OFFICE OF INSPECTOR GENERAL

U.S. Department of Energy

AUDIT REPORT

DOE-OIG-21-23 April 2021

FISCAL YEAR 2016 EVALUATION OF INCURRED COST COVERAGE AT THE PACIFIC NORTHWEST NATIONAL LABORATORY

Department of Energy
Washington, DC 20585

April 9, 2021

MEMORANDUM FOR THE MANAGER, PACIFIC NORTHWEST SITE OFFICE

SUBJECT: Audit Report on "Fiscal Year 2016 Evaluation of Incurred Cost Coverage at the Pacific Northwest National Laboratory"

The attached report discusses our review of incurred cost coverage during fiscal year 2016 for selected areas at the Pacific Northwest National Laboratory. This report contains six recommendations. Management generally concurred with our recommendations.

We conducted this audit from November 2019 through November 2020 in accordance with generally accepted government audit standards. We appreciated the cooperation and assistance received during this evaluation.

Jennifer L. Quinones
Deputy Inspector General
Office of Inspector General

cc: Deputy Secretary
Chief of Staff

DOE-OIG-21-23

Department of Energy
Office of Inspector General

Fiscal Year 2016 Evaluation of Incurred Cost Coverage at the Pacific Northwest National Laboratory
(DOE-OIG-21-23)

WHY OIG PERFORMED THIS REVIEW

In 1994, the Office of Inspector General (OIG), Department of Energy officials, and internal audit officials from selected sites with management and operating contractors implemented the Cooperative Audit Strategy, which allows management and operating contractors to audit their own incurred costs. Based on recent work conducted by the OIG and concerns expressed by external stakeholders, such as the Government Accountability Office, the OIG is evaluating the Cooperative Audit Strategy. As part of that effort, the OIG commenced six audits in fiscal year 2020 to review certain contractors' incurred cost coverage of selected areas. We initiated this audit to evaluate incurred cost coverage of selected areas during fiscal year 2016 at the Pacific Northwest National Laboratory.

What Did OIG Find?

We found that Battelle Memorial Institute's allowable cost audit at the Pacific Northwest National Laboratory for fiscal year 2016 did not adequately evaluate incurred costs for allowability, allocability, and reasonableness. We noted weaknesses in Battelle Memorial Institute Internal Audit's design of the audit risk assessment and sampling approach. We also identified issues with Battelle Memorial Institute's year-end indirect rate variance disposition practice, treatment of unallowable costs, and classification of subcontracts. Further, we determined the Department's Statement of Costs Incurred and Claimed is an inadequate information submission of the management and operating contractor's claim and certification of costs incurred during the year.

What Is the Impact?

Given the large amount of taxpayer funding used for Department management and operating contracts, and the reliance on contractor Internal Audit functions to audit such funds, weaknesses in the annual evaluation of incurred costs could result in significant amounts of unallowable costs being charged to the Department and going undetected.

What Is the Path Forward?

The results of this audit will be used in conjunction with the results of multiple other audits, inspections, and investigations in arriving at conclusions regarding the Cooperative Audit Strategy and providing recommendations to the Department in an upcoming report.

BACKGROUND

Since 1965, Battelle Memorial Institute (Battelle) has managed and operated the Pacific Northwest National Laboratory (PNNL) under contract with the Department of Energy. PNNL, as part of the Department's Office of Science, performs research and innovations in the areas of environmental protection and cleanup, energy resources, and national security. PNNL incurred and claimed costs totaling approximately $843 million from October 1, 2015, to September 30, 2016, which is fiscal year (FY) 2016.

As a management and operating contractor, Battelle's financial accounts were required to be integrated with those of the Department, and the results of financial transactions were required to be reported monthly according to a reciprocal set of accounts. Battelle was required by its contract to account for all funds advanced by the Department annually on its Statement of Costs Incurred and Claimed (SCIC), safeguard assets in its care, and 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.

In 1994, the Office of Inspector General (OIG), Department officials, and internal audit directors from selected sites with management and operating contractors implemented the Cooperative Audit Strategy. The Cooperative Audit Strategy places reliance on the contractors' internal audit function to provide operational and financial audits, including allowable cost audits, as well as assessing the adequacy of management control systems. The Cooperative Audit Strategy requires that audits performed internally must, at a minimum, meet the Institute of Internal Auditors *International Standards for the Professional Practice of Internal Auditing*. The OIG relies upon the contractors' internal audit activities and provides guidance to cognizant Contracting Officers, Head of Contracting Activity, Department site managers, and cognizant Chief Financial Officers on the sufficiency of the design and operation of internal audit activities, particularly as they support the SCIC. Consistent with the Cooperative Audit Strategy, Battelle was required by its contract to maintain an internal audit activity with responsibility for conducting audits, including audits of the allowability of incurred costs. Rather than perform one comprehensive audit, Battelle's practice was to complete a series of audits to address the allowability of incurred costs. For FY 2016, Battelle's Office of Audit Services (Internal Audit) completed a total of three audits related to incurred cost allowability. In addition, Battelle was required to conduct or arrange for audits of its subcontractors when costs incurred were a factor in determining the amount payable to a subcontractor. To assist internal audit activities, the OIG provided a sample allowable cost audit program through its OIG Audit Manual with the expectation that internal auditors would exercise professional judgment when creating an audit program appropriate for its operating environment.

The objective of this audit was to evaluate incurred cost coverage of selected areas during FY 2016 at PNNL. Therefore, we did not specifically evaluate individual incurred costs for allowability, allocability, and reasonableness.[1]

[1] The details of the objective, scope, and methodology is contained in Appendix 1, and prior related work is contained in Appendix 2.

INTERNAL AUDIT'S ALLOWABLE COST AUDIT WAS INADEQUATELY DESIGNED

Internal Audit's allowable cost audits were not designed to adequately evaluate incurred costs for allowability, allocability, and reasonableness. The *International Standards for the Professional Practice of Internal Auditing* requires that internal auditors exercise due professional care by considering the relative complexity, materiality, or significance of matters to which assurance procedures are applied, and to be alert to the significant risks that might affect objectives, operations, or resources. Under the Cooperative Audit Strategy, the Department and OIG rely upon the contractor's internal audit activity to review the allowability of costs claimed on the SCIC in accordance with the audit program approved by the OIG. The Department implements the Cooperative Audit Strategy through Department of Energy Acquisition Regulation (DEAR) contract clause 970.5232-3, *Accounts, Records, and Inspection*. We identified the following areas that were not adequately addressed:

- Direct and indirect costs were not fully considered in Internal Audit's risk assessment and transaction testing; and

- Sampling was not always adequate to determine whether incurred costs were allowable, allocable, and reasonable.

Costs Were Not Fully Considered in Assessing Risk and Transaction Testing

Internal Audit did not evaluate the substantial risks of indirect costs separate from direct costs in its allowable cost audits. At Battelle, indirect costs of $341.6 million accounted for about 40.5 percent of the $842.6 million costs incurred during FY 2016 reported on the SCIC. The OIG Audit Manual, Chapter 14, *Guidelines for Contractor Internal Auditors*, includes procedures to evaluate the risks associated with direct and indirect costs. A direct cost is any cost that specifically supports a single cost objective.[2] On the other hand, an indirect cost is any cost that supports two or more cost objectives, is grouped with similar costs, and then allocated to multiple cost objectives based on relative benefits received or another equitable relationship. Accordingly, indirect costs are inherently riskier when compared to direct costs. The OIG Audit Manual, Chapter 14, also states that Internal Audit should evaluate changes in direct and indirect charging practices, changes in Cost Accounting Standards Disclosure Statements (Disclosure Statement), and fluctuations in direct and indirect labor charges, as well as verify that costs are properly classified by expense category, are consistently treated, and comply with Cost Accounting Standards. However, we noted that Internal Audit's allowable cost audit transaction testing did not always differentiate between direct and indirect costs. Specifically, Internal Audit's risk assessment and transaction testing for the allowable cost audits were based on transactions classified by Type of Entry (TOE).[3] Individual TOEs can be either direct or indirect costs depending on the specific circumstances. Yet, neither the risk assessment nor the

[2] Cost Accounting Standard 402-30, *Definitions,* defines a "cost objective" as a function, organizational subdivision, contract or other work unit, for which cost data is desired for which provision is made to accumulate and measure the cost to processes, products, jobs, capitalized projects, etc.
[3] A TOE is the lowest level of accounting detail in Battelle's accounting system and represents a specific type of cost. Examples of specific TOEs include: Double Time, Retention Bonus, Company Paid Airfare, Duplicating, and Cellular Phone.

transaction testing for individual TOEs differentiated between direct or indirect transactions. Internal Audit did not always perform substantive testing to ensure indirect costs were accumulated in indirect cost pools that were homogeneous or that pooled costs were allocated to cost objectives in a reasonable proportion to the beneficial or causal relationship of the pooled costs to cost objectives, as required by Cost Accounting Standards.

