



OFFICE OF INSPECTOR GENERAL

U.S. Department of Energy

AUDIT REPORT

DOE-OIG-24-13

March 2024

**BECHTEL NATIONAL, INC.'S
COMPLIANCE WITH CONTRACT TERMS
RELATING TO SELF-PERFORMED
WORK AND SUBCONTRACTING FOR
THE WASTE TREATMENT AND
IMMOBILIZATION PLANT**



Department of Energy
Washington, DC 20585

March 11, 2024

**MEMORANDUM FOR THE MANAGER, OFFICE OF RIVER PROTECTION; AND
THE DIRECTOR, ENVIRONMENTAL MANAGEMENT
CONSOLIDATED BUSINESS CENTER**

SUBJECT: Audit Report on Bechtel National, Inc.'s Compliance with Contract Terms Relating to Self-Performed Work and Subcontracting for the Waste Treatment and Immobilization Plant

The attached report discusses our review of Bechtel National, Inc.'s compliance with contract terms relating to self-performed work and subcontracting for the Waste Treatment and Immobilization Plant. This report contains eight recommendations that, if fully implemented, should help ensure that the Department of Energy is not billed for unallowable fees, and that more competitive subcontracting opportunities are available to other vendors. Management fully concurred with our recommendations.

We conducted this audit from June 2022 through November 2023 in accordance with generally accepted government auditing standards. We appreciated the cooperation and assistance received during this audit.

A handwritten signature in black ink, appearing to read "Jennifer L. Quinones", is positioned above the printed name.

Jennifer L. Quinones
Deputy Inspector General
Office of Inspector General

cc: Deputy Secretary
Chief of Staff



Department of Energy Office of Inspector General

Bechtel National, Inc.'s Compliance with Contract Terms Relating to Self-Performed Work and Subcontracting for the Waste Treatment and Immobilization Plant (DOE-OIG-24-13)

WHY THE OIG PERFORMED THIS AUDIT

The Department of Energy uses self-performance clauses to increase competition, broaden industry participation, and assist small business concerns. If implemented, the clauses can increase competition and lead to reduced contract prices.

We initiated this audit to determine whether Bechtel National, Inc. (Bechtel) complied with contract terms relating to self-performed work and subcontracting for the Waste Treatment and Immobilization Plant. Specifically, our audit determined whether Bechtel was on track to meet its self-performance objectives, billed unallowable subcontractor fees, and emphasized competitive subcontracts for work that was not self-performed.

What Did the OIG Find?

We found that Bechtel did not achieve its contract objective relating to self-performed work and subcontracting for the Waste Treatment and Immobilization Plant. First, Bechtel is not on track to meet its self-performance 60 percent objective. Second, Bechtel billed the Department for unallowable fees, which Bechtel later self-disclosed. Third, Bechtel did not competitively award many of its subcontracts.

We attributed these issues to the Department's need for additional oversight. Specifically, the Department did not prioritize, accurately monitor, or coordinate with Bechtel on meeting the self-performance objectives. In addition, we found that in the original contract, the Department agreed to a clause that only allows 7 days to review invoices as opposed to the typical 30 days allowed under the Prompt Payment Act, making it difficult for a thorough review to be performed; did not use the full 7 days allowed; and lacked the information needed to identify unallowable fees. Finally, Bechtel was not giving vendors sufficient time to respond to solicitations.

What Is the Impact?

These issues resulted in \$700 million in reduced subcontracting opportunities for small businesses and other vendors; unallowable fees of \$2.3 million being billed, but later credited to the Government; and likely increased subcontract costs.

What Is the Path Forward?

To address the issues identified in this report, we have made eight recommendations that, if fully implemented, should help ensure that the Department is not billed for unallowable fees, and that more competitive subcontracting opportunities are available to other vendors.

BACKGROUND

To address the environmental risk posed by the waste stored at the Hanford Site Tank Farms, the Department of Energy is constructing a treatment facility called the Waste Treatment and Immobilization Plant (WTP). WTP's mission is to convert 56 million gallons of chemical and radioactive waste into a stable glass form for permanent disposal. This waste is currently stored in 177 underground tanks, most of which are beyond their design life. In December 2000, the Department awarded Bechtel National, Inc. (Bechtel) a \$4.3 billion cost-reimbursement contract to design and complete the WTP. As of March 2023, the contract value was approximately \$15 billion.

Bechtel's original WTP contract contained a clause requiring Bechtel to self-perform 40 percent of the work on the contract and to subcontract the remaining 60 percent. Self-performed work includes work performed by the prime contractor, teaming partners¹, related entities, and affiliates. The remainder of the subcontracted work should be performed through competitive procurements with an emphasis on fixed-price subcontracts. Any deviation from these requirements would require approval from the Department. The self-performance percentage can only be calculated at the end of the contract when the final contract cost is known.

Bechtel considered the original self-performance clause in the contract not to be the best and most cost-effective approach and submitted a white paper to the Department documenting how to complete the work by using a combination of subcontracts and direct hires. On January 16, 2009, bilateral contract modification A143 increased the self-performance percentage from 40 to 60 percent, changed the self-performance requirements to objectives, changed the competitive procurement requirements to "expectations," and removed the requirement of approval from the Department for any future deviation from the clause. These contract changes substantially weakened the Department's ability to achieve its objectives of increasing small business participation and subcontracting activities on the WTP project. The active contract clause currently reads:

The objectives for the amount of self-performed work by the Contractor is 60 percent of the Total Estimated Contract Cost. Self-performed work by the Contractor includes any teaming partner(s) and any parent, wholly-owned subsidiary or affiliated organizations. It is the expectation of DOE that the remainder of the work shall be performed through competitive procurements with an emphasis on fixed price subcontracts.

Self-performance is inversely related to Bechtel's contract requirement for a Small Business Subcontracting Plan (Subcontracting Plan). As self-performed work increases, the percentage of subcontracted work decreases. For example, Bechtel's original contract contained a Subcontracting Plan with a subcontracting goal of 60 percent. When bilateral contract

¹ The term teaming partner, as used throughout this report, means a contractor team arrangement as defined in Federal Acquisition Regulation 9.601(2), which states "contractor team arrangement, as used in this subpart, means an arrangement in which a potential prime contractor agrees with one or more other companies to have them act as its subcontractors under a specified Government contract or acquisition program."

modification A143 increased the self-performed work percentage from 40 percent to 60 percent, the Subcontracting Plan goal was reduced from 60 percent to 40 percent.

Subcontracting work is essential to the Hanford mission, as it increases competition, broadens industry participation, and assists small business concerns. According to the July 2021 Executive Order on Promoting Competition in the American Economy, a fair, open, and competitive marketplace offers benefits for both small businesses and consumers. If done successfully, subcontracting can lead to reduced contract prices. Subcontracting work includes addressing small business subcontracting goals that are committed to consistent growth, maximization, and utilization of small businesses to contribute to the mission. As part of its mission, the Department strives to develop, promote, and challenge small businesses to gain overall project efficiency by providing meaningful Government and commercial subcontracting opportunities to the small business community, which include entities owned and controlled by socially and economically disadvantaged individuals, minority businesses, woman-owned small businesses, service-disabled veteran-owned small businesses, and HUBZone small businesses. In execution of its responsibilities under the WTP contract, Bechtel's Subcontracting Plan states that it will comply with Public Law 95-507, Amendments to the Small Business Investment Act of 1958; Federal Acquisition Regulation (FAR) 52.219-8, Utilization of Small Business Concerns; and FAR 52.219-9, Small Business Subcontracting Plan, to maximize the utilization of small business concerns for purchasing goods and services.

