



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

ASSESSMENT REPORT

Audit Coverage of Cost Allowability for
Brookhaven Science Associates LLC During
Fiscal Years 2012 and 2013 Under Department
of Energy Contract No. DE-AC02-98CH10886

OAI-V-16-03

January 2016



Department of Energy
Washington, DC 20585

January 19, 2016

MEMORANDUM FOR THE MANAGER, BROOKHAVEN SITE OFFICE

FROM:

A handwritten signature in black ink, appearing to read "Jack Rouch", is positioned above the printed name.

Jack Rouch, Director
Central Audits Division
Office of Inspector General

SUBJECT:

INFORMATION: Assessment Report: "Audit Coverage of Cost Allowability for Brookhaven Science Associates LLC During Fiscal Years 2012 and 2013 Under Department of Energy Contract No. DE-AC02-98CH10886"

BACKGROUND

Since 1998, Brookhaven Science Associates LLC (BSA) has managed and operated the Brookhaven National Laboratory under contract with the Department of Energy (Department). Brookhaven National Laboratory conducts research in the physical, biomedical, and environmental sciences, as well as in energy technologies and national security. During fiscal years (FYs) 2012 and 2013, it expended and claimed \$1,361,562,628.67.

Because BSA is an integrated management and operating contractor, its financial accounts are integrated with those of the Department, and the results of transactions are reported monthly according to a uniform set of accounts. BSA is required by its prime contract to account for all funds advanced by the Department annually on its Statement of Costs Incurred and Claimed, to safeguard assets in its care, and to claim only allowable costs. Allowable costs are incurred costs that are reasonable, allocable, and allowable in accordance with the terms of the contract, applicable cost principles, laws, and regulations.

The Department's Office of Inspector General, Office of Acquisition Management, integrated management and operating contractors, and other select contractors have implemented a Cooperative Audit Strategy (Strategy) to make efficient use of available audit resources while ensuring that the Department's contractors claim only allowable costs. This Strategy places reliance on the contractors' internal audit function (Internal Audit) to provide audit coverage of the allowability of incurred costs claimed by contractors. Consistent with the Strategy, BSA is required by its prime contract to maintain an Internal Audit activity with the responsibility for conducting audits, including audits of the allowability of incurred costs. In addition, BSA is required to conduct or arrange for audits of its subcontractors when costs incurred are a factor in determining the amount payable to a subcontractor. During FYs 2012 and 2013, BSA's

Procurement and Property Management Division was responsible for ensuring subcontract audits were conducted. To help ensure that audit coverage of cost allowability was adequate for FYs 2012 and 2013, the objectives of our assessment were to determine whether:

- Internal Audit conducted cost allowability audits that complied with professional standards and could be relied upon;
- BSA conducted or arranged for audits of its subcontractors when costs incurred were a factor in determining the amount payable to a subcontractor; and
- Questioned costs and internal control weaknesses affecting allowable costs that were identified in prior audits and reviews have been adequately resolved.

RESULTS OF ASSESSMENT

Based on our assessment, nothing came to our attention to indicate that the allowable cost–related audit work performed by BSA’s Internal Audit could not be relied upon. We did not identify any material internal control weaknesses with cost allowability audits, which generally met the International Standards for the Professional Practice of Internal Auditing (Standards) prescribed by the Institute of Internal Auditors (IIA). BSA’s Internal Audit identified \$1,027,133.24 of questioned costs during FYs 2012 and 2013, all of which had been resolved. Additionally, in response to our previous report *Assessment of Audit Coverage of Cost Allowability for Brookhaven National Laboratory during Fiscal Years 2008 through 2011 under Department of Energy Contract No. DE-AC02-98CH10886* (OAS-V-13-08, March 2013), BSA closed out 13 subcontracts with approximately \$23 million in costs, arranging audits where appropriate (see Attachment 1).

Although BSA acted on the recommendations in our prior report, BSA had not fully addressed the weakness with subcontract audits to ensure only allowable costs are claimed by and reimbursed to the contractor. Specifically, BSA did not arrange for or conduct:

- Interim audits of subcontracts when costs incurred were a factor in determining the amount payable to a subcontractor, and
- Preaward, interim, or closeout audits of its time-and-materials subcontracts.