We determined this occurred because Battelle had not developed policies and procedures to specifically address consideration of direct and indirect costs. Internal Audit's *Risk Assessment Guidance* states that in evaluating risk exposure, the auditors should identify any potential Cost Accounting Standards cost allocation risks. However, the guidance does not provide additional direction regarding how, or to what extent, the evaluation of Cost Accounting Standards cost allocation risks is to be performed. Additionally, as part of its planning checklist for performing the allowable cost audits, Internal Audit incorporates the sample audit program contained in the OIG Audit Manual to identify testing attributes. However, the OIG Audit Manual does not set forth detailed procedures for the allowable cost audit. Instead, the OIG Audit Manual makes it clear that internal auditors must exercise professional judgment and ensure procedures are applicable to their operating environment.

Sampling Was Not Adequate to Evaluate Allowability, Allocability, and Reasonableness

Internal Audit did not always perform adequate sampling in its allowable cost audits to determine whether incurred costs were allowable, allocable, and reasonable. OIG Audit Manual, Chapter 14, states that it is expected that a recognized statistical sampling methodology will be used to sufficiently reach a conclusion on the allowability of costs and permit the projection of unallowable costs. If not statistical, it states that the rationale for using judgmental sampling should be clearly documented in the auditor's workpapers. However, we noted concerns with Internal Audit's sampling methods. For example, in two[4] of the three FY 2016 incurred cost allowability audits, Internal Audit did not perform statistical sampling or adequately document its rationale for using other sampling methodologies. We also found that Internal Audit did not always provide adequate detail in its sampling methodology workpapers. To illustrate, in one of the audits, Internal Audit reviewed a population of 1,306 purchase card transactions totaling $462,774 where it performed a non-statistical sample of 20 transactions, or 1.5 percent of the population. The only reference to the use of judgmental sampling in the workpapers was a copy of the Internal Audit's guidance document *Audit Sampling Policy* that stated Internal Audit's primary audit sampling methodology is judgmental sampling. Furthermore, we did not find any justification for why judgmental sampling was selected over statistical sampling or how the sampling methodology would permit the projection of unallowable costs to the population.

This occurred because Internal Audit did not follow the OIG Audit Manual when selecting and documenting its sampling approach. As mentioned previously, per the OIG Audit Manual, Chapter 14, a recognized statistical sampling methodology should be used to sufficiently reach a conclusion on the allowability of costs and permit the projection of unallowable costs; if statistical sampling is not used, the rationale for using another approach should be clearly documented in the auditor's workpapers. Instead, Internal Audit followed its own sampling policy, which states that Internal Audit's primary sampling methodology is judgmental sampling

[4] We could not review the workpapers for the third allowable cost audit due to issues associated with COVID-19.

because it provides reasonable assurance in the majority of instances to support audit findings and that statistical sampling is not commonly used in internal auditing, consistent with the Institute of Internal Auditors' guidance. Further, Internal Audit's policy asserts that the OIG Audit Manual states that there are no rigid rules for determining the sampling approach and that the approach should minimize the amount of work while providing useful results. However, Internal Audit's sampling policy and the Institute of Internal Auditor's guidance are for internal auditing, in general, and not specifically for allowable cost audits. Furthermore, Internal Audit's reference to the OIG Audit Manual is to Chapter 7, *Advanced Audit Techniques,* which is specific to OIG auditors when conducting routine audits; it does not refer to Chapter 14, which is specific guidance for contractor internal auditors, including conducting allowable cost audits, requiring statistical sampling or documented justification for judgmental sampling.

STATEMENT OF COSTS INCURRED AND CLAIMED IS INADEQUATE

DEAR 970.5232-2, *Payments and Advances*, Alternate III, requires contractors with integrated accounting systems to annually prepare, submit, and certify the SCIC, and requires that the SCIC be audited. In addition, Chapter 23 of the Department's Financial Management Handbook, *Statement of Costs Incurred and Claimed*, states that the SCIC serves as the contractor's claim and certification that the contractor's costs are allowable, allocable, and reasonable under the contract.

Further, DEAR 970.3002-1, *CAS Applicability,* requires integrated contractors to follow Cost Accounting Standards. Cost Accounting Standard 418-40, *Fundamental Requirements,* requires that indirect costs be accumulated in homogenous indirect cost pools and that pooled costs be allocated to cost objectives in reasonable proportion to the beneficial or causal relationship of the pooled costs to cost objectives. Due to these requirements, in order for the internal auditors to evaluate integrated contractors' claimed indirect costs for compliance with Cost Accounting Standards and adequately test all claimed costs for allowability, allocability, and reasonableness, integrated contractors should prepare, maintain, and audit adequately detailed indirect cost information.

The Defense Contract Audit Agency (DCAA) has established a benchmark that it requires of an indirect cost submission that would allow for meaningful audit. In addition, Federal Acquisition Regulation (FAR) 52.216-7, *Allowable Cost and Payment*, section (d), *Final Indirect Cost Rates,* establishes the data that an adequate indirect cost submission must include. While FAR 52.216-7 was not a Battelle contractual requirement, it is a representation of the type of data considered necessary for indirect cost certification and audit.

Both the Department and the OIG relied on the contractors' internal auditors to perform their audits to test for allowability, allocability, and reasonableness of costs under the contract, as well as compliance with Cost Accounting Standards. However, as discussed previously, Internal Audit did not always design its audit procedures appropriately. We found no evidence that Internal Audit questioned the format and usefulness of the SCIC in facilitating an effective cost allowability audit.

When we evaluated the Department's SCIC form against the DCAA *Checklist for Determining Adequacy of Contractor Incurred Cost Proposal* and FAR 52.216-7, we found a number of areas that were not explicitly addressed by the SCIC. For example, claimed pools and allocation bases, by element of cost, used to accumulate and distribute indirect costs were not included. The omission of this data would limit the Department's visibility into the composition of the pools and allocation bases, and limit the Department's ability to understand how indirect costs were allocated in order to make an accurate determination on allowability, allocability, and reasonableness.

This occurred for a couple of reasons. First, the Cooperative Audit Strategy relies significantly on management and operating contractors to audit themselves. The Department's SCIC form only requires a high-level summary of costs claimed for the year, and it does not explicitly require submission of the detail necessary to evaluate indirect costs. Along the same lines, the Department requires its integrated contractors to submit an Institutional Cost Report that shows indirect costs by category at a summary level, but again, does not explicitly require submission of the details for individual costs in each category. Despite the generality of these forms, it is important to note that nothing within the Department's SCIC form, or the Department's Institutional Cost Report, excused the obligation for Internal Audit to perform its audits to test for compliance with the acquisition regulations or the applicable Cost Accounting Standards. In exercising due professional care, the Internal Auditors should have concluded that the format of the SCIC was not adequate to facilitate an effective audit and should have recommended that this issue be corrected.

This also occurred because even though the Department was required to review and approve the SCICs submitted by the contractors, the Department's review and approval process was limited in scope and did not constitute an audit. The OIG also had the responsibility to "assess" these SCIC submissions. However, the OIG SCIC assessments were also limited in scope and did not constitute an audit. These assessment activities were not designed to replace the allowable cost audit that should have already been conducted by the internal auditors. As a result, the errors described in our report went undetected by the Department and the OIG.

BATTELLE'S YEAR-END VARIANCE PRACTICE WAS NOT COMPLIANT WITH COST ACCOUNTING STANDARDS

We found that Battelle's disposition of indirect cost and labor pool variances (rate variances) was not compliant with Cost Accounting Standard 418, *Allocation of Direct and Indirect Costs* (CAS 418). In particular, Battelle did not dispose of material rate variances by allocating the variances to cost objectives within the labor pool or indirect cost pools as required by CAS 418. Specifically, at year-end, Battelle's indirect cost pools showed a combined $11.39 million positive variance. The table below depicts the FY 2016 indirect rate variances by individual cost pool.

Rate	Variance	Actual Pool Costs	Variance Percentage of Pool Costs	Department Participation in Base
Facilities Space Service Center (B&U)	$3.53M	$88.94M	3.97%	71%
Laboratory Directed Research and Development	$2.86M	$39.72M	7.20%	71%
Department of Energy General & Administrative	$1.65M	$105.61M	1.56%	94%
National Security Directorate (NSD) Research ORG Overhead	$1.39M	$51.85M	2.68%	54%
Other Cost Pools	$1.96M	$62.03M		
Total Variance	**$11.39M**			

Instead of disposing of the positive variances within the respective indirect cost pools, Battelle netted the positive variances with other unrelated cost pools, such as Labor Cost, Other Federal Agencies General and Administrative (G&A), and Program Development & Management that had negative variances. The total of the combined negative variances was $11.37 million as shown below.

Rate	Variance	Actual Pool Costs	Variance Percentage of Pool Costs	Department Participation in Base
Labor Cost	($3.83M)	$569.1M	0.67%	72%
Other Federal Agencies G&A	($2.41M)	$33.13M	7.27%	0%
Program Development & Management	($1.74M)	$33.37M	5.21%	71%
DHS G&A	($.77M)	$10.52M	7.32%	0%
Other Under-Recovered Cost Pools	($2.62M)	$128.76M		
Total Under-Recovered Variance	**($11.37M)**			

Battelle's practice did not comply with the beneficial or causal relationship requirement between the final cost objective that contributed to the indirect cost and the final cost objective that benefited from the actual costs, or the practices described in Battelle's Disclosure Statement. CAS 418-40, *Fundamental Requirements*, paragraph (c), requires pooled indirect costs to be allocated to cost objectives in reasonable proportion to the beneficial or causal relationship of the pooled costs to cost objectives. CAS 418-50, *Techniques for Application*, paragraph (g)(4), requires that when variances are material, these variances are to be individually disposed of by allocating the cost to cost objectives in proportion to the costs previously allocated to the cost objectives.

