NATIONAL NUCLEAR SECURITY ADMINISTRATION’S OVERSIGHT OF THE CONSOLIDATED NUCLEAR SECURITY, LLC, COST SAVINGS PROGRAM AT THE Y-12 NATIONAL SECURITY COMPLEX AND THE PANTEX PLANT
MEMORANDUM FOR THE MANAGER OF THE NATIONAL NUCLEAR SECURITY ADMINISTRATION PRODUCTION OFFICE

FROM: Debra K. Solmonson  
Deputy Assistant Inspector General  
for Audits and Inspections  
Office of Inspector General


BACKGROUND

In December 2011, the National Nuclear Security Administration (NNSA) issued a request for proposals for a consolidated management and operating contract for the Y-12 National Security Complex (Y-12) in Oak Ridge, Tennessee and the Pantex Plant (Pantex) near Amarillo, Texas. NNSA also included an option for incorporating tritium work performed at the Savannah River Site near Aiken, South Carolina. NNSA awarded the new contract to Consolidated Nuclear Security, LLC (CNS) in January 2013. Following the resolution of bid protests and a 4-month transition period, CNS took over operations at Y-12 and Pantex in July 2014. The contract has a 5-year base period and three option periods that may extend the period of performance to 10 years.

In its Merger and Transformation Plan, CNS identified a series of actions that were projected to save the Government about $3.27 billion over the 10-year base and option period. The Merger and Transformation Plan outlined basic assumptions, the overall approach to reducing costs, and a timeline for achieving cost savings. CNS implemented its Cost Savings Program through the submission of annual updates to the Cost Reduction Proposal, which included specific Cost Reduction Initiatives it planned to conduct that year. In return for reducing costs, NNSA agreed to pay CNS 35 percent of the net savings achieved for each approved Cost Reduction Initiative item for 2 years, excluding any savings derived from employee benefit program changes and provided the savings continued to be sustained throughout the remainder of the contract. If savings were not sustained for the remainder of the contract, the payment would be subject to recovery by the Government. CNS expected to earn about $250 million in cost savings incentive fee payments over a 10-year contract period. In addition, to be eligible for the awarding of the three option periods, the contract required CNS to achieve performance evaluation ratings of 80 percent or above for the years evaluated and achieve a minimum of 80 percent of the total projected cost
savings outlined in the Merger and Transformation Plan for the years evaluated. We conducted this audit to determine whether NNSA provided oversight during implementation of the Cost Savings Program under the Y-12/Pantex contract consolidation. After the conclusion of our audit work in September 2017, we were notified of a subsequent event that occurred pertaining to the Cost Savings Program. NNSA modified the CNS contract on September 30, 2017, significantly altering the Cost Savings Program. Our findings and conclusions do not reflect changes to the Cost Savings Program as a result of the contract modification as this would significantly delay the issuance of the final report.

RESULTS OF AUDIT

Following NNSA’s review of the draft audit report language and waiver of an exit conference on September 26, 2017, a subsequent event occurred that changed certain aspects of the CNS contract and the associated Cost Savings Program. NNSA issued a contract modification on September 30, 2017, which, among other things, lowered the total projected cost savings to account for NNSA not exercising the Savannah River Site tritium option and eliminating proposed savings that were obviated by the extended protest period. Our findings and conclusions do not reflect changes to the Cost Savings Program as a result of the contract modification as it would significantly delay the issuance of the final report. The subsequent event and its impact on Cost Savings Program are discussed in the Subsequent Event section of this report. The remainder of this report and our conclusions are based on our audit work as of September 26, 2017.

We found that NNSA was actively engaged in overseeing the implementation of the Cost Savings Program under the CNS contract. Additionally, NNSA expressed its concerns regarding the overall credibility and integrity of the program as early as September 2015. NNSA cited delays in receiving an acceptable Merger and Transformation Plan, cost reduction proposals, and baselines; delays in implementing a single financial management system for both sites; and a failure to track all costs associated with executing the Cost Savings Program as problematic. NNSA stated that these issues may not appear disconcerting individually, but taken as a whole, threaten to erode requirements of the contract and place the Cost Savings Program at risk.