Interim Audits

BSA did not arrange for or conduct interim audits of its cost-type subcontracts in conformance with IIA Standards, as required by its prime contract. The Department of Energy Acquisition Regulation (DEAR) 970.5232-3, *Accounts, Records, and Inspection*, as incorporated in the BSA prime contract, requires subcontract audits be performed when costs incurred are a factor in determining the amount payable to a subcontractor. In addition, DEAR 970.5244-1, *Contractor Purchasing System*, specifies that the contractor shall provide for periodic postaward audits of cost-type subcontracts. During the period of our assessment, BSA incurred \$167 million in costs

on open subcontracts that were subject to interim audit. In the absence of the required audits, there is an increased risk that unallowable costs will be incurred on open subcontracts and not be detected in a timely manner.

The lack of interim audits occurred because BSA's subcontract audit policies at the time did not address performance of interim audits, an issue that we reported in our March 2013 assessment report. In response to our previous report, BSA implemented an interim audit policy in February 2015. The new policy requires audits of subcontracts over \$100,000 and longer than 1 year. However, we found that the policy uses the term "audit" when referring to activities that do not meet the requirements of an audit. Specifically, the policy states that an audit would consist of an in-depth review of invoices for cost allowability by a Contract Specialist. In Acquisition Letter 2014-01, the Department emphasized that subcontract audits should, at a minimum, meet IIA Standards. We also noted that BSA's subcontract audit policies allow for the substitution of desk reviews for subcontract close-out audits, although we did not note any instances where this substitution occurred.

BSA completed one in-depth invoice review since implementing its interim audit policy. We confirmed that the review did not meet IIA Standards. For example, the independence and objectivity standard was not met because the reviewer worked for the procurement function that was responsible for the subcontract. Moreover, other than a summary spreadsheet, there were no discernable working papers, such as an engagement work program and documentation supporting the reviewer's conclusions as required by the IIA Standards. Working without instructions, the Contract Specialist solicited guidance from others and then grouped expenses into categories, reviewed invoices, and recalculated fringe and other rates. Finally, there was no evidence of supervisory review of the work performed as required by IIA Standards. A BSA official agreed that the term audit should not be used when an in-depth invoice review is completed.

While we do not take exception to BSA's implementation of in-depth invoice reviews as an additional control over subcontractor costs, these reviews should not substitute for the audits required under its prime contract. A BSA official stated that the policy would be revised to clarify that in the future, audits will be conducted for higher-risk subcontracts. The official added that Internal Audit would be utilized for closeout audits.

Time-and-Materials Subcontracts

While BSA's procedures required preaward, interim, and closeout audits of cost-type subcontracts meeting certain thresholds, BSA had not arranged for or conducted audits for time-and-materials subcontracts. The Department's Acquisition Letter 2014-01 provides guidance on adopting a risk-based approach for conducting subcontract audits to ensure contractual requirements are met. This Acquisition Letter specifically states that time-and-materials subcontracts are cost-type subcontracts and should be included in the audit universe. For the period of our review, the following time-and-materials subcontracts met BSA current audit thresholds, but audits were not performed:

- Preaward Audits – 12 subcontracts valued at \$21 million.
- Interim Audits – 117 subcontracts valued at almost \$59 million.
- Closeout Audits – 18 subcontracts with incurred costs totaling about \$33 million.

A BSA official initially stated that time-and-materials subcontracts were not audited because they were considered low risk, as they have fully negotiated labor rates and the hours utilized were reviewed for technical sufficiency. However, time-and-materials subcontracts often include variable costs, such as materials and travel, which should still be audited. In a subsequent discussion, other BSA officials acknowledged that time-and-materials subcontracts should have been considered for audit because these types of subcontracts have attributes of cost-type subcontracts. We were informed that BSA plans to include time-and-materials subcontracts in future audit universes. Accordingly, we considered the \$33 million for the unaudited subcontracts in closeout as unresolved pending audit.

