



OFFICE OF INSPECTOR GENERAL

U.S. Department of Energy

AUDIT REPORT

OAI-M-17-06

April 2017

**FOLLOWUP ON THE SMALL BUSINESS
INNOVATION RESEARCH AND
SMALL BUSINESS TECHNOLOGY
TRANSFER PROGRAMS**



Department of Energy
Washington, DC 20585

April 11, 2017

MEMORANDUM FOR THE ACTING DIRECTOR, OFFICE OF SCIENCE
ACTING DIRECTOR, ADVANCED RESEARCH PROJECTS
AGENCY-ENERGY

Sarah B. Nelson

FROM: Sarah B. Nelson
Assistant Inspector General
for Audits and Administration
Office of Inspector General

SUBJECT: INFORMATION: Audit Report for the "Followup on the Small
Business Innovation Research and Small Business Technology
Transfer Programs"

BACKGROUND

The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs are congressionally-mandated programs that require Federal agencies with large research and development budgets to set aside a certain percentage of their funding for small businesses to develop innovative technologies. The Office of Science (Science) manages these programs for all Department of Energy offices except the Advanced Research Projects Agency-Energy (ARPA-E), which independently manages its own programs. While Science administers its awards through grants, ARPA-E uses cooperative agreements as its primary funding mechanism. With cooperative agreements, substantial Government involvement in the project is expected. In fiscal year (FY) 2015, annual funding for the Department's SBIR and STTR programs was approximately \$198 million for Science and \$12.3 million for ARPA-E.

In our previous audit of these programs, *The Department of Energy's Small Business Innovation Research and Small Business Technology Transfer Programs* (DOE/IG-0876, November 2012), we identified significant delays in the closeout of grants, substantiated allegations relating to conflicts of interest during the award selection process, and found erroneous and unsupported costs charged by a grant recipient. Due to the issues identified in our prior audit and ARPA-E's relatively limited experience with these programs, we initiated this audit to determine whether the Department is efficiently and effectively managing its SBIR and STTR programs.

RESULTS OF AUDIT

Science and ARPA-E had not always efficiently and effectively managed their SBIR and STTR programs in the areas of financial management, adherence to award terms and conditions, and

with respect to Science, award closeout. Through our review of eight Science grants and one ARPA-E cooperative agreement (awards), we found:

- Three recipients had not properly accounted for, or maintained adequate supporting documentation for, a portion of their project expenses.
- The Department had not ensured that three recipients met all terms and conditions of their awards. Specifically, we identified instances where recipients had not obtained required audits, had not ensured adequate participation by a nonprofit research institution, or had not adequately documented involvement of the principal investigator, as required by their awards.
- Although Science had significantly improved the timeliness of its award closeout process in response to our previous recommendations, two areas of concern remained. Specifically, Science had not always ensured recipients submitted all final expenditure reports within the required timeframe and had not always adequately documented its rationale for decisions to waive closeout requirements for recipients to submit final project deliverables.¹

The issues that we identified were primarily due to recipients having a lack of awareness of regulations and specific award terms and conditions and, at times, Department officials providing limited oversight. We identified several areas in which the Department could improve, including additional training for recipients and reevaluation of staffing needs.

Two of the goals of the SBIR and STTR programs are to stimulate technological innovation and increase private-sector commercialization of innovations derived from Federal research and development funding. Obtaining timely final project deliverables and providing effective financial management is critical to supporting these goals. Considering that many small businesses with limited Department program experience are receiving funding, it is important for the Department to ensure that recipients are fully aware of Federal and Department requirements that were designed to help the SBIR and STTR programs meet their intended goals and objectives in an efficient and effective manner.

Financial Management of Awards

We found that three recipients had not properly accounted for, or maintained adequate supporting documentation for, a portion of their project expenses. Specifically, one recipient, Light Foundry LLC had not maintained adequate support for expenses charged to its Science award. Light Foundry LLC, which had received an award of over \$1.1 million, provided a full list of expenses; however, the recipient had comingled award expenses with other business expenses. From this list, we sampled several project-related expenses and asked the principal investigator to provide us with specific invoices; however, the principal investigator had to search through his email accounts for each invoice, some of which he could not locate. Therefore, we concluded that Light Foundry LLC did not have a sufficient records management

¹ At the end of each award, the recipient is required to submit several final deliverables that include, but are not limited to, a final expenditure report, final technical report, patent certification, and final property report.

system in place to maintain award documentation. While it appeared the majority of the expenses were project-related, we could not reasonably determine or verify which expenses were specifically paid for using Science funds. As a result, we were unable to make a determination on the allowability, allocability, and supportability of the \$1.1 million in funds charged to the award.