Dispositioning rate variances within the respective indirect cost pool maintains the integrity of the beneficial or causal relationship of each indirect cost pool to the final cost objectives in its associated base. This ensures that the final cost objectives pay only their proportionate share of Battelle's indirect costs. Although Battelle performed a variance analysis at year-end, the analysis focused on materiality at the final cost objective level rather than materiality at the pool variance level. Specifically, following a determination of material impact through methods of analyses, Battelle then netted all the rate variances together and determined the residual pool variances were immaterial. As a result, Battelle effectively circumvented the CAS 418 requirement to dispose of material variances in reasonable proportion to the beneficial or causal relationship of pooled costs to cost objectives.

In response to our audit, Battelle performed an "after-the-fact" analysis for FY 2016 that showed its practice of netting year-end pool variances resulted in an immaterial effect on final cost objectives, as compared to returning the variances to individual bases. While this was true for FY 2016, this analysis at the pool level is not a routine practice for Battelle. Previous analyses performed by Battelle passed costs back to final cost objectives but aggregated the variances first before passing the costs back to the base or bases. Without first performing this analysis annually, neither the Department nor non-Department customers would have confidence that they were being fairly and proportionately charged their respective shares of Battelle's indirect rates.

Furthermore, we are particularly concerned with $2.86 million of over-recovered Laboratory Directed Research and Development (LDRD) funds that Battelle recovered under special legal authorities unique to the Department's LDRD program but spent these funds on costs unrelated to their required purpose. Specifically, Battelle recovered $42.5 million of LDRD funds through an indirect charge to both Department- and non-Department-funded programs. LDRD funds are authorized using special legal authorities that are administratively classified in Department Order 413.2C, *Laboratory Directed Research and Development*, which stipulates that these funds must be used for projects in the forefront areas of science and technology relevant to the Department's mission. Moreover, all projects receiving LDRD funding must receive concurrence from the Department. In September 2016, Battelle retroactively adjusted its LDRD rate from 5.6 percent to 5.2 percent. Although this rate adjustment reduced the projected year-end variance, it still allowed for a $2.86 million over-recovery. A Battelle analysis noted that the over-recovery could then be used to offset negative variances in other indirect cost pools, such as the $1.70 million negative variance in the Program Development & Management indirect cost pool. We noted that Department Order 413.2C specifically forbids LDRD funds be used to "fund general purpose capital expenditures." Further, we found no written concurrence from the Department to permit the use of LDRD funds in this manner. The practice of netting rate variances greatly increases the risk that over-recovered LDRD funds could be spent on costs unrelated to their required purpose.

This occurred because Battelle and the Pacific Northwest Site Office (PNSO) lacked sufficient internal controls to ensure adherence with Cost Accounting Standards requirements. Specifically, its Finance Manual did not fully adhere to CAS 418 requirements; the Finance Manual was inconsistent with Battelle's Disclosure Statement, which was provided to the Department, and PNSO did not provide sufficient oversight of Battelle's variance management practices.

Battelle's Finance Manual did not adhere to or address the fundamental requirement of CAS 418 to maintain the beneficial or causal relationship between the indirect cost pools and final cost objectives. Rather than disposing of year-end variances in a manner that maintained that relationship, Battelle's Finance Manual promoted the disposition of variances by permitting netting of unrelated pool costs and only analyzing the collective impact on final cost objectives.

Both of these processes are contrary to the standards of CAS 418. Further, Battelle's Finance Manual was inconsistent with Battelle's disclosed indirect rate practices concerning the beneficial or causal relationship between the final cost objectives receiving the indirect cost allocations and the final cost objectives receiving the benefit. Battelle's Disclosure Statement established an indirect rate structure in conformance with CAS 418's beneficial or causal requirements. However, Battelle deviated from this disclosed practice by following its Cost Accounting Standards non-compliant Finance Manual and netting positive and negative rate variances.

Additionally, PNSO did not provide sufficient oversight of Battelle's variance management practices for CAS 418 compliance. PNSO officials had expressed their suspicion to us that the variance policy was not totally compliant with Cost Accounting Standards but had not identified any formal findings regarding this issue at Battelle. Therefore, they did not question Battelle's policy for netting variances. PNSO officials also stated that the financial reports Battelle provided to PNSO did not provide an adequate level of detail for it to identify the contractor's variance disposition practices. Further, PNSO officials stated that through analysis, they believed Battelle was non-compliant with Cost Accounting Standards, but they admitted to not taking any formal action. PNSO last performed a CAS 418 review in May 2011 that focused on aspects of materiality and netting year-end variances, which identified that Battelle was improperly allocating year-end rate variances back to final cost objectives.

Recent Efforts

As a result of the OIG's Audit Report, *Battelle Energy Alliance, LLC Costs Claimed under Department of Energy Contract No. DE-AC07-05ID14517 for Fiscal Year 2016* (DOE-OIG-20-02), PNSO has since November 2019 taken action to ensure Battelle allocates year-end pool variances, including LDRD, in accordance with Cost Accounting Standards and other requirements. For example, in November 2019, PNSO suggested an independent review to determine if the same conditions found in the Idaho National Laboratory report existed at Battelle. PNSO also directed Battelle to develop a Cost Accounting Standards Corrective Action Plan to address any areas of concern from the independent review. PNSO and Battelle have also been meeting monthly since January 2020 to discuss topics within the Corrective Action Plan report. Based on the independent review's suggestions for improvement, Battelle asserts it will no longer net variances beginning in FY 2020 and will distribute variances back to each respective pool. Additionally, Battelle asserts that significant efforts are being made to update the variance policy as part of a greater Disclosure Statement review in coordination with PNSO and the Office of Science Consolidated Service Center.

BATTELLE'S UNALLOWABLE COSTS TREATMENT WAS NOT COMPLIANT WITH COST ACCOUNTING STANDARDS

We identified a Cost Accounting Standards noncompliance insofar as Battelle did not treat all of its unallowable costs in the same manner as allowable costs, as required by Cost Accounting Standard 405, *Accounting for Unallowable Costs* (CAS 405). Specifically, Battelle did not include all unallowable costs in the appropriate allocation bases and therefore did not always apply indirect cost burdens to unallowable costs like it did for similar allowable costs. For example, we found that Battelle included allowable costs in the Service Assessment allocation base and applied the Service Assessment indirect cost burden to those costs. However, Battelle did not include all unallowable costs in the Service Assessment allocation base and therefore did not apply the Service Assessment indirect cost burden to the unallowable costs.

In addition, Battelle did not include unallowable Estate Property Pool costs in the Service Assessment allocation base. Costs accumulated in this pool are considered by Battelle to be indirect costs of a G&A nature, which would typically not receive indirect cost burdens. However, the Estate Property Pool includes costs such as procurements, subcontracts, and labor, which are not always similar to G&A. These costs have a beneficial or causal relationship to specific projects and should therefore receive the associated indirect cost burdens.

We also noted that Battelle did not include unallowable cost in the allocation of its LDRD pool, as required by CAS 405. The allocation of LDRD is provided in Department Order 413.2C and the corresponding Contractor Requirements Document (CRD). The CRD specifically states that "DOE laboratories shall allocate LDRD costs by applying a uniform rate to the same base that is used to calculate the LDRD budget for the year."

CAS 405-40, *Fundamental Requirement*, paragraph (e), states that all unallowable costs are subject to the same cost accounting principles governing cost allocability as allowable costs. In circumstances where these unallowable costs normally would be part of a regular indirect-cost allocation base or bases, they shall remain in such base or bases.

To its credit, Battelle Internal Audit performed a CAS 405 review for FY 2014 and reported similar issues. Specifically, Internal Audit found that when labor costs were charged to unallowable accounts, Battelle did not always charge the applicable indirect cost burdens or all directly associated costs to unallowable accounts. Internal Audit also reported that Battelle did not apply indirect cost burdens to research organization staff labor charges when working on unallowable work packages. In contrast, for research organization staff labor charges on allowable work packages, Battelle applied the necessary indirect cost burdens.

Further, in FY 2019, an audit by the Office of Science Consolidated Service Center identified similar issues with Battelle's application of CAS 405. The scope of the audit included FY 2016 through FY 2018. To address the issues identified in that report, Battelle issued a revised Corrective Action Plan in May 2020. The Corrective Action Plan included a cost impact analysis covering FY 2016 through FY 2019, which was completed in July 2020. Corrective actions included a revision to Battelle's Disclosure Statement pertaining to unallowable cost treatment, a revision to its accounting practices to fully burden all unallowable costs with applicable indirect burdens, including LDRD, and revising its accounting practices to classify unallowable costs to a final cost objective when compared to similar allowable costs.