Through fiscal year (FY) 2016, NNSA concluded that CNS had achieved $165.6 million in cumulative creditable cost savings and earned $36.9 million in cost savings incentive fee. We also noted that CNS requested that NNSA provide relief from about $430 million of the contract’s target cumulative cost savings, citing delayed contract start from their original proposal assumptions, as well as differing conditions from information provided by NNSA in the request for proposals. NNSA agreed to lower the contract’s cost savings target by $360 million and directed CNS to revise the Merger and Transformation Plan. Furthermore, NNSA concluded that only $93 million in potential cost savings were impacted by differing conditions at contract transition from the information provided by NNSA as part of the request for proposals. The other $267 million in relief resulted from an NNSA decision to totally remove the potential savings related to incorporating tritium operations performed at the Savannah River Site from the cost savings target. According to NNSA, as of September 27, 2017, the revised Merger and Transformation Plan has not been approved because CNS made additional changes beyond removing the $360 million.
During the course of our review, several issues arose that have or subsequently may impact the amount of realized savings relating to these initiatives. These issues included:

- Delays in reaching an agreement on the Annual Controlled Baseline;
- Deferral of incorporating tritium operations performed at the Savannah River Site into the consolidated contract; and
- Issues related to CNS’s implementation of employee benefit program changes.

**CNS Cost Savings and Approach**

In its Merger and Transformation Plan, CNS projected that a consolidated Y-12 Pantex contract would generate about $3.27 billion in cost savings over 10 years. Of that total, about $2.38 billion would be available for general Government use, $630 million dedicated to site reinvestment, and $250 million for incentive fee payments to CNS. CNS asserted it would reduce costs by using commercially oriented merger and transition processes, streamlining staff levels, adjusting benefit and leave policies consistent with industry trends, standardizing processes, and eliminating unnecessary activities. Achieving cost savings according to the schedule outlined in the Merger and Transformation Plan is critically important because of its relationship to obtaining a contract extension. Specifically, CNS was required to achieve 80 percent of the savings projected in the first 3 years of the contract, as outlined in the Merger and Transformation Plan, in order to earn an extension beyond the 5-year base period. According to the original Merger and Transformation Plan, CNS planned to generate about $250 million in savings during the first 3 years of the contract ($92 million in year 1, an additional $88 million in year 2, and an additional $70 million in year 3).  

According to NNSA, it is still undetermined whether CNS will achieve the $3.27 billion in cost savings identified in CNS’ original Merger and Transformation Plan. Although CNS began contract transition activities in March 2014 and submitted the original Merger and Transformation Plan to NNSA for approval in May 2014, the plan was revised several times and not approved by NNSA until October 2015. At that time, NNSA directed CNS to develop a proposal for adjusting the Merger and Transformation Plan to reflect the deferral of incorporating tritium operations into the contract and other circumstances CNS believed appropriate. In November 2015, CNS submitted a revised Merger and Transformation Plan. According to NNSA, the revised plans constituted a request for relief from the original cost savings targets due to differing conditions from the data provided in the request for proposals and the delay in starting the contract that rendered CNS unable to pursue, in part or in whole, certain initiatives it had proposed. CNS proposed a new total 10-year savings target of $2.85 billion. Some of the specific cost impacts cited by CNS were related to staff reductions, NNSA deferring the decision to exercise the contract option for adding tritium work, and benefit program changes.

---

1 The compounded cumulative value of these savings would be approximately $523 million. The year 1 savings of $92 million were expected to be sustained in years 2 and 3; $88 million in new savings for year 2 were expected to be sustained in year 3; and $70 million in new savings were expected to be generated in year 3.
In February 2017, NNSA completed its review of CNS’ request for relief from about $430 million in cost savings and directed CNS to revise the Merger and Transformation Plan. We noted that NNSA did not grant CNS all of the relief it requested. NNSA only agreed to lower the cost savings target by $360 million. The $360 million was comprised of $93 million in differences in actual site operations from the information provided to bidders in the request for proposals and $267 million was related to NNSA directing CNS to remove all potential savings associated with incorporating tritium operations performed at the Savannah River Site into the contract. According to NNSA, they wanted to prevent multiple revisions to the Merger and Transformation Plan until a final tritium decision was made.

CNS may identify new cost savings initiatives that were not included in their original projection that formed the basis of the $3.27 billion target. For example, according to the Merger and Transformation Plan, if individual cost reduction initiatives are not approved for execution, CNS will submit revised or additional cost reduction initiatives to make up the shortfall. CNS believed its cost savings estimates were conservative and did not capture all of the saving potentially available. Therefore, CNS could still achieve the entire $3.27 billion in savings by identifying new innovative processes or over-performing planned initiatives. However, NNSA had not received information from CNS identifying specific new, or additional, cost savings initiatives beyond the annual updates to the Cost Reduction Proposal outlining specific initiatives to be pursued within the year.