In addition to self-performance contract requirements, Bechtel's WTP contract states that all fees associated with a consortium, joint venture, and/or teaming arrangement are unallowable costs of the contract. The clause further states that fees of wholly owned or majority-owned subcontractors, as well as affiliates of any team members, are also unallowable.

We initiated this audit to determine whether Bechtel complied with contract terms relating to self-performed work and subcontracting for WTP. Specifically, our audit determined whether Bechtel was on track to meet its self-performance objectives, billed unallowable subcontractor fees, and emphasized competitive subcontracts for work that was not self-performed.

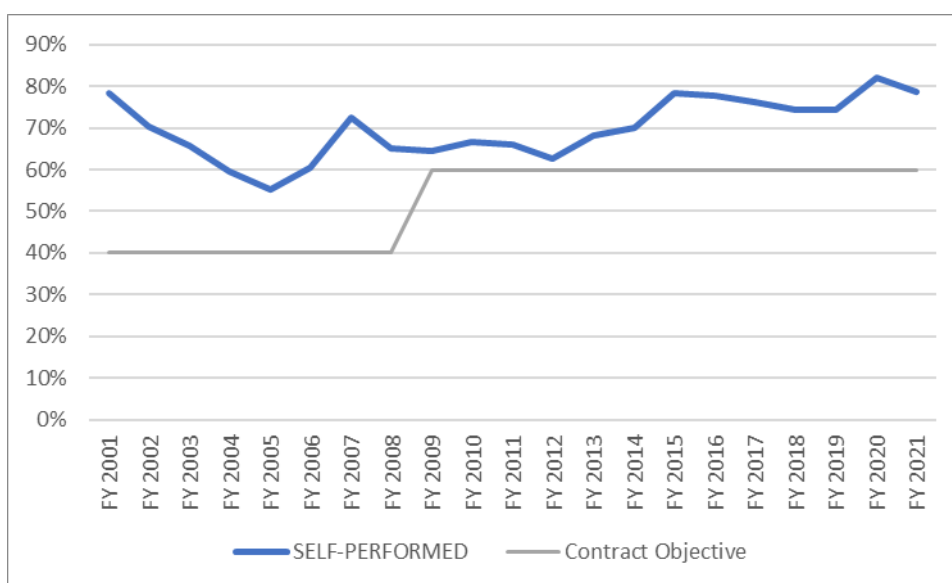
UNMET SELF-PERFORMANCE OBJECTIVES

We found that Bechtel is currently exceeding the 60 percent self-performance objective from its H.13 contract clause. Specifically, we estimate that Bechtel self-performed between 69.90 to 73.75 percent of its contract commitments as of September 2021. At the start of our audit, the Department's calculation of self-performance was incomplete, and Bechtel had not made a calculation. Therefore, we constructed our number based on input we requested from both parties.

We found that the Department used Bechtel's biannual subcontracting report for individual contracts (small business report) to monitor Bechtel's self-performance percentage. The Department also uses these small business reports to determine if Bechtel is compliant with its Subcontracting Plan. The small business report provides Bechtel's total amount of subcontracting dollars at the end of each fiscal year (FY). Using the total estimated contract cost and total subcontracting amount from Bechtel's report dated September 30, 2021, the

Department calculated a self-performance percentage of 67.04 percent. The Department’s calculation not only indicated that Bechtel had not met its self-performance objective, but Bechtel had also missed its subcontracting goal contained in its Subcontracting Plan by 7 percent. However, Bechtel disagreed with the Department’s calculation because it did not include the cumulative period of performance since the award date, excluded foreign purchases, and included the costs of its teaming partner. The self-performance clause states that the self-performance percentage is to be calculated using total contract costs, and teaming partner costs are considered self-performed work. In response to our audit, Bechtel submitted to us its own self-performance calculation of 70 percent. Bechtel’s calculation demonstrates that it has not met its contract objective on a cumulative basis. In addition, Chart 1 clearly demonstrates that Bechtel has also never met its self-performance objective on an annual basis.

Chart 1: Historical Self-Performed Work Percentage*



* Data derived from Bechtel’s self-analysis.

We conducted our own calculation of Bechtel’s self-performed work and found that Bechtel did not meet the self-performed work objective. In our calculation, we used September 30, 2021, as a contract end date, which allowed us to use the end of FY 2021 as a cumulative data cut-off point. Because the self-performance calculation is meant to be calculated at the end of the contract with the total estimated contract cost, we analyzed a range of data points to represent the “total amount” of the contract. See Table 1 on the following page. Our calculation included \$933 million of teaming partner and affiliate costs as self-performed work. Additionally, our calculation included \$50 million in foreign transactions as subcontract costs. Ultimately, we found that, as of September 30, 2021, Bechtel has self-performed work from 69.90 to 73.75 percent as opposed to its 60 percent objective, thus reducing subcontracting opportunities for small businesses and other vendors.

Table 1: Range of Auditor Self-Performance Calculation*				
	[A] (Base) Total Amount	[B] Subcontracted	[A-B] (Pool) Self-Performed	[(A-B)/A] Self-Performed %
Actual Costs of Work Performed	\$12,887,140,846	\$3,878,917,226	\$9,008,223,620	69.90%
September 2021 Dollars Obligated	\$13,939,799,776	\$3,878,917,226	\$10,060,882,550	72.17%
September 2021 Current Contract Value	\$14,775,514,090	\$3,878,917,226	\$10,896,596,864	73.75%

* Amounts are cumulative from contract award date through September 30, 2021.

Self-Performance Objective Not Prioritized

This occurred because the Department did not emphasize the self-performance objective as an ongoing priority. Specifically, the Department modified the self-performance clause which significantly reduced its prominence within the contract. Additionally, during our review, we found that Department officials did not regularly emphasize self-performance expectations with Bechtel, which resulted in Bechtel not focusing on this objective either. Finally, the Department did not effectively use fee to limit Bechtel's self-performance.

The Department's 2009 modification significantly reduced the prominence and emphasis of the self-performance clause. The modified clause was no longer binding when the self-performance requirements were changed to objectives and Department approval requirements were eliminated. Our audit revealed that the Department did not document a rationale explaining why the self-performance clause was modified, and the Contracting Officers that executed the modification are no longer with the Department.

As a result of the modification, Bechtel has not placed emphasis on meeting the objective. At the beginning of our audit, Bechtel could not tell us what percentage of the contract it had self-performed. Bechtel stated that it has not been monitoring its self-performance percentage because there is no requirement to do so. Bechtel also stated that the self-performance clause is no longer a contract requirement; consequently, Bechtel stated there should not be any contractual remedy, penalty, or negative consequence for not meeting the self-performance objective. Finally, Bechtel pointed out that the amount of self-performed work has been affected significantly by increases in self-performed labor costs caused by events outside of Bechtel's control such as time extensions for work stoppages.