While we recognize that PNSO and Internal Audit were aware of the CAS 405 issues at Battelle since at least 2014, the issues had not been resolved by FY 2016; in fact, a corrective plan was not devised until FY 2019. As a result, we did not evaluate the effectiveness of the recent actions taken or planned by PNSO.

With the exception of LDRD, this occurred because Battelle did not have adequate controls to ensure that unallowable costs consistently received their appropriate burdens. According to Battelle's Finance Manual, unallowable costs are treated predominantly like G&A indirect costs that are not allocable or allowable to the Department. For example, Battelle officials have stated that all lobbying costs are considered similar to G&A, instead of considering whether a beneficial or causal relationship to final cost objectives exists. By classifying these costs as similar to G&A and not to final cost objectives, the costs were not coded to receive the applicable burdens. Further, a Battelle official asserted that LDRD is not a Cost Accounting Standards compliant practice and therefore not subject to Cost Accounting Standards requirements. While LDRD is not specifically addressed by Cost Accounting Standards, the requirement remains that all costs must be treated consistently, whether allowable or unallowable, unless specifically exempted by regulation or Department guidance. We understand that Department guidance was provided regarding the allocation of LDRD, but we also note that the Department did not specifically exempt the LDRD allocation from the requirements of the Cost Accounting Standards.

Additionally, Battelle's Finance Manual and Disclosure Statement did not fully explain the treatment of unallowable costs in order to address compliance with CAS 405. Specifically, Battelle's Finance Manual language for the write-off of unallowable costs did not include language directing cost allocability. In addition, the Finance Manual did not describe the treatment of unallowable G&A type costs in sufficient detail to effectively guide the application of indirect burdens or inclusion of costs in the applicable base or bases. Also, Battelle's Disclosure Statement does not fully address the treatment of all unallowable costs in the Estate Property Pool.

SUBCONTRACT TYPES WERE NOT ALWAYS PROPERLY CLASSIFIED

We found that Battelle did not properly classify subcontracts to ensure the subcontracts were considered for audit. Specifically, of the 25 subcontracts that we reviewed, 4 were classified as fixed-price when, in fact, they were flexibly-priced. In FY 2016, Battelle had 5,515 subcontracts classified as fixed-price, which accounted for approximately $207.2 million of the FY 2016 subcontract costs. The FY 2016 subcontract costs of the 4 subcontracts that we identified as misclassified were approximately $1,048,195.

FAR 52.230-6, *Administration of Cost Accounting Standards*, as incorporated in the contract, includes, but is not limited to defining fixed-price subcontracts as those subcontracts where the price is not adjusted or final payment is not based on actual costs incurred; and flexibly-priced subcontracts as those subcontracts where the prices may be adjusted based on actual costs incurred and/or where final payment is based on actual costs incurred. FAR 30.001, *Definitions*, states that flexibly-priced contracts include, among others, all cost-reimbursement contracts, orders issued under indefinite-delivery contracts where final payment is based on actual costs incurred, certain fixed-price subcontracts, and portions of time and materials and labor hour contracts. Because the contractor's final payments may be adjusted based on actual cost incurred, flexibly-priced contracts typically do not provide incentives to the contractor for cost control or labor efficiency, and are considered higher-risk.

In prior reports by the U.S. Government Accountability Office's OIG and DCAA, similar issues were identified with the misclassification of contracts and subcontracts. The U.S. Government Accountability Office's OIG report explained that contracts can be categorized as firm-fixed price or flexibly-priced contracts. Firm-fixed-price contracts generally are not subject to price adjustments based on the actual costs that the contractor incurs. The DCAA report on a Department contractor found that the contractor did not classify fixed-price and flexibly-priced subcontracts correctly. DCAA identified subcontracts with costs based on actual hours worked and travel expenses incurred that should have been classified as flexibly-priced subcontracts because there was no firm value determined. In another subcontract, subcontracts with quantities impacting the cost incurred were estimated (not fixed) and also should have been classified as flexibly-priced. For example, DCAA noted that a subcontract price calculated by the actual quantities times the unit price results in the actual costs (Actual Quantities * Unit Price = Actual Cost = Subcontract Price). DCAA noted that "the price of a truly fixed-price subcontract should not be affected or changed by the actual quantities incurred." DCAA found that the contractor's procurement system did not ensure accurate classification of flexibly-priced subcontracts, and its internal polices did not include the requirement for representatives to understand all applicable subcontract types included in FAR 16, *Types of Contracts*.

Additionally, DEAR 970.5232-3, *Accounts, Records, and Inspection*, paragraph (c), *Audit of subcontractors' records*, requires subcontracts be audited if costs incurred are a factor in determining the amount payable. Since the examined subcontracts had flexibly-priced elements but were classified only as fixed-price by procurement officials, they would not have been considered for audit.

One subcontract for packaging, transportation, treatment, recycling, and disposal of hazardous and non-regulated wastes contained a pricing schedule based on fixed-unit-rates but did not contain a fixed quantity of services to be provided. The subcontractor's bill was based on the actual quantity of waste processed multiplied by the fixed-unit-rates, with the volume of waste treated fluctuating from month to month. Additionally, there were variable elements within the subcontract for the disposal of gaseous waste in cylinders, such as analysis charges, handling fees, and other surcharges. For example, the subcontract notes that cylinders with inoperable valves may be subject to additional handling fees. Because the quantity billed was based on actual waste processed, and portions of the costs could be subject to variable charges or fees, we concluded that this subcontract should have been classified as flexibly-priced.

Another subcontract for translation and interpretation services by a foreign vendor included fixed-unit-rates per word translated but did not include a fixed quantity of words translated. Furthermore, the vendor had the ability to charge urgency fees. We were unable to locate where these urgency fees were established as a fixed cost in the subcontract or any other supporting documentation. Because the quantity of services was not fixed and the services could be subject to variable urgency fees, we concluded that this subcontract should have been classified as flexibly-priced.

The other two subcontracts were indefinite quantity contracts based on fixed-unit rates without established quantities, and billing was based on actual costs incurred. Per FAR 52.230-6, *Administration of Cost Accounting Standards*, one way flexibly-priced subcontracts are defined are as those indefinite-delivery subcontracts where final payment is based on actual costs incurred. Because these subcontracts' quantities were indefinite, and actual costs incurred were therefore variable, these subcontracts should have been classified as flexibly-priced. By not classifying these subcontracts as flexibly-priced, Battelle would not have considered these subcontracts for audit.

This issue occurred because of weak controls by Battelle officials over subcontract classification. Specifically, the following factors contributed to these weak controls:

- Battelle's practice was to emphasize the use of fixed-price contracts as the preferred contract type classification;

- Subcontracts with foreign vendors were generally considered fixed-price regardless of other attributes;

- Battelle's acquisition system had limitations in selection of subcontract type classification; and

- Battelle's practice of not performing/avoiding audits of subcontracts may be creating an environment where the emphasis is to classify subcontracts as fixed-price regardless of the subcontract's attributes.

Battelle's emphasis on classifying most subcontracts as fixed-price was evidenced by the large quantity of fixed-price subcontracts we noted in our review of FY 2016. Battelle implemented PNNL Acquisition Guideline 23, *Types of Contracts*, which identifies the types of contracts used by Battelle and outlines the criteria to consider when selecting a contract type. Specifically, this document states that firm-fixed-price is the primary and preferred fixed-price type of contract. Battelle's practice of emphasizing fixed-price subcontracts was evidenced through the large number of active fixed-price subcontracts in FY 2016. Of Battelle's subcontracts, 5,115 subcontracts, or 75.8 percent, were classified as fixed-price in FY 2016.

Also, Battelle's practice was to generally classify subcontracts with foreign vendors as fixed-price even though they may be flexibly-priced. Our sample of 25 subcontracts included 8 subcontracts with foreign vendors. Of the 8, we determined that 1 was flexibly-priced. Battelle officials indicated that the use of fixed-price type contracts for foreign vendors minimized the risk to Battelle and the Government. Additionally, they indicated that since some foreign vendors may have limited financial and accounting systems or standards, it would be difficult for Battelle to audit these subcontracts. In FY 2016, Battelle had a total of 1,628 subcontracts with foreign vendors. Of the subcontracts with foreign vendors, 1,551 subcontracts, or 95.3 percent, were classified as a fixed-price, and accounted for approximately $34,133,926, or 98.7 percent, of FY 2016 subcontract costs with foreign vendors for the year.

Further, Battelle's acquisition system, as configured, limited Battelle's ability to accurately classify subcontracts. Specifically, the system was not configured to distinguish between fixed-price and flexibly-priced subcontracts. While the system did contain a drop-down menu for specialists to select subcontract types such as fixed-price, cost-reimbursement, cost-plus-fee, labor hour/time and material, etc., it was not configured to classify them as flexibly-priced subcontracts. Furthermore, the database only has one classification type for all varieties of fixed-price subcontracts rather than multiple options within the fixed-price classification.