In addition, there were discrepancies between employee-reported timesheets and the amounts charged by a second recipient, SixPoint Materials, Inc., to its award. SixPoint Materials, Inc., an ARPA-E recipient, required employees to record actual hours on a monthly timesheet, but instead of using those recorded hours, it charged a fixed percentage of each employee's time when charging labor against its award. As a result, our analysis showed that of about \$357,000 in labor, fringe, and indirect expenses through August 2015, SixPoint Materials, Inc. had overcharged ARPA-E by approximately \$42,000, an amount we questioned as unallowable.

Finally, a third recipient, Atmospheric Observing Systems, Inc., a Science recipient, had not maintained adequate support for subcontractor labor charges of \$4,050 charged to its award. Atmospheric Observing Systems, Inc. hired a former employee as a subcontractor to complete work on its project. The subcontractor, however, did not provide any invoices for work completed. Rather, there was an informal arrangement between the recipient and the subcontractor regarding compensation. Accordingly, we question these contractual expenses charged to the award as unsupported.

Federal regulations require award recipients to maintain financial records, supporting documents, and all other records pertinent to an award for a period of 3 years from the date of submission of the final expenditure report. Regulations also stipulate that charges to Federal awards for salaries and wages must be based on records that accurately reflect the work performed.

Award Terms and Conditions

Our review of nine awards also revealed that the Department had not ensured that three recipients were meeting all terms and conditions of their awards. For example, two Science SBIR recipients, Stratton Park Engineering Company, Inc. and Tech-X Corporation, had not ensured that annual audits had been conducted as required by the terms and conditions of their awards and Federal regulations on financial assistance awarded to for-profit organizations. Federal requirements in place at the time the awards were administered, and incorporated in the terms of the agreement, mandated an independent audit on any recipient that expended Federal awards of \$500,000 or more in a year. These audits are intended to determine whether the recipient has an internal control structure that provides reasonable assurance that the recipient is managing its award or awards in compliance with Federal laws and regulations as well as the terms and conditions of the award. We found that both recipients had expended over \$500,000 per year for FYs 2012, 2013, and 2014, but neither had arranged to have the required audits performed. To its credit, after we informed Tech-X Corporation of this issue, it had the required 2014 audit performed within 3 months. Tech-X Corporation also had its 2015 audit performed in a timely manner.

SixPoint Materials, Inc., an ARPA-E STTR recipient, had not met the level of work needed to be performed by a nonprofit research institution as required by statute and the terms and conditions of its award. This requirement, which is the primary difference between the SBIR and STTR programs, is intended to stimulate a partnership of ideas and technologies between innovative small businesses and research institutions. At the end of the first phase of the project, the nonprofit research institution had performed 26 percent of the work, slightly less than the 30 percent required by law. By not having its partnering research institution complete at least 30 percent of the work during the first phase of the award, this STTR award recipient did not fully meet the statutory threshold of collaboration required between the recipient and its partnering nonprofit research institution. ARPA-E officials told us that it was hard for the recipient to comply with the 30 percent requirement due to the short 6-month time period of the first phase, and noted that the recipient had made up the difference in the second phase. We did not verify ARPA-E's assertion that the recipient had made up the difference during the second phase, which is still ongoing. We noted that the statutory requirement applies to each phase of the project.

Stratton Park Engineering Company, Inc. had not been properly charging labor hours for its principal investigator and, therefore, was unable to show that it met a grant requirement that the principal investigator devote no less than 3 hours on average per week for the duration of the project. The principal investigator had not charged time to the award during the last 2 years. Based on his presentation of the project and our discussions with the principal investigator during our site visit, we believe that he had been substantially involved but mistakenly had not recorded his time. Further, the principal investigator indicated that he was unaware of the requirement to track his time on the project. Had we not visited this company, it would have appeared to us that this individual had no involvement with the project during the last 2 years.