The Department ineffectively used fee to limit Bechtel's self-performance. The Department and Bechtel both contended that the contractor performance fee is tied to the objectives of the contract, and contractor performance reviews can be used to encourage less self-performed work. However, our audit found that the Department only referred to the H.13, *Self-Performed Work*, contract clause and to the subcontracting plan in one of the last nine award fee evaluation

reports. Although fee can be used to encourage more subcontracting, it is significantly less impactful than a contract clause specifically tailored to self-performance requirements. Using fee to enforce objectives is a weaker strategy because contractor fee adjustments are based on multiple contract objectives.

The Department contributed to Bechtel's trend of increasing its self-performed work percentage by inappropriately addressing self-performance in its award fee reports. For example, in FY 2021, the Department rated self-performed work under the "Project Performance" award fee objective, which received a "good" rating of 72 percent (\$1.44 million of \$2 million available). The Department listed Bechtel's self-performance as both a strength and weakness.

The Department reported that:

- Strength: For the year 2021 (not cumulative), Bechtel met or exceeded each of the goals in its small business Subcontracting Plan and was compliant with the H.13 contract clause.
- Weakness: On a cumulative basis, Bechtel was not compliant with the H.13 contract clause and did not meet goals for small business and small disadvantaged business concerns. Because of this shortfall, in FY 2020, Bechtel established an internal goal to award 75 percent of all new award transactions to small businesses. Only 60 percent of awards in calendar year 2021 were made to small businesses.

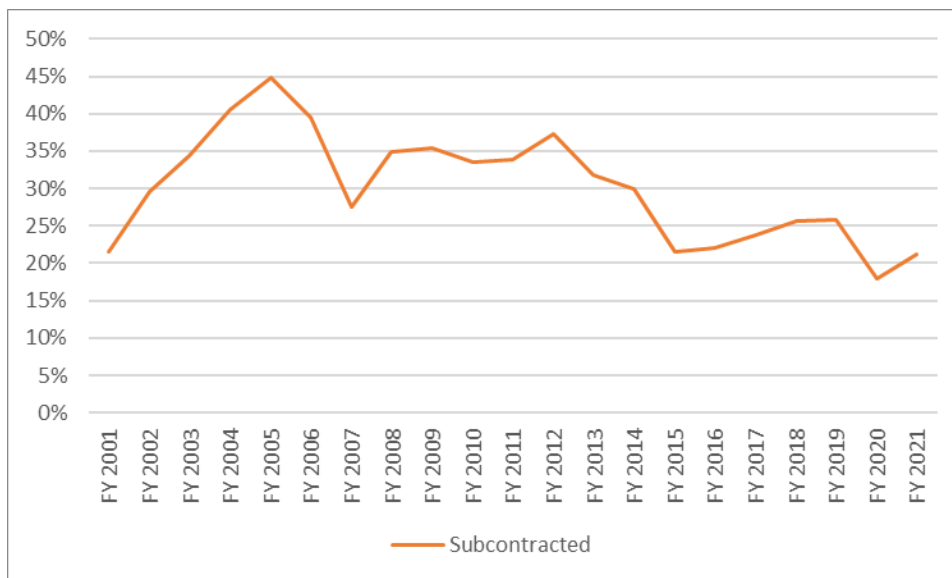
Though the Department reported, as a strength, that Bechtel was compliant with the self-performance clause, Bechtel's own data shows that the objective was missed by 19 percent in 2021. The Department used the change in the overall contract value to determine that Bechtel was compliant and had met the self-performance 60 percent objective in 2021 despite achieving only 55 percent. In some years, the contract value has increased substantially while it decreased slightly in other years. If the Department consistently used this method to assess self-performance year after year, it would have calculated yearly self-performance percentages since FY 2016 that ranged from -5,590 percent to 2,399 percent. Without specific data from Bechtel, it is nearly impossible to determine what the self-performance percentage should be for a single year. Yearly assessments of self-performance would require that the Department obtain more information than what is reported in Bechtel's small business reports such as yearly subcontracted and self-performed amounts. Finally, the Department reported and rated Bechtel's self-performed work and its award fee on "calendar year 2021" when the data it used was from a small business report for "[FY] 2021²." FY excludes data for the last 3 months of calendar year 2021 and includes data from the last 3 months of calendar year 2020. Using FY data to make a calendar year assessment may further contribute to an inaccurate conclusion (i.e., Bechtel meeting its self-performance objective when it did not).

In summary, we noted a significant decline in subcontracted work on the WTP contract starting in 2005. We noted that this decline has continued for the duration of the contract.

² The Department's FY is from October 1 through September 30.

The Department is unable to explain why the self-performance clause was modified in 2009. As stated previously, subcontracting benefits both small businesses and consumers and leads to reduced contract prices. Chart 2 shows subcontracting for the duration of the contract and clearly demonstrates the continuing decline in subcontracting.

Chart 2: Historical Subcontracting Percentage*



* Data derived from Bechtel's self-analysis.

Self-Performance Objective Not Monitored

Contributing to the self-performance objective not being met or emphasized is the Department's inability to accurately monitor contractor self-performance expectations and related metrics. Specifically, we found that the reports supplied by Bechtel and used by the Department to monitor Bechtel's self-performance are not reliable and lack the transparent support required to make accurate calculations.

We found that Bechtel was unable to provide supporting data that reconciled to the 2021 small business report it submitted to the Department, and the reported amounts were incorrect. The Department relied on the small business report to calculate the contractor self-performance percentage; however, it had no process in place to confirm whether the reported data was accurate. Bechtel advised us that its system creates the report using data based on a snapshot-in-time, and due to this limitation, the system cannot replicate the report once it is generated.

Further, the support for Bechtel's September 2021 report submission was not retained; therefore, Bechtel was unable to reconcile the report to the supporting details. In addition, based on our inquiry, Bechtel self-identified errors in its unreconciled data that could increase Bechtel's reported subcontracted amounts by \$400 million. Bechtel told us that it would work with the Department to correct the self-identified errors and resubmit its reports. If Bechtel's corrections are accurate, our calculated contractor self-performed percentage would be reduced from 71.09 to 66.85 percent, which still exceeds the objective of 60 percent.

The Department used Bechtel's small business reports to monitor self-performance although we found that the reports were unreliable. Our audit found that the numbers contained in the reports were not always the final subcontract amounts and will likely need to be adjusted when the subcontract is closed out. For example, one subcontract had a reported value of \$5.4 million, but Bechtel had made no payments on this subcontract as of September 2021. The subcontract had no action since October 2001, and Bechtel will likely reduce the value to \$0 when the subcontract is closed out. In addition, we identified data input errors that, in one instance, took over 1 year to correct. Finally, Bechtel was inconsistent in the numbers it input into its system.

In addition, Bechtel's small business reports lacked the transparent support required to make accurate calculations. If the Department is going to use the small business reports to evaluate self-performed work, as it told us it would, then it needs visibility of the data Bechtel uses to create the report. For example, Bechtel's supporting data that it provided the Department did not identify important information like foreign transactions that could be added to the self-performance calculation. Further, Bechtel's data did not clearly identify teaming partners that need to be removed from the data for the Department to create an accurate self-performance calculation. We estimate that the net effect of these adjustments could increase the self-performed percentage by approximately 6–7 percent.