Finally, Battelle's practice is to limit or avoid subcontracts which may require Battelle to perform the incurred cost audits. We believe this practice may be creating an environment that is emphasizing subcontract classification as fixed-price. As stated by a Battelle official, subcontracts classified as fixed-price are not subject to audit even though, in our professional judgment, some fixed-priced subcontract types should be. A Battelle official indicated that due to the cost of performing subcontract audits for cost-type subcontracts, it was Battelle's practice to utilize subcontractors that had received audit coverage by DCAA, the Office of Management and Budget A-133, or other external agencies. Therefore, a Battelle official noted that Battelle itself had not performed an incurred cost audit of a subcontractor in over 10 years. We concluded that this practice creates an environment that may lead Battelle procurement officials to classify subcontracts with vendors that are not audited by an external agency as fixed-price that actually should be classified as flexibly-priced.

THERE IS AN INCREASED RISK OF UNALLOWABLE CLAIMED COSTS AND IMPROPER COST ALLOCATION

As a result of the issues identified above, there is increased risk that Battelle charged unallowable costs to the Department and that Battelle's FY 2016 incurred costs were improperly allocated to some of its cost objectives. Weaknesses in the design of the allowable cost audits increased the risk that Battelle claimed unallowable costs because the level of testing and substantive procedures performed were adversely impacted, particularly regarding indirect costs. This is significant because Battelle's indirect costs totaled $370.4 million, or 40.5 percent, of the total $913.6 million costs incurred during FY 2016. Overall, the weaknesses we identified in Internal Audit's allowable cost audits design lessened the value of Internal Audit's determination that incurred costs were allowable, allocable, and reasonable.

As a result of the SCIC's inadequacies, Internal Audit, the OIG, and the Department have not had ready access to indirect cost details to ensure claimed costs were allowable, allocable, and reasonable. Further, an inadequate indirect cost submission limits the Department's visibility into the composition of the indirect cost pools and allocation bases, and therefore its ability to manage costs. Overall, this limits the Department's ability to evaluate its indirect costs. Because in many cases indirect costs are significant, this is a serious issue.

Further, due to Battelle's CAS 418 noncompliant year-end indirect rate variance disposition practice, Battelle's FY 2016 incurred costs were improperly allocated to some of its cost objectives. We questioned $11.39 million of positive rate variances and $11.37 million of negative rate variances that had accumulated by the end of FY 2016 as misallocated and non-compliant with Cost Accounting Standards. According to FAR 31.201-2, *Determining Allowability*, costs are only allowable when, among other items, they are compliant with Cost Accounting Standards requirements. Additionally, of the $11.39 million of positive rate variances, $2.86 million was for LDRD funds, which has statutory requirements restricting their use for only LDRD purposes that we concluded were not used in an approved manner. In FY

2016, slightly over 20 percent of Battelle's costs were from the Office of Science, its landlord, while the National Nuclear Security Administration and Strategic Partnership Projects customers also contributed a significant portion to Battelle's costs in that year. Given the multi-sourced funding at Battelle, it should actively take steps to avoid inadvertent violations of the requirements provided by Congressional Controls and Strategic Partnership Projects. While we did not identify a material impact on the final year-end netted variance, we noted that this may not always be the case in other fiscal years. Battelle's variance policy creates an opportunity to inappropriately combine indirect expenses from multiple pools that are allocated to funding from multiple sources and may cause the Department to use funds for unintended purposes. Specifically, 31 U.S. Code § 1301(a) prohibits the use of appropriations for purposes other than those for which they were appropriated. This statute can be applied to indirect and direct activities. Therefore, Battelle's year-end indirect rate variance disposition practice could lead to a loss of customer confidence in its indirect rate structure, and non-Department customers may have paid a disproportionate share of Battelle's costs without receiving the associated benefit.

By not always correctly applying indirect cost burdens, unallowable costs did not receive their appropriate allocation of indirect costs, and the respective allocation bases were incomplete. Specifically, G&A unallowable costs did not receive the appropriate allocation of LDRD costs and the LDRD allocation base was incomplete. PNSO and the Office of Science Consolidated Service Center reviewed unallowable costs extending from FY 2016 through FY 2019. This review, performed by Battelle, showed the cost impact of unallowable costs incurring the applicable indirect cost burdens from FY 2016 through FY 2019. Results of the review reflected the full receipt of burdens, which should have included Program Development & Management, G&A, Service Assessment, and LDRD. As part of its Corrective Action Plan analysis, Battelle determined that had these costs received their necessary indirect cost burdens for FY 2016, an additional $363,789 of costs should have been charged to unallowable accounts.

As a result of Battelle improperly classifying subcontracts as flexibly-priced, Battelle may not be subjecting all subcontracts to the required audit coverage. Without adequate audit coverage by Battelle or another cognizant audit agency, there is a significant risk that subcontractors may be passing along unallowable costs to the Department.

RECOMMENDATIONS

This audit was performed as part of the OIG's overall initiative to review the Cooperative Audit Strategy. The results of this audit will be used in conjunction with the results of multiple other audits, inspections, and investigations in arriving at conclusions regarding the Cooperative Audit Strategy and providing recommendations to the Department in an upcoming report. In the meantime, to address the issues identified in this report, we recommend that the Manager, Pacific Northwest Site Office, work with the Department and Battelle to address the following:

1. Ensure the appropriate design and execution of allowable cost audits;

2. Require the proper use and documentation of sampling in allowable cost audits;

3. Revise subcontract classification policies, procedures, and system capabilities;

4. Reexamine the adequacy of subcontract audit coverage as required by the management and operating contract;

5. Revise policies, procedures, and disclosures related to the process of year-end indirect rate variance disposition to be consistent with Cost Accounting Standards, and ensure procedures recognize the individuality of congressional controls; and

6. Reexamine the SCIC submission and the Department's ability to adequately evaluate costs.

MANAGEMENT RESPONSE

Management generally concurred with the report's recommendations and identified corrective actions it would take to address the issues included in the report. While disagreeing over the findings, management stated it would work with the Department and PNNL officials to change or update practices and requirements as appropriate.

Management's comments are included in Appendix 3.

AUDITOR COMMENTS

Management has generally agreed with the report's recommendations and has identified corrective actions it will take to address the issues included in the report. Management's proposed corrective actions were generally responsive to our recommendations.

With regard to the disagreement over the findings, the OIG stands by its findings and has significant concerns with the way Internal Audit performed its allowable cost audit risk assessment and sampling approach.

Further, where management noted this report appears to contradict past OIG reports, the OIG maintains that this audit did not have the same objective or scope as our previous review level engagements, and different procedures were used to identify potential gaps in Internal Audit's coverage of incurred costs.

Where management disputes the finding regarding indirect costs by asserting that it did test costs at the lowest accounting detail level, below the indirect cost level, the OIG notes on pages 2 and 3 that Internal Audit did not differentiate indirect costs from direct costs when developing their reviews. In addition, the OIG clearly demonstrates why indirect costs are riskier than direct costs.

Where management disputes the finding about the adequacy of sampling, we indicate on page 3 that Internal Audit did not perform statistical sampling nor did it adequately document its rationale for not using statistical sampling, as prescribed in the OIG Audit Manual.

Where management nonconcurs with the finding about the SCIC format being inadequate by claiming the DEAR clauses in its contract do not require greater details, its claim that additional data is available if needed seems to be a contradiction. In order to effectively audit the incurred costs, more detailed information is necessary than what is required in the current SCIC format, which the Department appears to agree with by stating that additional data is available if needed. The report does not state that the DEAR clauses currently require greater details. On page 5, the report explains that the OIG finds the SCIC format inadequate because it limits the Department's ability to understand how indirect costs were allocated impacting determinations on allowability, allocability, and reasonableness.

Where management disputes the finding that Internal Audit should have concluded that the format of the SCIC was not adequate to facilitate an effective audit, page 5 notes that Internal Audit does have a responsibility to exercise due professional care in its activities. Experienced auditors could have identified this issue just as the OIG did and should have recommended that this be corrected.

Where management disputes the finding of year-end indirect rate variance disposition, the OIG notes that management's practice does not conform with Cost Accounting Standards related to maintaining a beneficial or causal relationship. The OIG indicates on page 6 that "[I]nstead of disposing of the positive variances within the respective indirect cost pools, Battelle netted the positive variances with other unrelated cost pools, such as Labor Cost, Other Federal Agencies General and Administrative, and Program Development & Management." The OIG notes that management is not taking issue with our description of its practices but rather claiming it complied with Cost Accounting Standards under an immateriality exception despite the millions of dollars involved. We maintain that materiality should be assessed at the pool level and not at the final cost objective level. The OIG also found that management asserted that netting year-end pool variances resulted in an immaterial effect on final cost objectives in fiscal year 2016; this may not be the case every year.

Where management disputes the finding of unallowable cost treatment, the OIG notes that management's practice does not conform with Cost Accounting Standards related to burdening unallowable costs in the same manner as allowable costs. The OIG shows on page 9 that management did not apply indirect cost burdens to unallowable costs like it did for similar allowable costs. While management asserts it was aware of the issue, there was no resolution until 2019.

Where management nonconcurs with our statement that there is an increased risk of unallowable claimed costs and improper cost allocation due to the design of the allowable cost audit, the OIG notes on pages 13 and 14 that its conclusion is based on a flawed allowable cost audit design, inadequate indirect cost submission, a noncompliant practice with regards to year-end indirect rate variance disposition, a noncompliant practice with regards to not applying burdens to unallowable costs, and improperly classifying subcontracts. The culmination of these findings lessened Internal Audit's ability to make adequate determinations that incurred costs were allowable, allocable, and reasonable.