Overall we concluded that inadequate audit coverage occurred because BSA did not have a fully documented risk-based strategy in its policies defining its required subcontract audit responsibilities. As stated previously, the Department's Acquisition Letter 2014-01 provided guidance for establishing and implementing procedures requiring subcontract audits based on a reasonable risk-based approach, including appropriate thresholds, selection criteria, and capturing time-and-materials subcontracts in the audit universe. While officials stated that they had considered this guidance, BSA's policies were not revised accordingly. For example, as suggested in the guidance, BSA could have documented the risks associated with auditing time-and-materials subcontracts, along with the appropriate situations where an audit would not be necessary and an in-depth invoice review would suffice. A BSA official recognized the policies were unclear and said they would be reviewed in response to our assessment. As stated in our *Special Report: Management and Operating Contractors' Subcontract Audit Coverage* (DOE/IG-0885, April 2013), the failure to ensure that effective subcontract audit policies are developed and implemented substantially increases the risk that unallowable costs will be incurred and not detected in a timely manner.

RECOMMENDATIONS

We recommend that the Manager of the Brookhaven Site Office direct BSA to:

1. Revise its subcontract audit policies in accordance with Acquisition Letter 2014-01, to make certain they include a thorough risk-based approach that:
 - a. Ensures that interim audits meeting IIA Standards are conducted;
 - b. Clarifies when in-depth invoice reviews, in addition to audits, should be used to augment controls over subcontract costs; and
 - c. Considers time-and-materials subcontracts in the audit universe.

2. Obtain audits for the subcontracts meeting the revised risk-based approach, including the \$33 million in time-and-materials subcontracts in closeout that we considered unresolved pending audit, if necessary.

MANAGEMENT RESPONSE AND AUDITOR COMMENTS

Brookhaven Site Office management concurred with the OIG's recommendations, and its planned actions are responsive to our recommendations. Management comments are included as Attachment 2.

SCOPE AND METHODOLOGY

This assessment was performed from April 2015 to January 2016, at the Brookhaven National Laboratory, located in Upton, New York. The assessment was limited to Internal Audit's activities, subcontract audits, and resolution of questioned costs and internal control weaknesses that affect costs claimed by BSA on its Statements of Costs Incurred and Claimed for FYs 2012 and 2013. The assessment was conducted under Office of Inspector General project number A15CH037. To accomplish our objectives, we did the following:

- Assessed allowable cost audit work conducted by Internal Audit. Our assessment included a review of allowable cost audit reports; work papers; auditor qualifications; independence; audit planning, including risk assessments and overall internal audit strategy; and compliance with applicable professional auditing standards.
- Conducted interviews of auditors.
- Retested a sample of incurred cost transactions tested by Internal Audit in its allowable cost audits. We judgmentally selected a sample of 31 of the 229 transactions that Internal Audit tested in FY 2012 and 29 of the 206 transactions tested in FY 2013. Because sample selection was not statistical, the results and overall conclusions are limited to the transactions retested and cannot be projected to the entire population of transactions tested.
- Reviewed policies, procedures, and practices to identify subcontracts requiring audit and arrange for audits.
- Assessed subcontract audit status.
- Evaluated resolution of questioned costs and control weaknesses affecting cost allowability that were identified in prior audits and reviews conducted by the Office of Inspector General, Internal Audit, and other organizations.

We conducted our assessment in accordance with generally accepted Government auditing standards for attestation engagements. Those standards require that we plan and perform the review to obtain sufficient, appropriate evidence to provide a reasonable basis for our

conclusions based on our objectives. We believe that the evidence obtained provides a reasonable basis for our conclusions based on our objectives. A review is substantially less in scope than an examination or audit where the objective is an expression of opinion on the subject matter and accordingly, for this review, no such opinion is expressed. Also, because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our review. We relied on computer-processed data to accomplish our objectives and determined that data was sufficiently reliable for the purposes of the review by comparing the data to source documents.

Management waived the exit conference on December 15, 2015.

This report is intended for the use of the Department contracting officers and field offices in the management of their contracts and is not intended to be and should not be used by anyone other than these specified parties.