BILLING UNALLOWABLE SUBCONTRACTOR FEES

Bechtel self-disclosed billing the Department over \$2.3 million in unallowable teaming partner fees. Bechtel's contract clause B.4, *Allowability of Subcontractor Fee*, states, "[I]f the Contractor is part of a consortium, joint venture, and/or other teaming arrangement, the team shall share in this Contract fee structure (i.e., separate additional 'subcontractor fee' for teaming partners will not be considered an allowable cost under the Contract). If a subcontractor, supplier, or lower-tier subcontractor is a wholly owned, majority[-]owned, or affiliate of any team member, any fee or profit earned by such entity will not be considered an allowable cost under this Contract." According to the contract, Bechtel must share its fee with its major teaming partner and not bill these fees to the Department.

We obtained an organizational chart from Bechtel's teaming partner to determine if any of its affiliate's fees had been billed to the Department. Any fees billed by these affiliates are unallowable according to the B.4 clause of Bechtel's contract. Our review of the organizational chart identified complex ownership relationships. For example, the current chart identified 192 companies and up to 10 layers of ownership. Additional research demonstrated significant acquisitions and mergers by the teaming partner, which made it difficult to track changes in ownership and the relationships of entities over time. As a result, we were only able to compare the current list of affiliates to Bechtel's list of subcontractors.

Our audit found that contrary to requirements, Bechtel billed the Department \$2,319,085 in unallowable subcontracting fees when it submitted its Voucher 722 to the Department on April 20, 2022. Bechtel promptly notified the Department of the unallowable fee on April 26, 2022; however, the voucher had already been reviewed and paid by the Department. Bechtel included a credit on its May 5, 2022, voucher to correct the error. This voucher was submitted and paid

after we had discussed the contract requirements regarding fee with the Department and Bechtel at the onset of our audit and again at the beginning of April.

The payment of unallowable fees by the Department is not new. For example, in October 2018, the Department paid Bechtel \$34,251 in unallowable fees. In this example, Bechtel did not identify the unallowable fee as promptly as it did in April 2022, and it did not credit the Government until 1 month later. In both instances, Bechtel and the Department did not identify unallowable fees before Bechtel was paid by the Department.

Additional Oversight Needed

The payment of unallowable fees occurred because voucher reviews were not designed to prevent the payment of unallowable fees. Specifically, Bechtel's review did not identify errors before submission of the invoice for payment, so the Department needs to improve its oversight.

Bechtel indicated that unallowable fees were billed in 2018 because the wrong accounting codes were assigned to the fees. At that time, Bechtel implemented measures to ensure that coding was listed on the check request cover sheet and in all pertinent supporting documentation. In 2022, this information assisted Bechtel in identifying that accounting codes assigned to unallowable fees were inadvertently billed to the Department. The fact that Bechtel was able to identify the incorrect billing within 6 days demonstrates improvements in Bechtel's review process since 2018. Bechtel implemented additional controls in 2022 to prevent future occurrences. We were unable to audit the effectiveness of the additional controls and whether it will identify errors before payment because the controls were implemented during our audit.

Our audit also found that the Department's oversight controls need to be enhanced to monitor for unallowable performance fees related to subcontracting. The Department does not have a comprehensive list of Bechtel's teaming partners, related entities, and affiliates that is required to determine if subcontractor fees are unallowable. The complexity discussed previously regarding contractor ownership changes through various mergers and acquisitions makes it difficult for the Department to monitor company relationships over time and effectively enforce the contract clause. In addition, as noted earlier, the reliance on contractor self-disclosures demonstrates the Department's review process is not thorough enough to identify unallowable fees. A Department official told us that more thorough reviews are performed by the Defense Contracting Audit Agency (DCAA) each quarter through post-payment audits. However, we found that DCAA does not review contractor performance fees as part of its audits. A DCAA official told us that agreed-upon procedures would be established to review fee only when the Department's audit request specifically requests a review of such fees. Our review of prior DCAA audits indicated no such agreed-upon procedures have been performed on this contract, and a Department official told us the Department had not requested such reviews to be performed to date. After the unallowable fee was self-disclosed, we noted that the Department attempted to work with Bechtel to identify past billings of similar fees and mitigate the risk of future occurrences.

Insufficient Review Time

Contributing to the payment of unallowable fees, the Department had a limited time allotted for voucher review, making it difficult for Department reviewers to identify unallowable fees. Although the Prompt Payment Act typically allows the Government 30 days to pay an invoice, Bechtel's original contract stated that "contract financing payments shall be made on the seventh day after receipt of a proper contract financing request by the designated billing office." To meet the 7-day requirement, the Department review team stated that they usually take 3–4 workdays to review the voucher, so it can be processed for payment. The Department review team stated that they usually take 1–2 hours to perform a high-level overview that consists of reconciling the invoices to supporting documents, identifying unusual transactions, and looking at historical costs for trends. However, a Department invoice reviewing official told us the allotted timeframe given for review is not enough to review for unallowable fees. We requested information from the Department to determine how many days were given on other contracts. We found that the Department has multiple contracts that provide the Government less than 30 days to pay a contractor invoice with the most recent awards allowing 14 days. We also found that the Department does not have a policy or procedure in place to evaluate whether this contracting practice is in the best interest of the Government.

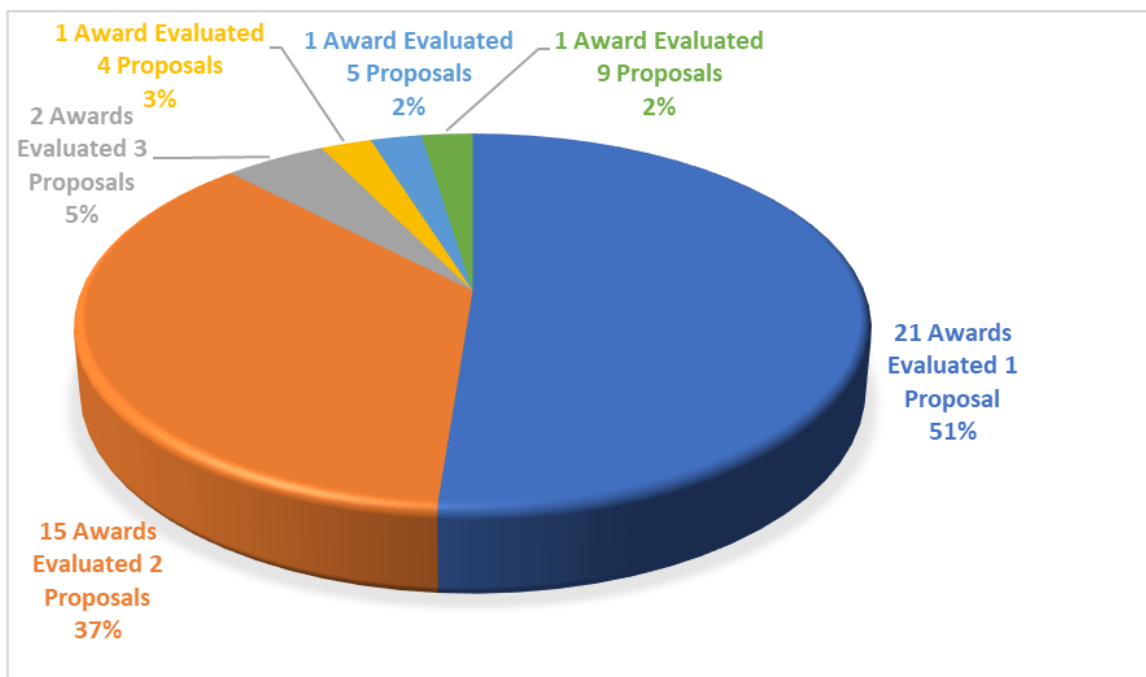
Finally, our audit found that the Department is not using the full amount of time the contract provides to review the vouchers for payment. For example, the Department approved Voucher 722 in 2 days after it was submitted and paid it in full within 5 days. Upon a review of payments made since April 2009, we found that the Department took an average of 3 days to approve each voucher and has paid 55 percent of its vouchers before the allowed 7 days.