As mentioned on page 14, the results of this audit will be used in conjunction with the results of multiple other audits, inspections, and investigations in arriving at conclusions regarding the Cooperative Audit Strategy and providing recommendations to the Department in an upcoming report.

OBJECTIVE

We conducted this audit to evaluate incurred cost coverage of selected areas during fiscal year (FY) 2016 at the Pacific Northwest National Laboratory (PNNL).

SCOPE

The audit was performed between November 2019 through November 2020 at the Department of Energy's Pacific Northwest Site Office and the Pacific Northwest National Laboratory in Richland, Washington. The audit scope included costs incurred and claimed by Battelle Memorial Institute (Battelle) for FY 2016. The audit was conducted under Office of Inspector General project number A20ID004.

METHODOLOGY

To accomplish our audit objective, we:

- Reviewed applicable Federal laws and regulations, United States Code, Cost Accounting Standards, Department and Battelle policies and procedures, Battelle contract provisions, and other legal requirements related to the audit objective.

- Interviewed Department officials and Battelle personnel, including Internal Audit, responsible for management and oversight of incurred costs.

- Reconciled Battelle's underlying accounting system data to the amounts contained in the Statement of Cost Incurred and Claimed, and compared the information to the Letter of Credit.

- Identified related-party disclosure procedures and determined whether Battelle properly disclosed related parties and following applicable procedures.

- Reviewed the disposition of year-end indirect rate variances to determine if they were liquidated appropriately.

- Reviewed the treatment of unallowable costs, including the application of indirect rates.

- Reviewed and evaluated Internal Audit's risk assessment process for preparing its annual audit plan and conducting its cost allowability audits.

- Reviewed the two Internal Audit files that supported FY 2016 allowable cost audits to determine if all questioned costs had been reported.

- Reviewed and evaluated Internal Audit's sampling approach used in its cost allowability audits.

- Reviewed and evaluated subcontract documentation to determine the appropriateness of classification.

- We used judgmental sampling throughout the project and adequately documented the applicable details in the relevant workpapers. Because the selection was based on a judgmental or non-statistical sample, results and overall conclusions are limited to the items tested and cannot be projected to the entire population or universe of costs.

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 the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We assessed internal controls and compliance with laws and regulations necessary to satisfy the audit objective. In particular, we assessed the internal control components and underlying principles significant to the audit objective. Specifically, we assessed the control environment and the underlying principles regarding Battelle's exercise of oversight responsibility and demonstration of commitment to competence. We also assessed control activities and the underlying principle of implementing policies and procedures. Further, we assessed monitoring and the underlying principle of establishing and performing of monitoring activities. However, because our review was limited to these internal control components and underlying principles, it may not have disclosed all internal control deficiencies that may have existed at the time of this audit.

We assessed the reliability of Battelle's FY 2016 financial and subcontracting data by: (1) independently reviewing and analyzing prior FY 2016 reviews/reports on financial data systems; (2) obtaining demonstrations and walkthroughs of many financial data systems from Battelle officials; (3) validating that raw transactional accounting data reconciled to control totals provided by Battelle; and (4) independently verifying subcontracting data agreed with source documentation. We determined that the data was sufficiently reliable for the purposes of this report.

Management officials waived an exit conference on April 1, 2021.

- Assessment Report on *Audit Coverage of Cost Allowability for Battelle Memorial Institute Under its Contract to Manage the Pacific Northwest National Laboratory During Fiscal Years 2015 and 2016 under Department of Energy Contract No. DE-AC05-76RL01830* (DOE-OIG-19-02, October 2018.) The assessment[5] determined that the allowable cost-related audit work performed by Battelle Memorial Institute's (Battelle) Internal Audit for costs incurred from fiscal years 2015 through 2016 could be relied upon. The Office of Inspector General (OIG) found that Battelle Internal Audit's cost allowability audits generally met the Institute of Internal Auditors *International Standards for the Professional Practice of Internal Auditing*; however, the OIG identified issues with adequate documentation of supervision, documentation of potential impairments to auditor independence and objectivity, and implementation of Battelle's risk-based approach. Internal Audit identified $577,325.68 in questioned costs from fiscal years 2015 through 2016, which had been resolved with the exception of $182,301.55 in parking-related costs. The OIG made two recommendations to address the issues identified.

- Audit Report on *Lawrence Livermore National Security, LLC, Costs Claimed Under Department of Energy Contract No. DE-AC52-07NA27344 for Fiscal Year 2015* (DOE-OIG-18-12, December 2017). The audit concluded that for areas where Lawrence Livermore National Security, LLC's (LLNS) Internal Audit provided audit coverage in fiscal year 2015, its work could be relied upon. The OIG questioned $1,262,454.77 in costs, identified internal control weaknesses, and identified weaknesses in LLNL Internal Audit's audit procedures. Specifically, the OIG questioned $1,257,828.48 of interagency agreement costs and $3,900.61 in other areas such as purchased materials and UniCards. Further, the OIG identified internal control weaknesses in LLNS's management of its Strategic Partnership Project cost over- and underruns and unallowable costs. Other internal control weaknesses were that LLNS did not maintain its own complete records of supplemental labor costs and did not always adhere to internal policy and contract requirements to properly allocate travel and associated labor costs to the same project. Additionally, areas of improvement by LLNS's Internal Audit were identified in order to ensure the effectiveness of the Cooperative Audit Strategy. The report found that these issues occurred because LLNS did not properly follow contract terms and conditions, including the Federal Acquisition Regulations and Cost Accounting Standards, for the management of its Strategic Partnership Project overruns, underruns, and unallowable costs. The OIG made seven recommendations to address the issues identified.

- Audit Report on *Battelle Energy Alliance, LLC Costs Claimed under Department of Energy Contract No. DE-AC07-05ID14517 for Fiscal Year 2016* (DOE-OIG-20-02, October 2019). The audit identified Battelle Energy Alliance (BEA) practices that were not compliant with Cost Accounting Standards and weaknesses in BEA's Internal Audit audit procedures. The audit questioned $17.66 million of positive (over-recovered) funds, $8.4 million of negative (under-recovered) funds from year-end indirect cost pool variances, and $11,176 of Laboratory Directed Research and Development burdens. Also, the audit determined that BEA Internal Audit work could be relied upon in the select areas reviewed and identified

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[5] We conducted our assessment as a review attestation. A review is substantially less in scope than an examination or audit. Our review was limited and would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our review.

minor additional questioned costs of $8,013. However, the audit identified areas that required improvement by Internal Audit. In particular, BEA Internal Audit did not identify certain Cost Accounting Standards noncompliance issues in BEA's cost accounting and management practices. These issues occurred because BEA did not properly follow contract terms and conditions, including Federal Acquisition Regulations and Cost Accounting Standards, and did not sufficiently adhere to internal policy. Accordingly, the OIG recommended certain corrective actions and additional oversight to ensure that these problems do not recur.

- Audit Report on *Battelle's Pacific Northwest National Laboratory Procurement Activities* (OAI-M-16-14, July 2016). The audit concluded that Battelle did not effectively manage its procurement activities. In particular, Battelle's paperless procurement files were inadequate in that they were unreliable and were incomplete. In addition, subcontracts appeared to exceed procurement personnel's authority and did not receive the appropriate level of review when large dollar value procurements were split into multiple separate contract actions at the time of award as well as when contracts were modified. The report found that these issues occurred due to weaknesses in Battelle's policies and procedures, as well as inconsistent implementation of the policies and procedures by Battelle procurement officials. Further, Battelle did not conduct adequate reviews of individual contract files. The OIG made four recommendations to address the issues identified.

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21-PNSO-0021

MEMORANDUM FOR JENNIFER L. QUINONES
DEPUTY INSPECTOR GENERAL
OFFICE OF INSPECTOR GENERAL

FROM: ROGER E. SNYDER
MANAGER

Roger E. Snyder Digitally signed by Roger E. Snyder
Date: 2021.03.30 09:15:21 -07'00'

SUBJECT: FISCAL YEAR (FY) 2016 EVALUATION OF INCURRED COVERAGE AT THE PACIFIC NORTHWEST NATIONAL LABORATORY (PNNL) - A20ID004

The Office of Science (SC) Pacific Northwest Site Office (PNSO) appreciates the Office of Inspector General's (OIG) interest in improving the operations of the Department of Energy (DOE) as outlined in this report. However, PNSO disagrees with the incurred cost coverage findings in this report. PNSO does concur on the finding on subcontract classification.

PNSO supports efforts to ensure that reviews of incurred costs are useful. As the OIG noted, the Cooperative Audit Strategy was developed and implemented by the OIG in collaboration with Department officials and internal audit directors from selected management and operating contractor (M&O) sites. The OIG has a critical role in this process. Therefore, addressing concerns about the implemented strategy's ongoing effectiveness should include a complete assessment of the process, including the OIG's role.

