Funded through the American
Recovery and Reinvestment Act of 2009"

The Office of Electricity Delivery and Energy Reliability (OE) appreciates the opportunity to respond to the Office of Inspector General's (IG) Draft Audit Report "The Department of Energy's Interconnection Transmission Planning Program Funded through the American Recovery and Reinvestment Act of 2009."

Under the Interconnection Transmission Planning (ITP) Program, OE manages approximately \$88 million of taxpayer and private funds. OE takes the responsibility of managing each of the six industry and supporting national laboratory projects very seriously to ensure that funds are being spent properly and that the funds are accomplishing the intended purpose and objectives.

OE understands that such an important and complex program requires a level of monitoring and oversight that is higher than normally applied in typical programs. In fact, OE's management processes and procedures for the ITP program go beyond Federal, Department of Energy (DOE) and National Energy Technology Laboratory (NETL) standard project management practices and include specific requirements to help ensure that recipients deliver the intended results in a timely and cost-effective manner and with reduced risks for U.S. taxpayers. For example, NETL developed a Project Monitoring Plan that includes a Technical Project Officer (TPO) Desktop Monitoring Checklist, which was completed by the TPO on review of each monthly report from the grant recipient, as well as an Invoice Review Checklist to ensure that TPOs were reviewing all aspects of the invoice.



OE's responses to the two recommendations in the Audit Report are listed below.

IG Recommendation 1:

"Develop and document negotiation strategies relating to consultants' rates."

Response:

The Department partially concurs with the IG finding to develop and document negotiation strategies relating to consultants' rates. After a thorough review of NETL's "best practice" documents, the Department agrees that the negotiation strategies developed and implemented in this case could be better documented. While it is the responsibility of recipients to exercise their business judgment in determining the reasonableness of the consultant requirements, the Department acknowledges that it has an important oversight role in evaluating estimated budgets in this area to determine whether the consultant cost is reimbursable as an allowable cost. It is the policy of the Department to analyze and document negotiation strategies for all individual elements of cost contained in an applicant's budget in order to determine necessity, reasonableness, and allowability of the cost. The objective in analyzing and documenting a negotiation strategy of the entire budget is to assure that the proposed amount of Department funding is adequate to achieve the intended purpose and that Department funds will be expended in a manner consistent with the cost principles and that best meets the objectives of the program. In summary, the Department will continue to scrutinize the entire budget which includes consultants' rates to ensure the following factors are considered: 1) the level of difficulty of the consultant work to be performed; 2) the qualifications of the consultant; 3) to the extent possible, the pay rates of comparable individuals performing similar work in Federal or non-Federal sectors; 4) the availability of qualified candidates; and 5) the tradeoff between cost and time.

Action:

NETL will revise its best practices guide to assist staff to enhance the quality of their cost analysis techniques related to consultants' rates. This will be completed by August 30, 2013.

IG Recommendation 2:

"Resolve the questioned costs discovered during our review totaling about \$86,000."

Response:

The Department does not concur with this recommendation. The Department understands that the IG questions \$86,000 in costs. As the Department explained during the IG review, when the overall budgeted amount for particular items was not exceeded,

the terms and conditions of the award did not require Department approval, and the recipient was within its authority to negotiate and approve sub-awards for those budgeted items. Here the recipient used its authority to enter into a monthly fixed fee sub-award to ensure that the required technical services were available when required for the project. The rationale presented in the audit report does not adequately consider the value provided to the project by ensuring the required technical expertise is available up to 28 hours per month, where the amount of needed availability is not known.

We note that the sub-award did not exceed the budgeted amount—and in fact came in approximately \$46,000 under budget—so the terms and conditions of the award did not provide for Department approval. Whether the recipient took maximum advantage of this sub-award fee structure was outside Department review. Going forward, the Department will consider providing additional oversight and guidance to recipients on such a sub-award fee structure.

In conclusion, the Contracting Officer believes that the recipient acted within the scope and budget of their discretion and exercised that discretion in a non-arbitrary manner. Therefore, it is the determination of the Contracting Officer that the questioned cost of \$86,000 will not be subject to disallowance on the grounds of unreasonableness.

Action:

No action required.

Should you have any questions, please contact me at (202) 586-1411 or Kathy Bittner at (202) 287-5613.

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