NOT EMPHASIZING COMPETITIVE FIXED-PRICE SUBCONTRACTS

Bechtel did not emphasize competition for work that was not self-performed, as required by its H.13 contract clause. Adequate competition broadens industry participation, assists small business concerns, and if done successfully, can lead to reduced contract prices. Of the 41 sampled purchase orders we reviewed, 21 (51 percent) were awarded by evaluating³ only 1 proposal, of which 10 were sole source acquisitions. An additional 15 (37 percent) were awarded by evaluating only 2 proposals. Our testing indicated that only 5 (12 percent) of our sampled items were awarded by evaluating 3 proposals or more. A low number of proposals being evaluated for each award can demonstrate a low level of competition for each procurement. Chart 3, on the following page, displays the number of proposals evaluated prior to each award.

³ Evaluated proposals consist of those that were considered acceptable at the end of the solicitation of which Bechtel reviewed prior to making the award.

Chart 3: Proposals Evaluated Before Award

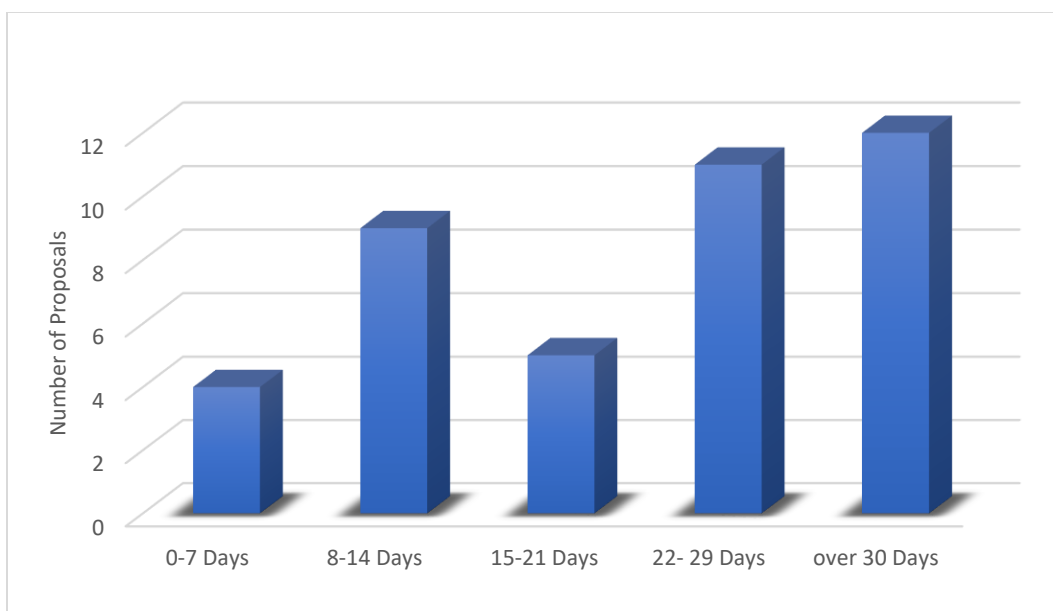


When presented with our audit findings, the Department indicated that it had found similar observations in its internal reviews. The Department stated that it has discussed these issues with Bechtel but did not provide evidence of these discussions or reviews. Both the Department and Bechtel indicated that the nature of the WTP project (i.e., one-of-a-kind, technically challenging, and very complex) makes it difficult for Bechtel to competitively award many of its procurements. The high number of sole source acquisitions contained in our sample (24 percent) and their accompanying justifications support the complexity of the WTP project; however, the potential list of vendors contained in the purchase order files demonstrated the availability of competition for the remaining sampled items. Bechtel's solicitation process tends to eliminate many of the proposals received prior to final award. For example, in one instance, Bechtel solicited 13 companies, received 4 proposals, but only evaluated 1 proposal prior to award. Companies rescinded proposals due to design changes, proposal expiration, and other factors. In addition, we found multiple instances where prospective offerors may have been given an improper advantage by allowing a certain company more time for proposal preparation than others. In one instance, the buyer allowed a company more time for proposal preparation when two companies did not bid because these companies were unable to meet the original due date.

A lower level of competition occurred because Bechtel used short time durations for companies to respond to request for proposals. Excluding the 10 sole source acquisitions, our audit found that 20 of our 31(65 percent) sampled items issued request for proposals with due dates of less than 30 days. Bechtel's procedure 24590-WTP-GPP-RAPS-PS-3006, *Solicitations, Proposal Evaluation, Negotiations and Award Documentation*, states, "Sufficient time for preparation and submission of proposals must be provided and the cut-off date and time clearly specified in the solicitation. Thirty calendar days is typical for receipt of proposals from the date of issuance of the solicitation; however, schedule and acquisition complexity may modify this timeframe.

Limited proposal response time may restrict competition.” When presented with our audit findings, Bechtel stated that it was standard practice to solicit bids for less than 30 days when the solicitation was for basic commercial services (e.g., trash, portable toilets, maintenance of office equipment) or consumables (e.g., diesel fuel, unleaded fuel, water). Although we were able to confirm that 10 (50 percent) of the 20 items mentioned above were for these types of services, we found that 10 (50 percent) were not. In fact, in some instances, the purchase orders mentioned the complexity of the purchase. In addition, we found in multiple instances Bechtel’s standard practice of less than 30 days for commercial items increased the number of companies that declined to bid based on insufficient time. Therefore, we concluded that the effect of reducing time for proposal submission, in contradiction of Bechtel’s own guidance, resulted in fewer proposals from which to select an awardee. Chart 4 displays the amount of time given for each request for proposal.