Award Closeout

In response to recommendations made in our prior audit, Science had created policies and procedures that improved the timeliness of its closeout process. Notably, we found that only 10 of 582 awards had not been closed out within 3 years of the end of the awards' periods of performance. This was a significant improvement from our last audit, which found 264 awards had not been closed out within a 3-year period. Of the 10 awards, 5 had not been closed due to unresolved patent issues. Subsequent to our fieldwork, Science informed us that it had further reduced the number of awards not closed out within 3 years to six and hoped to reduce the number to zero within 3 months.

While Science's corrective actions have improved upon the closeout process, our audit found that there are still areas of concern. Specifically, Science had not consistently ensured that final expenditure reports were submitted by recipients within the required timeframe, or that final expenditure reports were received within 90 days of the completion of the award term, as required by Federal regulations. The final expenditure report is used to confirm that the total incurred costs are commensurate with work performed under the award, and it is necessary to close out the award in a timely manner. Final expenditure reports for about 77 percent (346 of

452) of completed awards that we reviewed were not received within the 90-day requirement. Our analysis showed that the final expenditure reports were received, on average, 431 days (or more than a year) past the 90-day requirement.

We also found that decisions to waive closeout requirements had not been adequately documented. Science had waived closeout requirements for 20 of the 452 awards we reviewed. In accordance with its internal closeout policy, Science only has the option to waive any closeout documentation when (1) a report cannot be furnished in a timely manner for reasons legitimately beyond the control of the recipient, or (2) the purposes for which a report is to be used will be accomplished through other means. However, for 19 of the 20 awards in which selected closeout requirements had been waived,² the decision was documented using standard language that did not adhere to Science's closeout requirements, as it did not address each award's unique circumstances or the rationale upon which each waiver was based. Specifically, the waiver language noted that the timely closeout of expired awards was a priority and stated "Due to the inability to obtain closeout documents and because the awards have been in close-out status for an extended amount of time, it has been determined that all remaining closeout documents be waived and that the attached list of actions be closed out without further action." Finally, in the case of final reports, Science waived the final technical report for 17 of the 20 awards for which it had waived requirements.

The intent of the final technical report is to increase the diffusion of knowledge gained by Department-funded research. Waiving these required technical reports, which include research findings and other significant scientific and technical information resulting from the work completed, may reduce the public benefit received from these awards. Of greater concern, waiving required documentation without receiving sufficient justification from the recipient as required by the Office of Science's closeout policy could result in additional Department funds being awarded to recipients that may have exhibited a history of not consistently adhering to award terms. For example, we identified one recipient, Advanced Energy Systems, Inc., which had not provided final technical reports for three of its awards as required, yet the Department waived this requirement for these awards without receiving sufficient justification, due to an "inability to obtain closeout documents and because the awards have been in close-out status for an extended amount of time." Despite Advanced Energy Systems not adhering to its award terms by failing to provide required final technical reports, Science subsequently awarded Advanced Energy Systems, Inc. four additional SBIR awards. When we brought this to the attention of Science officials, we were informed that these waivers were not taken into consideration when awarding the four additional awards to Advanced Energy Systems. However, Science officials indicated that modifications were in the process of being made to its current system which is designed to identify issues of non-compliance with project deliverable requirements so that Science would ensure consideration of these issues prior to approval of subsequent awards. Subsequently, we were informed by Science officials that they reached out

² Any or all of the following items on the Federal Assistance Reporting Checklist can be waived: final technical report, final expenditure report, and patent certification. For the 19 awards, one or more of these 3 items had been waived.

to Advanced Energy Systems and obtained the final reports in question. Delays in obtaining final award documentation were also identified in our audit report, *Public Dissemination of Research Results* (DOE/IG-0912, May 2014).

ARPA-E, which began its SBIR and STTR programs in FY 2012, was also included in our review of the closeout process, but it only had five awards with periods of performance ending by the conclusion of our fieldwork. We did not identify any issues with its closeout process.