Attachments

PRIOR REPORTS

- Special Report on [Management and Operating Contractors' Subcontract Audit Coverage](#) (DOE/IG-0885, April 2013). Between 2010 and 2012, the Office of Inspector General reported subcontract audit weaknesses with nine management and operating contractors. Subcontracts valued in excess of \$906 million had not been audited or were reviewed in a manner that did not meet audit standards. The subcontract costs were not audited because the Department of Energy did not ensure that its management and operating contractors developed and implemented procedures to meet their contractual requirements. The failure to ensure that effective subcontract audit policies are developed and implemented substantially increases the risk that unallowable costs will be incurred and not detected in a timely manner.
- Assessment Report on the *Assessment of Audit Coverage of Cost Allowability for Brookhaven National Laboratory during Fiscal Years 2008 through 2011 under Department of Energy Contract No. DE-AC02-98CH10886* (OAS-V-13-08, March 2013). This assessment found that Brookhaven Science Associates LLC (BSA) did not always conduct or arrange for audits of its subcontractors when costs incurred were a factor in determining the amount payable to subcontractors. Thirteen subcontracts representing about \$23.1 million in total costs required closeout audits under the policy but had not been audited. Consequently, the \$23.1 million was considered unresolved pending audit. Additionally, we found that BSA's policy did not address performance of interim subcontract audits. Finally, the report noted that Internal Audit had not always met International Standards for the Professional Practice of Internal Auditing regarding engagement supervision.

MANAGEMENT COMMENTS



Department of Energy

Brookhaven Site Office

P.O. Box 5000

Upton, New York 11973

DEC 08 2015

MEMORANDUM FOR JACK D. ROUCH, DIRECTOR
OFFICE OF AUDITS AND INSPECTIONS
OFFICE OF INSPECTOR GENERAL

FROM:

A handwritten signature in black ink, appearing to be "Frank J. Crescenzo".

FRANK J. CRESCENZO, MANAGER
OFFICE OF SCIENCE
BROOKHAVEN SITE OFFICE

SUBJECT:

DRAFT REPORT ON "ASSESSMENT OF AUDIT COVERAGE OF
COST ALLOWABILITY FOR BROOKHAVEN NATIONAL
LABORATORY (BNL) DURING FISCAL YEARS 2012 AND 2013
UNDER DEPARTMENT OF ENERGY (DOE) CONTRACT NO.
DE-AC02-98-CH10886"

REFERENCE:

MEMORANDUM, FROM J. ROUCH, IG-322 TO MANAGER SC-BHSO,
SUBJECT: SAME AS ABOVE, DATED NOVEMBER 18, 2015

As requested, per referenced memorandum, the Brookhaven Site Office (BHSO) has reviewed the subject draft audit report including the facts presented, conclusions reached, and the appropriateness of the recommendations. Based on our review, BHSO takes no exception to the report as written. BHSO concurs with the recommendations and has requested Brookhaven Science Associates (BSA), the management and operating contractor of Brookhaven National Laboratory, to develop a corrective action plan (CAP) to address each recommendation. BSA created and submitted the following corrective actions, which BHSO has accepted:

Recommendation

BSA will revise its subcontract audit policies in accordance with Acquisition Letter 2014-01 to make certain they include a thorough risk-based approach that:

- a. Ensures that interim audits meeting the International Standards for the Professional Practice of Internal Auditing (Standards) prescribed by the Institute of Internal Auditors are conducted;
- b. Clarifies when in-depth invoice reviews, in addition to audits, should be used to augment controls over subcontract costs; and
- c. Considers time-and-materials subcontracts in the audit universe.

J. Rouch

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Corrective Action

BSA concurs with the recommendations and will revise the POM Chapter IX which will be submitted to the DOE-BHSO for approval by January 15, 2016.

Recommendation

BSA will obtain audits for the subcontracts meeting the revised risk-based approach, including the \$33 million in time and materials subcontracts in closeout that the OIG considered unresolved pending audit, if necessary.

Corrective Action

BSA will determine which of the 18 time and material subcontracts from FY2012 and FY2013 meet the revised risk-based approach and will submit the subcontracts requiring audit to the BSA Internal Audit group or other IIA Standards certified auditor by February 15, 2016.

If you have any questions please contact Kim Nekulak, of my staff, at 631-344-7439.