Chart 4: Request for Proposal Days Given



OTHER MATTERS—LONG CONTRACT

Many of the issues identified in our report can also be attributed to the long-term contract that Bechtel has held for over 20 years for the WTP. Very long contracts can present challenges for the Department such as legacy contract clauses and terms. The award date on the WTP contract was December 11, 2000, with an original contract end date of July 31, 2011. This contract is a completion contract with a current period of performance through September 30, 2024. Additionally, the Department is currently at approximately four times the original cost and 15 years beyond the original milestone for the start of hot commissioning in the WTP contract. Recognizing that the WTP project has been challenged by numerous, unfortunate situations over the years, the following items are challenges of lengthy contracts, including the WTP contract:

1. Competition—The Department misses out on new competitors that were not around 20 years ago. Others may be able to use new technologies or new strategies to compete for the chance to accomplish the Department’s mission.
2. Contract clauses—Many FAR clauses and other contract clauses have been updated, modified, or added in the last 20 years. The Department has stated on multiple occasions that it cannot easily make unilateral contract changes. For example, Bechtel’s contract did not include the clauses for business systems, the Mandatory Disclosure Rule, Department Order 471.7, *Controlled Unclassified Information*, or applicable clause updates.
3. Contract terms—The current contract has several terms that were negotiated in prior years and some acquisition officials who constructed those terms are no longer with the Department, which leaves only the contract award file to support development of the contract. Those legacy contract files may not always adequately support contract clause and modification rationale. For example, the Department has only 7 days to review a Bechtel invoice for WTP, whereas the Prompt Payment Act typically allows the Government 30 days to pay an invoice. In addition, Bechtel is the only one of the large Hanford Site prime contractors that does not use certain Hanford Site services.
4. Contract Closeout—The current contract is over 20 years old, which puts many of the contract years beyond the 6-year limitation period of the Contract Disputes Act. As a result, the Department may be prevented from recovering any unallowable costs that are identified at contract closeout.

Work at the WTP will continue for several more years. Specifically, WTP should begin treating low-activity waste as soon as practical, and the treatment of high-level waste should begin about a decade later. The Department completed design and construction of the Low-Activity Waste facility, and the facility was 85 percent complete with startup in January 2023. In the near future, the Department is planning to start the commissioning scope for WTP’s Low-Activity Waste facility. The Department also stated that it plans to soon restart work on the High-Level Waste facility and solicited public feedback on the Hanford Site’s High-Level Waste Treatment Analysis of Alternatives in January 2023. Based on the amount of work still to be completed, the length of the contract could continue to be extended.

EFFECT OF NONCOMPLIANCE WITH CONTRACT TERMS AND OBJECTIVES

By not meeting its 60 percent self-performance contract objective, Bechtel reduced subcontracting opportunities for small businesses and other vendors by at least \$700 million⁴. Our audit found that it will be a challenge for Bechtel to recover from the cumulative deficit in subcontracted work to meet the self-performance objective in the future. Bechtel’s overall effort described in its Subcontracting Plan aims to subcontract 40 percent of the total contract, and as of September 30, 2021, Bechtel had subcontracted less than 35 percent. We estimated that

⁴ We calculated this amount using numbers reported in Bechtel’s 2021 small business report. The \$700 million is the conservative difference between the actual amount of subcontracts and how much should have been spent on subcontracting per the Subcontracting Plan goal.

Bechtel would need to subcontract 50–86 percent of additional future contract costs, depending on how many years the contract may be extended, to be able to meet the self-performance objective.

In addition, the fact that Bechtel could not initially provide or monitor its self-performed work percentage at the onset of this audit can contribute to a lack of intention and good-faith effort to adhere to the Subcontracting Plan. A self-performance objective of 60 percent translates to a subcontracting goal of 40 percent, which is what was also stated in Bechtel’s Subcontracting Plan. Not only did Bechtel not meet its overall subcontracting goal, but it repeatedly did not meet the overall goal for small business spending. Bechtel planned to mitigate the situation by establishing an internal goal to award 75 percent of new award transactions to small businesses; however, it did not achieve this. Bechtel’s Subcontracting Plan goal is to subcontract 16.2 percent of the total contract with small businesses, and as of September 30, 2021, Bechtel had subcontracted approximately 12.9 percent of the total contract with small businesses. It is important for the Department to evaluate Bechtel’s small business metrics, not just as a percentage of subcontracts, but as a percentage of the contract as a whole. For example, when Bechtel’s small business metrics are analyzed as a percentage of total subcontracts, it meets most of its goals. However, when we analyze Bechtel’s small business metrics as a percentage of the contract total, Bechtel only meets the goal for service-disabled veteran-owned small business.

Intentional failure to perform in accordance with the requirements of a Subcontracting Plan may subject Bechtel to liquidated damages under FAR 52.219-16, Liquidated Damages-Subcontracting Plan. Although liquidated damages are not calculated until the end of a contract, if the contract had ended September 2021, potential liquidated damages could have been approximately \$208 million. Further, the Department may have overpaid Bechtel in award fee by inappropriately considering its self-performance metrics a strength in the 2021 “Project Performance” award fee objective, and by not addressing Bechtel’s high self-performance metrics in prior years.

The billing of over \$2.3 million in unallowable fees necessitated the Department to confirm the incorrectly billed amounts, validate the proper application of credits, and confirm that Bechtel has identified all unallowable fees that have been billed. Further, the Department will have to implement additional steps in its own review process to prevent paying unallowable fees in the future while still meeting the short review time allowed by the contract.

Finally, Bechtel’s lack of emphasis on competitive procurements may have resulted in excess pricing on many of its subcontracts. According to the current Presidential Administration’s July 2021 Council of Economic Advisers, basic economic theory demonstrates that when firms compete for customers, it leads to lower prices, higher quality goods and services, greater variety, and more innovation.

RECOMMENDATIONS

We recommend that the Manager, Office of River Protection, direct Department Contracting Officers to:

1. Use the contract terms remaining in the contract to prompt Bechtel to meet the self-performance objective by encouraging and incentivizing more subcontracting;
2. Discuss the self-performance status with Bechtel, develop a mutual method of accurately calculating self-performance, and establish a plan to monitor the self-performance objective on a regular basis;
3. Evaluate the impact of contract time extensions on the self-performance percentage objective and its effect on the Subcontracting Plan goals, and adjust the contract (if appropriate);
4. Ensure Bechtel identifies all teaming arrangements, related entities, and affiliates needed to facilitate reviews for subcontractor unallowable fees on a regular basis;
5. Review Bechtel's corrective actions for invoice review to validate implementation and effectiveness, and confirm that Bechtel has identified all unallowable fees that have been billed to the Department;
6. Evaluate the invoice review process for the depth and breadth required to make a complete and accurate review of the allowability, allocability, and reasonableness of invoice costs before payment; and
7. Ensure that Bechtel follows its policies, procedures, and practices that allow subcontractors 30 or more days to respond to request for proposals unless a specific justification is documented.

We recommend that the Director, Environmental Management Consolidated Business Center:

8. Develop a policy or procedure to periodically evaluate whether the Department's practice of awarding terms that require payment in less than 30 days is in the best interest of the Government.