Departmental Oversight

The issues we found during the course of our audit were caused by the award recipients' lack of awareness of program regulations and award terms and conditions and, at times, limited oversight by Department officials. While the terms and conditions of each award are agreed upon and the regulations are acknowledged by each recipient, we found that some of the recipients were unfamiliar with specific clauses in the terms and conditions of their awards. For example:

- Light Foundry LLC was unfamiliar with the financial management and record retention requirements in 2 Code of Federal Regulations 200.302 - *Financial Management*, and 2 Code of Federal Regulations 200.333 - *Retention Requirements for Records*;
- Stratton Park Engineering Company, Inc. was unaware of the clause that requires the principal investigator to devote no less than 3 hours on average per week for the duration of the project; and
- Stratton Park Engineering Company, Inc. was unaware of the annual 316 audit requirement.

The terms and conditions as well as the regulations applicable to the award are acknowledged at the beginning of each award. Considering these awards have periods of performance that can exceed 3 years, it is possible that recipients may not remember specific clauses over the course of their awards. Therefore, it is important that the Department take a proactive approach in addressing this issue.

In 2015, Science only provided two training sessions for its SBIR and STTR recipients regarding financial management. The training sessions were not mandatory, and were limited to indirect cost concepts. Currently, there is no training in place to remind recipients of their other program and statutory responsibilities as beneficiaries of Federal funding. This problem is compounded within Science by the fact that many recipients receive funding on a drawdown basis without having to submit any supporting documentation, which results in Science only performing a high-level review of the financial aspects of its awards. In regard to the closeout issues we found, we noted that Science had not made timely attempts to contact recipients according to its internal policy. If Science had initiated communication with recipients regarding closeout requirements earlier, the timeliness of final award deliverables may have significantly improved. As mentioned in our prior report, Science attributes its limited oversight to the magnitude of the workload in comparison to available Government resources. On average, each of Science's contract specialists manages over 100 awards per year. In our opinion, this level of oversight is

inadequate considering the issues we have identified and the fact that many of these companies are small businesses that have minimal experience managing SBIR and STTR awards through the Department.

Regarding the issues we identified with the ARPA-E recipient, we found that ARPA-E had also not provided specific training or guidance on tracking and charging labor expenses to an award. ARPA-E officials stated that financial management training and guidance is provided during award negotiations. However, ARPA-E was not aware that SixPoint Materials, Inc.'s method of tracking and charging time to the award had resulted in some overcharges. By providing training related to project labor expenses, ARPA-E could mitigate issues such as the one identified in this report. Finally, ARPA-E had not ensured that the recipient had adhered to a statutory requirement regarding the level of work needed to be performed by a nonprofit research institution.

Opportunity to Improve Oversight

Federal grants and cooperative agreements exist to serve a public purpose. SBIR and STTR programs aim to stimulate technological innovation and increase private-sector commercialization of innovations. When making SBIR and STTR awards, the Department is responsible for ensuring that program objectives of the awards are achieved and that funds are appropriately spent. Timely submission of final technical and financial reports by recipients coupled with sufficient oversight by the Department helps to ensure that the goals set by the programs are met. When oversight is insufficient or award deliverables are not submitted in a timely manner, the Department cannot ensure that research results produced the maximum return on taxpayer investment. Furthermore, inadequate oversight and lack of awareness of program regulations exposes the Department to an increased likelihood of fraud, waste, and abuse. With over \$200 million in annual funding for SBIR and STTR, the Department has an opportunity to improve its oversight of this critical area.

RECOMMENDATIONS

To address the issues noted in this report related to Science's management of SBIR and STTR awards, we recommend that the Acting Director for the Office of Science:

1. Provide additional training to ensure that all recipients are aware of and adhere to record-keeping requirements and all clauses within the terms and conditions of their awards;
2. Reinforce existing procedures and established mechanisms to ensure the timely submission of deliverables required to closeout awards;
3. Ensure that all awards are closed within the 3-year record retention period;
4. Ensure that the rationale for waiving specific closeout requirements is adequately documented and complies with Departmental policy; and

5. Resolve noted concerns related to costs addressed in the report for selected Science awards including lack of support for costs incurred for the awards.