Initial Staff Levels

NNSA and CNS negotiated for nearly 1 year on the number to use as the starting staff level (employee headcount) for the development of baselines and calculation of cost savings. CNS believed the most appropriate measure to use was the actual headcount that existed when the contract was originally awarded in January 2013, prior to the bid protests.

In its FY 2014 cost reduction proposal and cost savings validation report, CNS identified a large number of unfilled, but funded positions. CNS concluded these positions could be eliminated, represented excess capacity, and would not be needed under the more efficient CNS organization. Therefore, CNS claimed cost savings credit for eliminating 270 unfilled, but funded positions. NNSA initially rejected the cost savings related to these vacant positions because the savings were not created by any direct action of CNS. According to the negotiation file maintained by NNSA, CNS discussed the possibility of hiring and separating employees in order to demonstrate that savings had been achieved as a result of CNS’s action. In July 2015, NNSA notified CNS that it had completed its assessment of the cost savings claimed by CNS for FY 2014 and agreed that CNS may achieve cost savings of up to $68 million over 24 months from the elimination of the 270 vacant positions. Further, NNSA’s assessment concluded that CNS may earn up to $21 million in cost savings incentive fee payments in FYs 2015 and 2016 as a result of receiving credit for the elimination of these vacant positions. While NNSA acknowledged the possibility of cost savings incentives related to the 270 positions, it did so in a negotiated exchange for CNS agreeing to forgo fee related to one fiscal quarter of the savings. NNSA therefore did not pay CNS any cost savings incentive fee related to the vacant positions in FY 2014.
To gain additional insight on the staffing issue and CNS performance, we reviewed NNSA’s FY 2015 and FY 2016 Performance Evaluation Reports of CNS and the associated award fee determination letters. For FY 2015, we noted that NNSA cited staffing shortages in multiple areas including quality assurance, project controls, metal production, radiological protection, and safeguards and security. Also, of the $42.6 million in fee paid to CNS for operating Y-12 and Pantex from July 2014 through September 2015, $31.2 million was paid as a fixed fee. Only $11.4 million was based on performance and NNSA concluded that CNS was only 57 percent effective in meeting performance expectations under the contract. However, when asked if there was any correlation between the staffing issues noted in the performance evaluation and the 270 funded vacant positions, NNSA told us that it may be difficult to draw a direct linkage between the unfilled, but funded positions that were eliminated and particular performance challenges, because those positions had been unfilled under the predecessor contractor as well. Further, if necessary or warranted, NNSA would address performance challenges not directly linked to cost savings initiatives in the annual Performance Evaluation Report. According to NNSA, any impact on mission activities directly related to a CNS cost reduction initiative would be addressed through the contract’s cost reduction clause and the Government’s validation of the CNS cost savings claim. For cost savings to be deemed as creditable by the contracting officer, they cannot have a negative impact on existing contract requirements such as scope, safety, or security. The Government’s validation of claimed cost savings would also ensure that NNSA’s mission deliverables (quality or timeliness) were not negatively impacted.

For FY 2016, NNSA concluded that CNS had improved its overall performance. CNS was rated as 77 percent effective in meeting the goals outlined in its Performance Evaluation and Measurement Plan. CNS earned about $30.6 million of the $40 million in available award fee and was paid another $1 million in fixed fee related to Strategic Partnership Projects. However, NNSA still identified staffing-related issues in quality assurance and project management. Additionally, NNSA noted that CNS faced challenges in financial management and the Cost Savings Program. The lack of an integrated business system and CNS management practices continued to hinder financial integrity, and put NNSA mission deliverables at risk. NNSA specifically cited the validation of cost savings, the tracking of execution costs, and transparency of the process as problematic.

**Tritium Incorporation Deferral**

Another event that impacted CNS’s ability to achieve the cost savings originally outlined in the Merger and Transformation Plan was NNSA’s decision to defer incorporating tritium operations performed at the Savannah River Site into the CNS contract. According to the request for proposals and the CNS contract, NNSA retained the option for incorporating this work into the new consolidated contract. Accordingly, CNS assumed the option would be exercised in year 1 and cost savings would start in year 2 of the contract. In total, CNS estimated this action could save the Government about $267 million over 10 years.

In February 2017, NNSA directed CNS to remove all cost savings associated with the tritium option from the Merger and Transformation Plan. Since the option to incorporate tritium work has been deferred until an unspecified future date, NNSA concluded it was appropriate to remove all cost savings targets associated with the tritium work from the Merger and Transformation Plan.
rather than remove single years of savings estimates on an annual basis. If and when NNSA elects to exercise the tritium option, the corresponding savings targets are expected to be negotiated into the Merger and Transformation Plan.

