

Statement of Gregory H. Friedman

Inspector General

U.S. Department of Energy

Before the

Subcommittee on Investigations and Oversight,

Committee on Science, Space, and Technology

U.S. House of Representatives

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Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to testify at your request on the work of the Office of Inspector General concerning the Department of Energy's Advanced Research Projects Agency – Energy (ARPA-E). Specifically, as requested by the Subcommittee, my testimony today will focus on our August 2011 audit report on the Program (OAS-RA-11-11, August 25, 2011). ARPA-E was created to enhance domestic economic and energy security by funding high-risk, high-payoff energy technology research and development projects. A key element of this concept involves transferring developed technologies to the marketplace.

While ARPA-E was authorized in 2007 as part of the America COMPETES Act, it did not begin operations until 2009, when the Omnibus Appropriations Act provided an initial \$15 million in funding. The American Recovery and Reinvestment Act of 2009 provided an additional \$400 million to ARPA-E. In addition to the Recovery Act funding, the program received \$180 million in Fiscal Year 2011 and \$275 million in Fiscal Year 2012.

ARPA-E has issued a number of funding opportunity announcements that targeted specific technology research areas, such as obtaining fuel from plants, providing more efficient cooling for buildings, and carbon capture technologies. As of January 17, 2012, according to Department data, it had approved 153 projects valued at about \$448 million. Of this amount, approximately \$220 million has been expended.

Office of Inspector General Oversight

The purpose of our audit was to evaluate ARPA-E's program implementation and its stewardship of taxpayer-provided resources. Our review revealed that ARPA-E generally had effective systems in place to make research awards and to deploy Recovery Act resources. Of particular note, we found that ARPA-E, despite being a relatively new program, had developed and implemented research proposal selection criteria designed to make certain that awards were consistent with its mission objectives.

We did, however, identify several opportunities to enhance safeguards over program execution activities and funding. Specifically, we found that policies and procedures had not been implemented in certain areas nor were necessary controls in place to ensure that technology transfer spending objectives were met. ARPA-E took action to address several of the issues we raised when brought to their attention during the audit. Further, subsequent to the issuance of our report, action plans have been developed in response to a number of our recommendations.

Policies and Procedures

At the time of our review, ARPA-E had not fully implemented policies and procedures to ensure that:

- Technology transfer and outreach activity expenditure goals were met and that such costs were effectively tracked and verified. In this regard, ARPA-E had not provided recipients with guidance regarding budgeting for and tracking of expenditures, and the allowability of such costs;
- Awardee activities were effectively monitored and that recipient requests for reimbursement were properly reviewed. ARPA-E appropriately focused on technical performance during

periodic site visits of awardees. However, we noted that business aspects of the award, including recipient control over costs, were not emphasized as part of regular oversight activities.

Further, ARPA-E had not established formal procedures for determining whether to continue or terminate projects that were not meeting objectives nor was it clear who had the authority and responsibility to make such determinations.

Technology Transfer and Outreach

ARPA-E was required by statute to spend 2.5 percent of its funding on technology transfer and outreach activities.¹ These activities are a means through which ARPA-E was to achieve its goal of ensuring that the United States, working with the commercial sector, maintains a lead in deploying advanced energy technologies.

In implementing these requirements, the program considered technology transfer and outreach to be an integral part of each recipient's activities. In addition to an in-house commercialization effort, ARPA-E expected that recipients would engage in technology transfer activities and, as a result, would incur related costs. In this regard, ARPA-E decided to include such recipient expenditures when measuring overall program progress in meeting the 2.5 percent threshold. However, in implementing this approach, the Department had not adopted a system to ensure or verify that awardees were meeting technology transfer and outreach requirements. ARPA-E, in its formal agreements, had not required recipients to meet specific spending levels nor had it required that they track and report such expenditures to the Department.

¹ This requirement was subsequently increased to 5 percent with the enactment of the America COMPETES Reauthorization Act of 2010.

In response to our concerns, ARPA-E surveyed award recipients about their technology transfer and outreach activities and expenditures. According to the responses, recipients reported that they had spent an estimated \$15.3 million on such activities. As a result, program officials concluded that ARPA-E had exceeded the 2.5 percent spending requirement. In response to our audit, ARPA-E established a requirement that recipient expenditures on technology transfer reflect at least the minimum amount required by the America COMPETES Reauthorization Act and that their expenditures be tracked and reported.

Allowable Costs

During our review, we also identified potentially unallowable costs that had been incurred by a small business recipient. At this small business, which was awarded approximately \$5.8 million in ARPA-E funding, \$1.2 million of which had been incurred at the time of our audit, we identified \$39,992 in questionable direct costs. Responding to our finding, the responsible contracting officer concluded that virtually all of the direct costs were allowable because, in his judgment, they fell under the broad category of technology and outreach activities.

Separately, we noted that this recipient also did not have support for its indirect cost rate. Rather, it was using the rate of an affiliated firm, a rate that had not been reviewed by an independent party as required. As such, we questioned the total indirect costs of \$239,497 claimed by the recipient as of June 30, 2010. In response to our finding, program officials requested a review of the recipient's indirect cost rate.

ARPA-E Response and Actions

ARPA-E's response to our report was favorable and management indicated that it was committed to improving its operations. In fact, as noted, corrective actions had been taken to address several

concerns during the course of our audit. For example, policies governing monitoring and oversight, invoice review, and those related to terminating non-performing awards had been finalized.

Additionally, management implemented a number of other improvements, including the deployment of a web-based project management system to facilitate the monitoring and oversight of awardees. Further, ARPA-E officials told us that it had taken action to better define allowable technology transfer and outreach costs and implemented a process to measure progress in meeting spending goals in this area.

Path Forward

ARPA-E is a relatively new, yet very important Department of Energy initiative. As such, we will continue to monitor its activities as part of our normal risk assessment process. In addition, the Office of Inspector General recently issued a Special Report on “Lessons Learned/Best Practices during the Department of Energy’s Implementation of the American Recovery and Reinvestment Act of 2009” (OAS-RA-12-03, January 18, 2012), which is based on our extensive body of work covering the Department’s efforts under the Recovery Act, a major source of ARPA-E support. Our report, based on over 70 audits and inspections, along with a number of investigations, identifies several best practices, which if fully implemented, should help ARPA-E and the Department at-large enhance overall program execution.²

Mr. Chairman, this concludes my statement and I would be pleased to answer any questions that the Subcommittee may have.

² A full listing of our Recovery Act-related reviews is available at: <http://energy.gov/ig/calendar-year-reports/recovery-act/recovery-act-reports>.