To address the issues noted in this report related to ARPA-E's management of the award we reviewed, we recommend that the Acting Director for the Advanced Research Project Agency-Energy:

6. Provide additional training and guidance to ensure that all recipients are aware of and adhere to project labor expense requirements, and that all recipients adhere to statutory requirements; and
7. Resolve questioned costs noted in the report related to the ARPA-E award.

MANAGEMENT RESPONSE

Management concurred with the recommendations and provided initial corrective actions to address the issues identified in the report.

Specifically, Science indicated that it would host principal investigator meetings to highlight key terms and conditions and award reporting requirements; document rationales for waiving closeout requirements; and randomly review files in the Strategic Integrated Procurement Enterprise System to ensure waivers are appropriately documented. Science stated that Contracting Officers will resolve questioned costs noted in the report. Additionally, Science noted that it had established a more centralized process for reminding recipients of their closeout reporting requirements, and would take action to ensure that the remaining awards not closed out within 3 years would be reduced to zero by August of 2017. ARPA-E stated that it would require SBIR and STTR award recipients to complete an accounting and finance training course, and noted that its Contracting Officer would resolve questioned costs noted in the report.

While management fully concurred with our recommendations, both Science and ARPA-E noted concerns regarding the naming of recipients in the report. In particular, Science was concerned that the naming of small businesses in the report would negatively impact the small businesses with regard to their ability to partner, and raise investment capital in the future and potentially discourage small businesses from participating in Federal research and development programs. ARPA-E noted that naming a recipient in the report could have a particularly chilling effect on its reputation and that this would likely deter other small businesses from applying to ARPA-E's future funding opportunities.

AUDITOR COMMENTS

We consider management's comments and planned actions to be responsive to our recommendations. We respect the position of management regarding the issue of disclosing recipients' names in our report. However, we concluded that the results of our audit, including the names of recipients audited, are public information subject to disclosure under the *Freedom of Information Act*, and that including the names in the report was in the public interest. Management's comments are included in Attachment 3.

Attachments

cc: Deputy Secretary
Acting Under Secretary for Science and Energy
Chief of Staff

OBJECTIVE, SCOPE, AND METHODOLOGY

OBJECTIVE

We conducted this audit to determine whether the Department of Energy is efficiently and effectively managing its Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs.

SCOPE

This audit was performed between July 2015 and April 2017 at the Advanced Research Projects Agency-Energy (ARPA-E) in Washington, DC; the Office of Science (Science) in Germantown, Maryland; and six recipient sites in Boulder, Colorado; Santa Monica, California; and Buellton, California. The scope was limited to awards made under the SBIR and STTR programs. The audit was conducted under Office of Inspector General project number A15HQ051.

METHODOLOGY

To accomplish our audit objective we:

- Reviewed applicable laws and regulations pertaining to Department's SBIR and STTR programs;
- Reviewed prior reports issued by the Office of Inspector General and the Government Accountability Office;
- Tested ongoing Phase I and Phase II³ awards to determine whether Science and ARPA-E were efficiently and effectively managing their awards and selecting their awards in accordance with Department policy, and to determine whether expenses incurred by recipients were allowable, allocable, and reasonable;
- Conducted site visits of selected recipients to review award documentation and obtain an understanding of each individual company, project, and award;
- Tested completed Phase II awards to determine if awards were closed in a timely manner, final deliverables were submitted in a timely manner, and waivers were used to close awards; and
- Interviewed key Department and recipient personnel.

When testing ongoing Phase I and Phase II awards, we judgmentally selected a sample of 8 of 721 Science awards and 1 of 11 ARPA-E awards received by 7 recipients (1 of which is a

³ SBIR and STTR programs are structured in three phases. Phase I explores the feasibility of innovative concepts with awards up to \$225,000 over 9 months. Phase II is the principal research and development (R&D) effort, with awards up to \$1,500,000 over 2 years. Phase III offers opportunities to small businesses to continue their Phase I and II R&D work to pursue commercial applications of their R&D with non-SBIR and STTR funding.

subsidiary of another). The sample selection was based on such factors as geographic concentration of awards, number of awards per recipient, period of performance duration, experience and size of the recipient, method of reimbursement for each award, and other information that came to our attention. Because our sample was not statistical, we could not project our results to the population of transactions.