PAST OIG STATEMENT OF COST INCURRED AND CLAIMED (SCIC) ASSESSMENTS

This report contradicts DOE-OIG-19-02 "Audit Coverage of Cost Allowability for Battelle Memorial Institute Under its Contract to Manage the Pacific Northwest National Laboratory During Fiscal Years 2015 and 2016 Under Department of Energy Contract No. DE-AC05-76RL01830"(October 23, 2018), which stated that:

> *"Based on our assessment, nothing came to our attention to indicate that the allowable cost-related audit work performed by Internal Audit for FYs 2015 through 2016 could not be relied upon. We did not identify any material internal control weaknesses with cost allowability audits, which generally met the Institute of Internal Auditors International Standards for the Professional Practice of Internal Auditing (IIA Standards)."*

PNNL's Internal Audit has not changed its approach or process since the above, and three previous OIG reports issued since 2010. Thus, it appears that the OIG has changed its policy and procedures for assessing the Department's long-standing cooperative audit strategy.

RESPONSE TO AUDIT FINDINGS AND RECOMMENDATIONS

OIG Finding 1: INTERNAL AUDIT'S ALLOWABLE COST AUDIT WAS NOT ADEQUATELY DESIGNED

PNSO non-concurs on the main finding and the two sub-findings as outlined in the report. PNSO specifically disagrees with the report's statement that:

> *"Internal Audit's allowable cost audit was not designed to adequately evaluate incurred costs for allowability, allocability, and reasonableness."*

PNNL Internal Audit exercised due professional care, and from their long experience, they inherently understand the complexity, materiality, and significance of matters related to PNNL's operations. Past reports by PNNL's Internal Audit demonstrate that the auditors are alert to significant risks that might affect PNNL's objectives, operations, or resources.

Sub-Finding a: Direct and Indirect Costs Were Not Fully Considered in Assessing Risk and Transaction Testing

PNSO non-concurs on the sub-finding as outlined in the report. The OIG should revise its sample audit program or mandate a specific assessment of indirect expenses and how they contribute to the Department's costs.

PNNL's Internal Audit tests at the lowest accounting detail level below the indirect/direct cost level. Testing transaction groupings does not increase the likelihood of detecting unallowable costs. PNSO and Consolidated Service Center (CSC), Office of Financial Services (OFS) review indirect cost pools for homogeneity and the beneficial or causal relationship of the pooled costs to cost objectives. The SCIC review does not specify cost pool relationship testing. PNNL's internal audit testing at the lowest accounting detail level raises no allocability issues and does not warrant the suggested analysis.

The report states that indirect costs are inherently riskier when compared to direct costs. The OIG offered no basis for this opinion; no independent study, no analysis of issues related to direct and indirect costs, or any examples from other laboratories where indirect costs are more problematic. Previous OIG Assessment Reports did not reference this point.

Sub-Finding b: Sampling Was Not Adequate to Evaluate Allowability, Allocability, and Reasonableness

Ms. J. L. Quinones 3
21-PNSO-0021

PNSO non-concurs on the sub-finding as outlined in the report. While statistical sampling may be the OIG's preferred sampling methodology for incurred cost audits, judgmental sampling is not prohibited. PNNL's Internal Audit followed the *DOE OIG Audit Manual, Chapter 14, Sample Audit Program for Allowable Cost Reviews*, that states:

> **The audit steps are general guidance and should be expanded or eliminated as necessary to fit the contractor's audit environment and risk assessment**. The program is intended to provide a logical sequence to the audit fieldwork and to reflect a mutual understanding between the auditor and supervisor as to the scope required to meet auditing standards and the audit's objectives for allowable costs reviews. It is expected that those portions of the audit that are covered in other audits will be referenced and incorporated in this review. (emphasis included in the original)

The guidance for sampling in the OIG Audit Manual does not mandate a sampling methodology, nor does it prescribe specific sample sizes. Per OIG guidance, the sample size is determined using the audit environment, risk assessment, and coverage from other audits. PNNL's Internal Audit considered these factors in their sampling.

Auditing standards do not mandate statistical or non-statistical sampling nor a specific sample size. PNNL's Internal Audit determined the sampling methodology and sample size based on its professional judgment on risks, resources, and effectiveness, consistent with auditing standards and guidance. The following auditing standards apply in this situation:

- Institute of Internal Auditors, Practice Advisory 2320-3 – The auditor may use non-statistical (judgment) sampling to confirm a condition.
- Accounting Oversight Board, General Auditing Standards 2315 Audit Sampling – The auditor chooses between statistical or non-statistical sampling that provides sufficient audit evidence after considering their relative cost and effectiveness. Conditions leading to a smaller sample size include a low assessed level of inherent or control risk and risk associated with other relevant substantive procedures.
- American Institute of Certified Public Accountants Auditing Standards Board, Statement on Auditing Standards 39 Audit Sampling - The auditor is not required to select a specific number of items comparable to the statistical sample size. If their experience with a subject matter has been good, the auditor might continue to use sample sizes proven effective.

<u>Response to Recommendations</u>

The OIG makes two recommendations associated with this finding.

1. Ensure the appropriate design and execution of allowable cost audits.
2. Require the proper use and documentation of sampling in allowable cost audits.

PNSO non-concurs with the finding as outlined in the report. However, PNSO supports the associated recommendations to strengthen and clarify expectations. The OIG should work to change the Department's audit requirements and revise the Audit Manual to align with the summary of Chapter 14 provided in the report. PNSO will work with the SC, CSC, OFS to assist the OIG in updating the Audit Manual and the Department's internal audit function requirements.

PNSO does not support an update to the allowable cost audits that adds the review of indirect cost pools for homogeneity and the beneficial or causal relationship of the pooled costs to cost objectives.

PNSO will explore ways to clarify for outside readers that testing at the lowest accounting detail level is below and more the indirect/direct cost level. PNSO will work with PNNL to assess the need for statistical sampling. The methodology will need to be in the Government's best interest, cost-effective, and provide actionable results.

OIG Finding 2: STATEMENT OF COSTS INCURRED AND CLAIMED IS INADEQUATE FOR IDENTIFICATION OF ALL COSTS INCURRED

PNSO non-concurs with the finding as outlined in the report. The OIG used FAR 52.216-7 as its criteria for determining the adequacy of the SCIC, while it acknowledged that the clause was not a contractual requirement.

M&O contractors are not subject to the cited clause. Guidance for clauses included in DOE M&O contracts are outlined in the Department of Energy Acquisition Regulation (DEAR) 970.52 Solicitation Provisions and Contract Clauses for Management and Operating Contracts. Specifically, PNNL is subject to DEAR 970.5232-2 Payments and Advances [prescribed by DEAR 970.3270(a)(1), and subsection (k) of Alternate III] explicitly calls out the SCIC requirement as follows:

> *(k) Review and approval of costs incurred. The Contractor shall prepare and submit annually as of September 30, a "Statement of Costs Incurred and Claimed" (Cost Statement) for the total of net expenditures accrued (i.e., net costs incurred) for the period covered by the Cost Statement.*

Use of FAR 52.216-7 conflicts with the required DEAR clause. The DOE Financial Management Handbook Chapter 23 states in 1(a) Requirements and Applicability (emphasis added):

(1) *The Statement of Costs Incurred and Claimed (SCIC), is prepared and certified by DOE's integrated contractors annually after they have submitted their financial statements and related information to their cognizant field elements (Attachment 23-1). This requirement applies to individual DOE contracts that include the contract clause at 48 CFR 970.5232-2 (alternate iii).* ***The costs reported on this statement should be consistent with the contractors' financial statements****. The SCIC form is provided as an attachment to this chapter; detailed descriptions of the SGL accounts listed on the form are kept by the Office of Financial Controls and Reporting. Deviations from the form and procedures established by this chapter must be approved by the cognizant contracting officer.*

(2) *The Statement of Costs Incurred and Claimed is not a payment voucher.* ***It is the contractor's accounting for all costs incurred for the year covered by the Statement.*** *By submission of the Statement, the integrated contractor summarizes its costs incurred during the year specified.*

(3) *The Statement of Costs Incurred and Claimed serves as the contractor's claim and certification that the contractor's costs it covers have been incurred and (to the best of the Certifying Official's knowledge and belief) are allowable, allocable, and reasonable (hereinafter referred to as allowable) under the contract.*

Therefore, the OIG's evaluation of DOE's SCIC form against the Defense Contract Audit Agency's Checklist for Determining Adequacy of Contractor Incurred Cost Proposal and FAR 52.216-7 to cite PNNL with inadequate identification of costs incurred is not appropriate. The use of the SCIC format does not preclude the auditors from obtaining claimed pools and allocation bases, including supporting information. In fact, PNNL supplied the OIG auditors with the requested pool and base data during their review.

The OIG signs the current SCIC form, which was last revised in November 2012, so PNNL's Internal Audit should not have to determine or question that a form approved by the OIG was inadequate for identifying all costs incurred. The Department designed the SCIC form to report a high-level summary of costs claimed for the year. PNNL maintains detailed supporting information that is available to auditors.

Response to Recommendation

The OIG makes the following recommendation associated with this finding.