MANAGEMENT RESPONSE

Management fully concurred with our recommendations and identified responsive corrective actions to address the reported issues. Specifically, for Recommendation 1 and Recommendation 3, management will request a plan from Bechtel for changes and/or improvements to its self-performance metric for the High-Level Waste design scope, and management will use the 2025 performance evaluation and measurement plan and award fee going forward to incentivize Bechtel's subcontracting. For Recommendation 2 and Recommendations 4–7, the Department will meet with Bechtel to jointly act upon the recommendations, internally evaluate its invoice review process, perform periodic reviews to confirm fees paid are appropriate, and continue to require Bechtel to comply with contract requirements. For Recommendation 8, the Environmental Management Consolidated Business Center will develop a policy or procedure to periodically evaluate whether the Department's

practice of awarding terms that require payment in less than 30 days is in the best interest of the Government.

Management's comments are included in Appendix 3.

AUDITOR COMMENTS

Management's comments and proposed actions were responsive to our recommendations, and we agree with the planned actions to be taken.

OBJECTIVE

We initiated this audit to determine whether Bechtel National, Inc. (Bechtel) complied with contract terms relating to self-performed work and subcontracting for the Waste Treatment and Immobilization Plant.

SCOPE

The audit was performed from June 2022 through November 2023 in Richland, Washington. The audit scope included a review of Bechtel's self-performed work and subcontracting practices from January 2015 through September 2021. The audit was conducted under Office of Inspector General project number A22RL008.

METHODOLOGY

To accomplish our audit objective, we:

- Reviewed applicable policies, procedures, laws, and regulations pertaining to Bechtel's self-performed work and subcontracting.
- Reviewed reports issued by the Office of Inspector General, Government Accountability Office, and other entities such as external audit firms.
- Interviewed key personnel from Bechtel, the Office of River Protection, and the Department of Energy's Office of Environmental Management.
- Reviewed billing procedures against contractual requirements and adequacy of verification processes.
- Obtained and reviewed self-performance reporting and subcontracting information to determine if self-performed work and subcontracting practices aligned with contract terms.
- Evaluated the Department's self-performance calculation and Bechtel's small business reports to determine the accuracy of the Department's self-performance calculation.
- Obtained and reviewed purchase orders to determine compliance with contract terms relating to self-performed work and subcontracting. We judgmentally sampled 41 purchase orders that were issued from January 2015 through September 2021. 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

Appendix 1: Objective, Scope, and Methodology

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 control activities components as well as the underlying principles implementation of control activities and design activities for information systems. 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.

To assess the reliability of Bechtel's support for its small business reports to meet our audit objectives, we: (1) performed electronic testing; (2) reviewed related documentation; and (3) interviewed agency officials knowledgeable about the data. The results of our electronic testing determined that the data was incomplete, inaccurate, and inconsistent. Therefore, we determined the data was not sufficiently reliable for the purposes of this report. To answer the audit objective, we quantified the impact of data errors whenever possible within this report and calculated a range of possible self-performance percentages as opposed to a precise number. Because our audit was limited to the review of the data needed to meet our objective, and because we were unable to quantify all the errors we identified in the data, this report may not have disclosed or quantified the impact of all data errors that may have existed at the time of this audit. However, when the data are viewed in context with other available evidence, we believe the evidence provides a reasonable basis for our findings, conclusions, and recommendations based on our audit objectives.

We assessed the reliability of Bechtel vouchers submitted to the Department from October 2015 through June 2022. To address the audit objective, Bechtel's invoice data and voucher documentation was gathered and analyzed. We requested an invoice log from Bechtel and voucher packages from the Department. We then reconciled the invoice log to the voucher packages from October 2015 through June 2022. All invoice information reconciled to the voucher packages without exception. We determined that the data was sufficiently reliable for the purposes of this report.

We held an exit conference with management officials on March 4, 2024.

Appendix 2: Related Reports

Office of Inspector General

- Audit Report on [*Small Business Subcontracting Requirements for Prime Contractors at the Hanford Site*](#) (DOE-OIG-20-51, July 2020). The audit found that Mission Support Alliance, LLC (MSA) and CH2M HILL Plateau Remediation Company reported meeting contractual requirements but, according to our calculations, did not. The companies inaccurately reported costs associated with team arrangements and incumbent employee arrangements by excluding these costs from its self-performed percentage calculations although its contract required these costs to count as self-performed. These issues were attributed to inadequate oversight by MSA, CH2M HILL Plateau Remediation Company, and the Richland Operations Office. In particular, it was found that MSA did not have formal procedures for reviewing and validating its own small business subcontracting reports.
- Special Report on [*Management of Suspended Procurements at the Waste Treatment and Immobilization Plant Project*](#) (OIG-SR-17-04, February 2017). The Department of Energy and Bechtel National, Inc. (Bechtel) had not fully resolved issues with suspended procurements for the Waste Treatment and Immobilization Plant's Pretreatment Facility. Specifically, neither the Department nor Bechtel has fully acted to terminate all 28 procurements recommended for termination. Although Bechtel initially suspended the procurements due to funding constraints, subsequent events resulted in major changes to the project with circumstances that increased the expected duration of the suspensions as well as affected the need for certain items.
- Audit Report on [*Management and Oversight of Information Technology Contracts at the Department of Energy's Hanford Site*](#) (DOE-OIG-16-10, April 2016). The audit identified potential unallowable profit of more than \$63.5 million. The Federal Acquisition Regulation requires that all non-commercial goods and services sold or transferred between affiliates are not subject to additional fee or profit, and our analysis identified that profit appeared to have been included in rates charged by Lockheed Martin Services, Inc. (LMSI). Federal officials also told us that paying LMSI fee or profit for such work resulted in payments that amounted to total markups on LMSI's subcontracts in excess of its costs ranging from 1 to approximately 7,000 percent. The identified weaknesses in relation to fee occurred, in part, because the Richland Operations Office had not promptly acted to compel involved contractors to comply with requirements.

Government Accountability Office

Audit Report on [*Department of Energy Contracting: Actions Needed to Strengthen Subcontract Oversight*](#) (GAO-19-107, March 2019). In fiscal year 2016, 28 entities participated in the Department's and its National Nuclear Security Administration's 24 largest prime contracts, which totaled \$23.6 billion of the Department's fiscal year 2016 obligations. The Government Accountability Office's (GAO) review of data about these contracts and subcontracts identified complex ownership relationships among the contractors and subcontractors. Under GAO's review, the Department and the National Nuclear Security Administration did not always ensure that contractors audited

Appendix 2: Related Reports

subcontractors' incurred costs as required in their contracts. GAO's review of 43 incurred-cost assessment and audit reports identified more than \$3.4 billion in subcontract costs incurred over a 10-year period that had not been audited as required, and some subcontracts remained unaudited or unassessed for more than 6 years. Department headquarters has not issued procedures or guidance that requires local offices to monitor contractors to ensure that required subcontract audits are completed in a timely manner, consistent with Federal standards for internal control. Without such procedures or guidance, unallowable costs may go unidentified beyond the 6-year limitation period of the Contract Disputes Act, preventing the Department from recovering those costs.