When testing completed Phase II awards, we judgmentally selected a sample of 200 awards from a total of 399 Science SBIR and STTR awards with periods of performance ending within the last 3 years. Because our sample was not statistical, we could not project our results to the population of transactions. We also randomly selected a sample of 228 awards from a total of 558 Science SBIR and STTR awards with periods of performance ending between fiscal year (FY) 2009 and FY 2012. Our sampling plan was based on a 95 percent confidence interval and a tolerable error rate of 5 percent. Due to issues we encountered regarding the accuracy of Science's reported population, we could not project the results of our testing for these awards. In addition, we reviewed 15 awards that were inadvertently omitted by Science from the original listing provided to us, 9 Science SBIR and STTR awards with periods of performance ending between FY 2009 and FY 2012 that had not yet been closed, and all ARPA-E SBIR and STTR awards with periods of performance ending by the conclusion of our fieldwork, which constituted 5 awards.

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 objective. We believe that the evidence obtained provided a reasonable basis for our findings and conclusions based on our audit objective. In particular, we assessed compliance with the *GPRA Modernization Act of 2010* and found that performance measures had been established for the programs. 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 by comparing the data to source documents. We determined the data to be reliable for our purposes.

Department officials waived an exit conference on February 2, 2017.

PRIOR REPORTS

- Audit Report on [*Public Dissemination of Research Results*](#) (DOE/IG-0912, May 2014). The audit revealed that Department of Energy-funded science and energy research results were not always properly disseminated to the public. The audit also found that financial assistance recipients had not always submitted final technical reports to the responsible office, unrestricted reports submitted to the Department's Energy Link system were not always reviewed and subsequently released publicly, and reports were not released after the expiration of associated data protection periods.
- Audit Report on [*The Department of Energy's Small Business Innovation Research and Small Business Technology Transfer Programs*](#) (DOE/IG-0876, November 2012). The audit found that the Department had not always effectively managed the Small Business Innovation Research and Small Business Technology Transfer programs. Specifically, the audit identified problems with grant financial management and grant award scoring; and substantiated an allegation that potential conflicts of interest had not been identified and properly mitigated. In the area of financial management, the audit found that grant closeouts continued to be an issue and the Department had not fully addressed prior concerns regarding questioned costs. The audit also identified an additional \$534,000 in erroneous and unsupported costs involving bid and proposal costs, costs not allocable to the grant, excess labor charges not in compliance with Federal cost principles, and costs that lacked documentation.
- Audit Report on [*Management Controls over Monitoring and Closeout of Small Business Innovation Research Phase II Grants*](#) (OAS-M-08-09, July 2008). The audit found that the Office of Science's Chicago Office had not taken action related to resolving \$1.2 million in questioned costs from a 2001 audit, as well as issues related to timely grant closeout. Specifically, the audit found that the Chicago Office had not completed action on, or was unable to provide files for, 87 percent (73 out of 84) of Small Business Innovation Research Phase II grants with completion dates exceeding 3 years. Because the 3-year document retention period had expired, untimely closeouts jeopardized the Department's ability to audit the costs. The audit also identified \$27,610 in questionable costs and \$749,749 in unsupported costs during testing of closed grants.



Department of Energy
Office of Science
Washington, DC 20585

Office of the Director

JAN 24 2017

MEMORANDUM FOR SARAH B. NELSON
ASSISTANT INSPECTOR GENERAL
FOR AUDITS AND INSPECTIONS
OFFICE OF INSPECTOR GENERAL

FROM: J. STEVE BINKLEY *JSBinkley*
ACTING DIRECTOR
OFFICE OF SCIENCE

SUBJECT: Response to Inspector General's Draft Report, "Follow-up on the Small Business Innovation Research and Small Business Technology Transfer Programs"

Thank you for the opportunity to review and comment on the subject draft report. The Office of Science (SC) responses to the recommendations appear after the following general comment on the report. ARPA-E is providing a separate response.

In the course of reviewing the report, we noticed that the Office of Inspector General (OIG) has changed its policy with regard to the naming of firms that were selected to participate in the audit. In the most recent OIG audit of the SC SBIR/STTR programs, small businesses were not named. This appeared to be appropriate, because the recommendations for the report are not for the small businesses but for SC. The inclusion of small business names would not serve any purpose and has the potential to damage the reputation of the small business.