cc: G. Smeets, SC-CH
K. Nekulak, SC-BHSO

STATEMENTS OF COSTS INCURRED

ATTACHMENT 21-1

STATEMENT OF COSTS INCURRED AND CLAIMED

Statement of Costs Incurred and Claimed Under Contract Number		DE-AC02-98CH110886	
For the period beginning	10/1/2011	and ending	9/30/2012
	Contractor	Contracting	Total
	Costs Incurred	Officer Adjustments	Adjusted Costs
1. Operating Expenses/Program Costs			
(61000000)	475,289,401.49		
2. Integrated Contractor Cost Overruns			
and Undistributed Costs			
(61009900)	0.00		
3. Other Interest Expenses (63300000)	0.00		
4. Cost of Goods Sold - Budgeted			
B&R WN and CB (6500F000)	0.00		
5. Purchases of Capitalized PP&E			
(88020100)	248,479,636.03		
6. Financing for Previously Unfunded			
Capital lease PP&E (88020500)	0.00		
7. Purchase of Capitalized Inventories			
(88030200)	3,043,312.00		
8. Purchase of Funded Inventory			
(88030300)	158,304.88		
9. Purchase of Other Assets (88040900)	0.00		
Costs Incurred and Claimed (Total)	726,970,654.40		

Signatures:

I certify that, to the best of my knowledge and belief the Costs Incurred and Claimed are allowable and reasonable in accordance with the terms of the subject contract and applicable laws and regulations, subject to audit.

Suzanne Davidson 11/14/12
 Manager, Management and Operating Contractor Date

Suzanne Davidson, Chief Financial Officer

The contractor has established a system of accounting and procurement controls adequate to minimize the risk of incurring unallowable or unreasonable cost. Additionally our review of the contractor's cost statement has disclosed no unallowable or unreasonable costs except for any noted adjustments. The above statements do not constitute final approval or settlement of

M. D. DeLeon 12-10-12 Robert P. B... 12-31-12
 Field Chief Financial Officer Date Contracting Officer Field Director of Procurement Date

Audit by the Inspector General disclosed \$ questioned costs, subject to future audit.

**

Office of Inspector General Date

Approved by the U.S. Department of Energy in the amount of \$ subject to future audit

**Please refer to OIG Assessment Report OAI-V-16-03

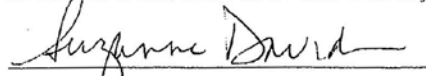
STATEMENT OF COSTS INCURRED AND CLAIMED

Statement of Costs Incurred and Claimed Under Contract Number		DE-AC02-98CH110886	
For the period beginning	10/1/2012	and ending	9/30/2013
	Contractor	Contracting	Total
	Costs Incurred	Officer Adjustments	Adjusted Costs
1. Operating Expenses/Program Costs			
(61000000)	484,925,097.86		
2. Integrated Contractor Cost Overruns			
and Undistributed Costs			
(61009900)	0.00		
3. Other Interest Expenses (63300000)	0.00		
4. Cost of Goods Sold - Budgeted			
B&R WN and CB (6500F000)	95,875.18		
5. Purchases of Capitalized PP&E			
(88020100)	145,803,917.86		
6. Financing for Previously Unfunded			
Capital lease PP&E (88020500)	0.00		
7. Purchase of Capitalized Inventories			
(88030200)	3,823,188.38		
8. Purchase of Funded Inventory			
(88030300)	(56,105.01)		
9. Purchase of Other Assets (88040900)	0.00		
Costs Incurred and Claimed (Total)	634,591,974.27		

Note: Detailed information on the individual SGLs listed above is retained by the CFO Office of Financial Controls and Reporting

Signatures:

Subject to the False Claims Act (31 U.S.C. § 3279 et seq) I certify that, to the best of my knowledge and belief, the Costs Incurred and Claimed are allowable in accordance with the terms of the subject contract and applicable laws and regulations.

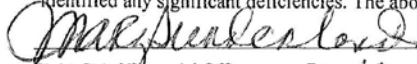


Manager, Integrated Contractor

11/12/13

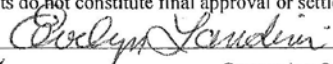
Date

The contractor has established a system of controls adequate to minimize the risk of incurring unallowable costs. Additionally, our review(s) of the contractor's system controls that lead to the development of the contractor's Statement of Costs Incurred and Claimed have not identified any significant deficiencies. The above statements do not constitute final approval or settlement of costs.



Field Chief Financial Officer

Date 10.29.14



Contracting Officer

10/23/14

Date

Questioned costs disclosed by the Inspector General \$ _____

**

Office of Inspector General

Date

Approved by the U.S. Department of Energy in the amount of \$ _____ subject to future audit.

Contracting Officer

Date

Field Office Manager or Head of Contracting Activity

Date

**Please refer to OIG Assessment Report OAI-V-16-03