Appendix 3: Management Comments



Department of Energy
Hanford Site
Richland Operations Office | Office of River Protection

February 14, 2024

BIR-MAZ/24-BIR-0013

MEMORANDUM FOR: EARL OMER
ASSISTANT INSPECTOR GENERAL FOR AUDITS
OFFICE OF INSPECTOR GENERAL

FROM: SHELBY NICOLE SCHULLER
ACTING ASSISTANT MANAGER FOR PROCUREMENT

SHELBY
SCHULLER
Digitally signed by
SHELBY SCHULLER
Date: 2024.02.14
11:29:37 -0800

SUBJECT: MANAGEMENT RESPONSE TO THE OFFICE OF INSPECTOR
GENERAL DRAFT AUDIT REPORT ON BECHTEL NATIONAL,
INC.'S COMPLIANCE WITH CONTRACT TERMS RELATING TO
SELF-PERFORMED WORK AND SUBCONTRACTING FOR THE
WASTE TREATMENT AND IMMOBILIZATION PLANT

The U.S. Department of Energy (DOE) appreciates the opportunity to review and comment on the subject Office of Inspector General draft report (project number A22RL008). DOE has reviewed the information in the draft report with respect to the facts presented, conclusions reached, appropriateness of the recommendations, and reasonableness of any estimated potential monetary impact or other benefits that may be realized. DOE recognizes that additional improvements will only serve to ensure that the Department is not billed for unallowable fees, and that more competitive subcontracting opportunities are available to other vendors.

DOE's Management Response to each of the recommendations is summarized below:

Recommendation 1:

Use the contract terms remaining in the contract to prompt Bechtel to meet the self-performance objective by encouraging and incentivizing more subcontracting.

Management Response: Concur

DOE will request a plan from Bechtel National Inc. (BNI) for improvements to their self-performance metric for High Level Waste (HLW) Design scope and utilize the award fee plan going forward to incentivize increased improvement to the performance objective outlined in clause H.13 *Self-Performed Work*. The calendar year 2025 Performance Evaluation and Measurement Plan (PEMP) will be crafted in calendar year 2024 and approved for performance in calendar year 2025. This PEMP can be used to incentivize BNI's subcontracting element.

Appendix 3: Management Comments

Earl Omer
24-BIR-0013

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February 14, 2024

Furthermore, the Contractor Performance Assessment Report remains a viable incentive tool, as do quarterly feedback (if not more frequently) sessions with the contractor.

Estimated Completion Date: December 31, 2024

Recommendation 2:

Discuss the self-performance status with Bechtel, develop a mutual method of accurately calculating self-performance, and establish a plan to monitor the self-performance objective on a regular basis.

Management Response: Concur

DOE will take the action to meet with BNI and jointly act upon the recommendation.

Estimated Completion Date: November 1, 2024

Recommendation 3:

Evaluate the impact of contract time extensions on the self-performance percentage objective and its effect on the Subcontracting Plan goals and adjust the contract (if appropriate).

Management Response: Concur

To properly evaluate how extensions of the contract, as needed to support DOE's mission, impact the self-performance percentage objectives, DOE will request a plan from BNI for changes and/or improvements to their self-performance metric for the HLW Design scope. In addition, the DOE will utilize the award fee plan going forward to incentivize increased improvement to the performance objective outlined in clause H.13 *Self-Performed Work*.

Estimated Completion Date: January 30, 2025

Recommendation 4:

Ensure Bechtel identifies all teaming partners, related entities, and affiliates needed to facilitate reviews for subcontractor unallowable fees on a regular basis.

Management Response: Concur

DOE understands that the term "Teaming Partners," as used in this recommendation, to mean a "Contractor Team Arrangement" as defined in Federal Acquisition Regulation 9.601(2) and refers to any arrangements BNI may have with its subcontractors. As such, DOE will meet with BNI to jointly act upon the recommendation to identify any arrangements they may have with their subcontractors. DOE will ensure periodic reviews continue on a regular basis to confirm fees are paid appropriately per the contract terms and conditions.

Estimated Completion Date: November 1, 2024

Recommendation 5:

Review Bechtel's corrective actions for invoice review to validate implementation and effectiveness, and confirm that Bechtel has identified all unallowable fees that have been billed to the Department.

Appendix 3: Management Comments

Earl Omer
24-BIR-0013

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February 14, 2024

Management Response: Concur
DOE will take the action to meet with BNI to jointly act upon the recommendation.

Estimated Completion Date: November 1, 2024

Recommendation 6:

Evaluate the invoice review process for the depth and breadth required to make a complete and accurate review of the allowability, allocability, and reasonableness of invoice costs before payment.

Management Response: Concur
DOE will take the action to meet with BNI to jointly act upon the recommendation. DOE will also internally evaluate the current invoice review process to look for and, if possible, implement efficiencies.

Estimated Completion Date: November 1, 2024

Recommendation 7:

Ensure that Bechtel follows its policies, procedures, and practices that allow subcontractors 30 or more days to respond to request for proposals unless a specific justification is documented.

Management Response: Concur
DOE will continue to require BNI to comply with the contractual requirements including the applicable Federal Acquisition Regulations. DOE does not have a contractual mechanism to enforce BNI's internal policies, procedures and practices. DOE will take action to meet with BNI to jointly act upon the recommendation in order to improve the subcontract award process.

Estimated Completion Date: November 1, 2024

If you have any questions, please contact Marcy Aplet-Zelen, Hanford Audit Coordinator, at (509) 376-8510.

cc:
Director, Office of Financial Policy and Audit Resolution, CF-20
Audit Resolution Specialist, Office of Financial Policy and Audit Resolution, CF-20
Audit Liaison, Office of Environmental Management, EM
Audit Liaison, Richland Operations Office, RL
Audit Liaison, Office of River Protection, ORP

Appendix 3: Management Comments



Department of Energy
Environmental Management
Consolidated Business Center
550 Main Street, Room 7-010
Cincinnati, Ohio 45202
(513) 246-0500

January 30, 2024

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

EMCBC-00240-24

FROM: JOHN ZIMMERMAN
DIRECTOR

SUBJECT: Management Response to Office of Inspector General Draft Audit
Report, *Bechtel National, Inc.'s Compliance with Contract Terms
Relating to Self-Performed Work and Subcontracting for the Waste
Treatment and Immobilization Plant*

The Environmental Management Consolidated Business Center (EMCBC) appreciates the opportunity to review and comment on the subject Office of Inspector General draft report (project number A22RL008). EMCBC has reviewed the information in the draft report with respect to the facts presented, conclusions reached, appropriateness of the recommendations, and reasonableness of any estimated potential monetary impact or other benefits that may be realized.

EMCBC's Management Response to the recommendation is summarized below:

Recommendation 8:

Develop a policy or procedure to periodically evaluate whether the Department's practice of awarding terms that require payment in less than 30 days is in the best interest of the Government.

Management Response: Concur. The EMCBC will develop a policy or procedure to periodically evaluate whether the Department's practice of awarding terms that require payment in less than 30 days is in the best interest of the Government.

Estimated Completion Date: September 30, 2024

If you have any questions, please contact Stephanie Reid, EMCBC Audit Coordinator, at stephanie.reid@emcbc.doe.gov.

FEEDBACK

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Office of Inspector General (IG-12)
Department of Energy
Washington, DC 20585

If you want to discuss this report or your comments with a member of the Office of Inspector General staff, please contact our office at 202–586–1818. For media-related inquiries, please call 202–586–7406.