In this audit, the small businesses were named. The small businesses were found to be non-compliant with the terms and conditions of their SBIR/STTR award by the OIG at the time the audit was performed. The small businesses are not accused of any fraudulent activity and SC will work with firms to reconcile the deficiencies that were identified and to better educate small businesses going forward (as discussed in our response to the recommendations below). SC is concerned that the naming of small businesses in the report will (1) negatively impact the small businesses with regard to their ability partner and raise investment capital in the future and (2) potentially discourage small businesses from participating in federal research and development programs.

While we appreciate and support the need for the OIG to conduct its operations as openly and transparently as possible, we are concerned that including small business names in the report exceeds the requirement for transparency and creates the potential for unnecessary harm to the reputation of the small businesses. We understand that the names of the small businesses are available under the Freedom of Information Act (FOIA), however that rationale alone is not a



sufficient basis to make information routinely available to the public. We therefore respectfully request that the OIG in revising its policies not only consider the benefits with regards to transparency but also the negative impacts on small businesses and the mission of the DOE programs being audited. We furthermore request that the OIG revisit its decision to name small business awardees in this report.

Recommendation 1: Provide additional training to ensure that all recipients are aware of and adhere to recordkeeping requirements and all clauses within the terms and conditions of their awards.

Management Response: Concur

Action Plan: Beginning in FY 2017, DOE will host a Phase I Principal Investigator (PI) meeting to which all PI's are expected to attend. At this meeting the Integrated Support Center-Chicago Office (ISC-CH) staff will present on award management, to include highlighting key award terms and conditions and reporting requirements and also discuss recipient responsibilities in the event a Phase II award is issued. A representative from the DOE Office of Intellectual Property Law (IPL) will also present to address intellectual property issues and reporting. This meeting will take place approximately 4 months after the start of the Phase I grant.

ISC-CH currently presents two indirect rate webinars annually targeted at applicants. ISC-CH plans to provide two additional webinars annually targeted at Phase I awardees that will discuss relevant terms and conditions, recipient responsibilities, and reporting requirements. This webinar will give recipients the opportunity to ask questions about their responsibilities under the grant. The webinars will be recorded so those that missed the webinar can watch it at a later date. It is anticipated that webinars will take place no later than one month after the award start date.

Estimated Completion Date: Webinar - June 15, 2017 and bi-annually thereafter. PI meeting – July 15 and October 15, 2017.

Recommendation 2: Reinforce existing procedures and established mechanisms to ensure the timely submission of deliverables required to closeout awards.

Management Response: Concur

Action Plan: ISC-CH recently established a more centralized process for reminding recipients of their closeout reporting requirements. While this process currently involves manually sending e-mail messages to individual recipients, it is anticipated that reminder notices will eventually be sent via an automated system.

Estimated Completion Date: Completed. New process established December 2015.

Recommendation 3: Ensure that all awards are closed within the 3-year record retention period.

Management Response: Concur

Action Plan: Currently, SBIR/STTR closeouts are processed by acquisition professionals at the ISC-Chicago Office and by a DOE-HQ support service contractor. This support service contract is funded by SC's contribution to the DOE Working Capital Fund. As stated in the IG's report, ongoing closeout efforts have reduced the number of awards not closed out within three years from 264 in the previous audit to 10 under this audit report. It is anticipated that this number will be reduced to 0 by the end of August, 2017. Assuming funding for the support service closeout contractor remains near current levels; the active workload remains relatively unchanged; and federal staffing levels are not adversely impacted; the number of awards not closed out within three years should remain at 0 thereafter, absent unanticipated patent, audit, or other issues that may preclude closeout.

Estimated Completion Date: August 30, 2017.

Recommendation 4: Ensure that the rationale for waiving specific closeout requirements is adequately documented.

Management Response: Concur

Action Plan: The rationale for prospectively waiving closeout requirements will be documented in a memo to file and concurred on by a Division Director or above prior to execution. The Strategic Integrated Procurement Enterprise System (STRIPES) files will be randomly reviewed by the ISC-CH Policy Support Division to ensure waivers are appropriately documented.