6. Reexamine the SCIC submission and the Department's ability to adequately evaluate costs.

Ms. J. L. Quinones 6
21-PNSO-0021

PNSO non-concurs with the finding as outlined but supports the recommendation as it applies to the OIG. PNSO will work with OFS to assist the OIG, as Chair of the Steering Committee for the Cooperative Audit Strategy (SCCAS) to address any concerns with the SCIC. PNSO will also support OFS in implementing any changes made to the SCIC.

OIG Finding 3: BATTELLE'S YEAR-END VARIANCE PRACTICE WAS NOT COMPLIANT WITH COST ACCOUNTING STANDARDS

PNSO non-concurs with the finding as outlined in the report. PNNL is not required to proportionally allocate rate variances back to cost objectives unless the variances are material. The OIG failed to consider the materiality aspect of the standard. Cost Accounting Standards (CAS) 418.50(g)(5)(4) states (emphasis added):

> (g) *Use of preestablished rates for indirect costs.*
>
> *(4) Under paragraphs (g) (2) and (3) of this subsection* ***where variances of a cost accounting period are material****, these variances shall be disposed of by allocating them to cost objectives in proportion to the costs previously allocated to these cost objectives by use of the preestablished rates.*

As a result, the risk of unallowable claimed costs and improper payments is minimal in that it follows CAS standards.

48 CFR § 9903.305 establishes the criteria for materiality. Examples of the criteria include dollar amount involved, the amount compared to the contract value, the relationship between the amount and a cost objective, impact on Government Funding. Federal Acquisition Regulation's (FAR) fundamental approach to addressing materiality allows for interpretation and judgment. PNSO considers the practice to comply with CAS because PNNL analyzes the variance to ensure no material impact to final cost objectives. The report says this about the PNNL analysis:

> *"In response to our audit, Battelle performed an "after-the-fact" analysis for FY 2016 that showed its practice of netting year-end pool variances resulted in an immaterial effect on final cost objectives, as compared to returning the variances to individual bases."*

The criteria applied by the OIG to conduct variances against pool levels and final cost objectives are new. CAS 418 does not require materiality assessment for year-end variance disposition at the pool variance level. CAS 418, the Department, and the OIG have not established specific processes for assessing year-end variances for materiality. Netting rate variances together and determining materiality at the final cost objective level is CAS compliant.

As written, the finding represents a final determination of CAS noncompliance, which is contrary to FAR 30.605, which states that CAS determinations are the Cognizant Federal Agency Official's responsibility. The OIG should only provide an opinion on CAS noncompliance, not a determination.

Additionally, as written, the OIG in the report is alluding to conversations between officials of DOE and the OIG auditors. The OIG should provide its opinion and recommendations based on requirements and facts, not conversations that occurred during the audit, whether they were from DOE officials or Contractors. Attributing this to individuals who may not represent DOE's position is problematic.

Response to Recommendation

The OIG makes the following recommendation associated with this finding.

5. Revise policies, procedures, and disclosures related to the process of year-end indirect rate variance disposition to be consistent with CAS, and ensure procedures recognize the individuality of Congressional Controls.

PNNL has submitted a revised accounting practice for rate variances that modifies the thresholds for retroactive rate adjustments and fiscal year-end rate variance distributions. When liquidating year-end variances, PNNL will conduct, for each pool, a distribution to active projects and other indirect cost objectives. Bringing a pool variance to zero is a mathematical process requiring numerous iterations to address impacts to and from other pools. PNSO will work with PNNL to establish an administrative threshold and avoid extraneous work and cost to the government. The new practice differs from the current practice in that PNNL sets a new administrative threshold for netting variances and making determinations of materiality at the final cost objective.

PNSO will work with OFS to approve PNNL's Disclosure Statement Revision 2021-01, which revises Battelle's accounting practice for rate variances. PNSO will determine the significance of the recommended practice change and work with OFS to determine the best value for the government and the continued applicability of the materiality exceptions. If the OIG provides them, PNSO and OFS reaffirm our position to use OIG provided materiality determination calculations. The materiality calculation should be consistent with 48 CFR § 9903.305 and not based on the arbitrary individuality of an auditor's opinion.

OIG Finding 4: BATTELLE'S UNALLOWABLE COSTS TREATMENT WAS NOT COMPLIANT WITH COST ACCOUNTING STANDARDS

PNSO non-concurs with the finding as written. The OIG bases their conclusion on work performed by PNNL's Internal Audit, PNSO, and OFS. There have been and continues to be iterative changes to PNNL's Disclosure Statement and processes. These ongoing efforts demonstrate the commitment to CAS 405 compliance.

DOE O 413.2C, Laboratory Directed Research and Development (LDRD), directs how to calculate the LDRD allocation base. The Order, which the OIG concurred on, was updated to reflect Congressional direction. Congress reaffirmed that direction in the FY 2021 National Defense Authorization Act. If the OIG disagrees with this DOE directed cost accounting practice, it should direct those concerns to the Department.

As written, the finding represents a final determination of CAS noncompliance, which is contrary to FAR 30.605, which states that CAS determinations are the Cognizant Federal Agency Official's responsibility. The OIG should only provide an opinion on CAS noncompliance, not a determination.

<u>Response to Recommendation</u>

The OIG did not provide a written recommendation.

OIG Finding 5: SUBCONTRACTS TYPES WERE NOT ALWAYS PROPERLY CLASSIFIED

PNSO concurs with the finding.

<u>Response to Recommendations</u>

The OIG makes two recommendations associated with this finding.

1. Revise subcontract classification policies, procedures, and system capabilities.
2. Reexamine the adequacy of subcontract audit coverage as required by the management and operating contract.

PNSO concurs with the recommendations.

PNSO will direct PNNL to reexamine subcontract contract type classification; update their policies, procedures, and systems to distinguish between different Contract types falling under the fixed price category.

PNSO will direct PNNL to update their subcontract audit coverage and policies and procedures to comply with Contract Clause I-157, DEAR 970.5244-1 Contractor's Purchasing System, 970.5232-3, Accounts, Records, and Inspection and submit to PNSO Contracting Officer for review by no later than one year after the formal date of the report issued.

Estimated Completion Date: One year after the formal date of the report issued.

OIG Finding 6: THERE IS AN INCREASED RISK OF UNALLOWABLE CLAIMED COSTS AND IMPROPER COST ALLOCATION

Ms. J. L. Quinones 9
21-PNSO-0021

PNSO non-concurs with the finding as written in the report. The OIG has not provided any objective evidence to support this finding.

It is inaccurate to state that Internal Audit, the OIG, and the Department have not had ready access to indirect cost details to ensure claimed costs were allowable, allocable, and reasonable. PNNL has provided this information when requested, including during regular biennial reviews conducted by the CSC.

It should be noted that CAS standards were developed to ensure that the Federal Government did not pay more than their appropriate share for indirect costs where Contractors had both federal and non-federal contracts. Through the incorporation of DEAR 970.5235-1 in its contract with DOE, PNNL is a Federally Funded Research and Development Centers (FFRDC). As defined in FAR 35.017, an FFRDC performs a federal mission, but allows for work to be performed for non-federal sponsors.

> *(a)(2) An FFRDC meets some special long-term research or development need which cannot be met as effectively by existing in-house or contractor resources. FFRDC's enable agencies to use private sector resources to accomplish tasks that are integral to the mission and operation of the sponsoring agency. An FFRDC, in order to discharge its responsibilities to the sponsoring agency, has access, beyond that which is common to the normal contractual relationship, to Government and supplier data, including sensitive and proprietary data, and to employees and installations equipment and real property. The FFRDC is required to conduct its business in a manner befitting its special relationship with the Government, to operate in the public interest with objectivity and independence, to be free from organizational conflicts of interest, and to have full disclosure of its affairs to the sponsoring agency. It is not the Government's intent that an FFRDC use its privileged information or access to installations equipment and real property to compete with the private sector. However, an FFRDC may perform work for other than the sponsoring agency under the Economy Act, or other applicable legislation, when the work is not otherwise available from the private sector.*

Further, M&O Contractors are performing a federal mission as defined by FAR 17.601:

> *Management and operating contract means an agreement under which the Government contracts for the operation, maintenance, or support, on its behalf, of a Government-owned or -controlled research, development, special production, or testing establishment wholly or principally devoted to one or more major programs of the contracting Federal agency.*

In 2016, the proportion of PNNL costs that were not attributable to federal funding sources was 3%. Therefore, the potential risk of misallocation between federal and non-federal funds is overstated by the OIG as it includes other Federal Sponsors in its measure of Strategic Partnership Projects (SPP).

Ms. J. L. Quinones 10
21-PNSO-0021

Response to Recommendation

The OIG did not make any specific recommendation on this finding. The OIG has played a key role in the development of the current SCIC and Audit Manual. The OIG has forums for addressing concerns with the SCIC that include: Updating the Audit Manual, bringing issues before the SCCAS, requesting policy changes, providing guidance (as required in the Cooperative Audit Strategy), and engaging the Department in a meaningful way. PNSO will work with OFS to assist the OIG in using these forums to address any concerns and issues.

If you have any questions or can be of further assistance, please contact Ryan Kilbury at ryan.kilbury@science.doe.gov or (509) 372-4030.

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