**Employee Benefit Program Changes**

CNS encountered issues related to implementing changes to salaried and hourly employee benefit programs that impacted cost savings. In August 2015, Pantex bargaining unit employees went on strike. The strike, which lasted until October 2015, primarily involved proposed benefit changes. CNS delayed negotiating a new collective bargaining agreement for Y-12 workers until after it resolved the issues at Pantex. A new collective bargaining agreement for Y-12 workers was not signed until December 2015.

The CNS Merger and Transformation Plan estimated that savings of about $700 million could be generated over a 10-year contract period by modifying employee benefit programs. During discussions with NNSA, we were told that CNS planned to adjust down the rate of benefit program changes to improve employee morale. In June 2015, CNS formally requested that NNSA approve a series of benefit program enhancements, including reducing employee pension contributions at Pantex and delaying employee pension contribution increases at Y-12. NNSA approved CNS modifying the employee benefit programs in August 2015. At that time, NNSA estimated that the benefit plan enhancements could increase contract costs by $400 million above the previously approved negotiation position, and requested that CNS develop a corrective action plan because these program changes could cause benefit program costs to exceed those of comparator companies by more than 5 percent. In response, CNS provided NNSA an analysis showing that the increase to benefit program costs would start to decline over the next several years.

**NNSA Concerns and Actions**

On multiple occasions, NNSA expressed concerns regarding the implementation and management of the Cost Savings Program to CNS. For example, in September 2015, NNSA notified CNS regarding its concerns about the overall credibility and integrity of the Cost Savings Program. NNSA cited delays in receiving an acceptable Merger and Transformation Plan, cost reduction proposals, and baselines; delays in implementing a single financial management system for both sites; and a failure to track all costs associated with executing the Cost Savings Program as problematic. Further, NNSA stated that these issues may not appear disconcerting individually, but taken as a whole, threatened to erode requirements of the contract and place the Cost Savings Program at risk. NNSA also reiterated that CNS was not tracking all execution costs associated with the Cost Savings Program to arrive at true net savings; and the failure to track and account for execution costs directly associated with the Cost Savings Program, as described in the contract, would result in inflated cost savings claims. Finally, NNSA reminded CNS that having a single financial management system was a key component to supporting the management of the Cost Savings Program. In the approved Merger and Transformation Plan, CNS stated it would implement a single financial management system in Fiscal Year 2016, but failed to do so.
CNS acknowledged the delay in implementing a single financial system and stated an executive staff member was appointed the responsibility to lead this effort. CNS was working to select a software platform and develop a detailed implementation schedule, but did not anticipate implementing a new financial system until October 2017. CNS did not agree with NNSA’s position on tracking the costs of executing the Cost Savings Program. Specifically, CNS stated their approach to the management and execution of the Cost Savings Program recognized that it was not possible to isolate the costs associated with achieving cost savings from the integrated delivery of other mission and contract requirements. In January 2016, NNSA notified CNS that it had reached a decision regarding the definition of execution costs related to the Cost Savings Program. As a result, NNSA directed CNS to develop a plan for tracking execution costs and to revise cost savings plans to incorporate execution costs. CNS provided NNSA with its plan for quantifying execution costs in March 2016. NNSA partially accepted the CNS plan for quantification and treatment of execution costs in May 2016, and directed CNS to ensure that its approach to capturing and calculating execution costs complied with the terms of the contract and direction on the issue. However, according to NNSA’s May 2017 review of the CNS FY 2016 cost savings validation report, CNS did not track execution costs, as directed by the contracting officer.

NNSA conducted reviews to verify the validity of the cost savings reported by CNS for FYs 2014, 2015, and 2016. NNSA’s verification efforts significantly reduced the value of the cost savings claimed by CNS in all 3 years. For example, CNS reported achieving $13.5 million in cost savings during FY 2014 (July through September 2014). These savings resulted primarily from the elimination of unfilled positions, a targeted voluntary separation program, and a workforce optimization process that eliminated additional jobs. After deducting execution costs associated with the Cost Savings Program, as a result of CNS’s failure to track execution costs, NNSA concluded that CNS’s cost savings initiatives only achieved $1.3 million in net cost savings in FY 2014. However, an agreement reached between NNSA and CNS in May 2016 modified the process used to quantify the costs incurred to execute the Cost Savings Program. This change resulted in NNSA increasing the value of the cost savings achieved in FY 2014 to $7.8 million. NNSA stated this increase was due to CNS providing information that certain costs were not execution costs, as NNSA originally claimed, but rather were costs associated with overall site merger activities and unrelated to the pursuit of cost reduction initiatives.