Estimated Completion Date: Concurrence requirement effective January 11, 2017. Random policy reviews to be initiated no later than September 30, 2017.

Recommendation 5: Resolve questioned costs noted in this report related to Science awards.

Management Response: Concur

Action Plan: Contracting Officers will resolve the questioned costs noted in the IG report related to Science awards.

Estimated Completion Date: September 30, 2017.

If you have any questions on these comments, please contact Manny Oliver at 301-903-0309.



MANAGEMENT COMMENTS

Attachment 3



January 25, 2017

TO: MICHELLE ANDERSON
DEPUTY INSPECTOR GENERAL FOR AUDITS AND INSPECTIONS
OFFICE OF INSPECTOR GENERAL

FROM: DR. ERIC ROHLFING 
ACTING DIRECTOR
ADVANCED RESEARCH PROJECTS AGENCY – ENERGY (ARPA-E)

RE: ARPA-E's Response to OIG Draft Audit Report on "Follow-up on the Small Business Innovation Research and Small Business Technology Transfer Programs"

On behalf of ARPA-E, I would like to thank the Office of the Inspector General (OIG) for the opportunity to review and respond to the subject draft Report. ARPA-E appreciates the OIG's efforts in identifying opportunities for the agency to improve its management of the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. ARPA-E is committed to continuously improving how it manages its project portfolio and implementing effective management practices.

Comments

ARPA-E makes the following general comment on the Draft Audit Report.

ARPA-E respectfully, but strongly, objects to the OIG identifying, by name, the sole ARPA-E SBIR/STTR awardee addressed in the draft Report. This would be the first instance of the OIG publicly identifying an audited ARPA-E awardee that was chosen "randomly" (general factors listed on page 9) rather than a 'targeted' audit for suspected malfeasance. Naming the small business in the Report could have a particularly 'chilling' effect on the small business's reputation, and thus future opportunities in attracting follow-on funding from non-governmental entities. One of the goals of every ARPA-E award (including SBIR/STTR awards), is for the awardee to commercialize the technology developed under the award. Further, naming the small business in the Report appears particularly unnecessary given that the primary audit finding was an inadvertent erroneous billing of some \$42,000. It also appears highly unlikely that, for this minor infraction, there would be any public interest in the specific identity of the small business. However, if the Report were issued as currently drafted, the company's name would appear instantly on any future internet search of companies subject to 'negative' US government IG audit findings. The implications for such a small business are readily apparent. (This comment applies equally to Office of Science awardees identified by name in the draft Report.)

Furthermore, naming the awardee in this Report will likely deter other small businesses from applying to ARPA-E's future funding opportunities. As required under its authorizing Act, ARPA-E funds research and development of promising and transformative energy technologies that industry is not yet ready to support because of technical and financial uncertainty. Many of the entities developing these types of technologies are small businesses, and in addition to its SBIR and STTR programs, ARPA-E funds many small businesses through its non-SBIR/STTR funding opportunities. As a consequence of naming the awardee in this Report, potential applicants will be less willing to participate in future funding opportunities for fear of similar treatment in later audits.

Recommendations

ARPA-E concurs with both recommendations made by the OIG. ARPA-E's responses to the OIG's specific recommendations are provided below.

Recommendation 1: Provide additional training and guidance to ensure that all recipients are aware of and adhere to project labor expense requirements, and that all recipients adhere to statutory requirements.

Management Response: Concur. ARPA-E will implement this recommendation by requiring SBIR/STTR award recipients to complete the free training course on Accounting and Finance prepared by the Small Business Association for SBIR and STTR awardees, as well as review Enclosure 2, Section 4 of the 2012 edition of the Information for Contractors guide (Pamphlet 7641.90) prepared by the Defense Contract Audit Agency, which provides information on implementing an appropriate labor charging system. These requirements and information on how to fulfill them will be communicated to award recipients by including them in ARPA-E's Award Negotiations Guide.

Recommendation 2: Resolve question costs noted in the report related to the ARPA-E award.

Management Response: Concur. The Contracting Officer will resolve the questioned costs within 6 months (180 days) of issuance of the final audit report.

FEEDBACK

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