For FY 2015, CNS reported achieving nearly $35 million in new cost savings. The savings resulted primarily from employee benefit programs, supply chain management operations, and labor usage. NNSA’s January 2017 verification review again significantly reduced the value of the CNS cost savings claim. In total, NNSA concluded that only about $24.3 million in new cost savings had actually been achieved.

In February 2017, NNSA once again expressed its concerns regarding the Cost Savings Program to CNS. NNSA concluded that the FY 2016 cost savings claim submitted by CNS was inadequate. NNSA cited the absence of data regarding claimed cost savings and the identification of execution costs as problematic. Further, NNSA was troubled by the fact that CNS had certified that the FY 2016 cost savings claim was current, accurate, and complete. CNS provided a revised FY 2016 cost savings claim to address the inadequacies noted by NNSA.
In May 2017, NNSA completed its review of the FY 2016 cost savings claim. NNSA concluded that CNS had achieved $12.2 million in new cost savings during FY 2016, not $44 million as claimed by CNS. The primary difference was NNSA’s conclusion that about $30 million in labor cost savings had not been achieved. Once again, the NNSA contracting officer notified CNS that the methodology being used to capture and report on execution costs for the Cost Savings Program was not compliant with prior direction.

Cost Savings Achieved and Fee Earned

NNSA concluded that CNS earned about $36.9 million in cost savings incentive fee as a result of the cost savings achieved under the consolidated Y-12/Pantex contract through FY 2016. The cost savings incentive fee payment was based on NNSA’s overall conclusion that CNS achieved creditable cost savings of about $165.6 million. Of that amount, $7.8 million in creditable cost savings were achieved in FY 2014; $24.3 million in new creditable cost savings were achieved in FY 2015; and $12.2 million in new creditable cost savings were achieved in FY 2016. The remaining $121.3 million represented CNS’ sustainment of prior year cost savings achieved by reducing labor/staff, benefits, and supply chain management costs.

IMPACT AND PATH FORWARD

We acknowledge that NNSA was actively engaged in the implementation and management of the Cost Savings Program under the consolidated contract. Consequently, we have no recommendations in this report. However, without NNSA’s ongoing efforts to monitor CNS and its overall approach to reducing costs, the achievement of future cost savings may be diminished. Therefore, we strongly encourage the manager of the NNSA Production Office to continue closely monitoring any revisions CNS makes to the Merger and Transformation Plan to ensure that estimated future cost savings are not lowered for activities within CNS’ control and ensure that costs incurred by CNS’ execution of the Cost Savings Program are deducted from reported cost savings.

Subsequent Event

Following NNSA’s review of the draft audit report language and waiver of an exit conference on September 26, 2017, a subsequent event occurred that changed certain aspects of the CNS contract and the associated Cost Savings Program. Specifically, on September 30, 2017, NNSA executed a contract modification that revised Clause F-5, Evaluation of Performance and Exercise of Options (s), incorporated a revised cost savings goal, and updated the revised Merger and Transformation Plan cost savings incentive fee for each period. According to NNSA, the contract modification was executed in part to clarify contract language regarding the performance evaluation ratings CNS had to achieve in order to be eligible for an extension to the contract’s base term. In addition, the contract modification clarified the requirement that CNS achieve 80 percent of the projected cost savings in all years evaluated in order to earn a contract extension. According to the contract modification, the achievement of cost savings is now a discretionary item to be evaluated in conjunction with CNS’s performance under the Performance Evaluation Report. We did not modify the scope of the audit and the resulting findings and conclusions to reflect the September 30, 2017, contract modification because it occurred after
management waived an exit conference and we had finalized the audit report. As such, we did not make a determination on NNSA’s intent on contractor performance as stated in the original contract nor NNSA’s reasons for modifying the contract on September 30, 2017. Substantial additional audit work would have been required to sufficiently analyze the full impact of the revised terms of the contract that would have significantly delayed the issuance of the audit report. Consequently, the subsequent event is not reflected in our findings and conclusions and is presented in this section as information only.

Attachments

cc: Deputy Secretary
    Chief of Staff
    Administrator, National Nuclear Security Administration
OBJECTIVE, SCOPE, AND METHODOLOGY

OBJECTIVE

The objective of the audit was to determine whether National Nuclear Security Administration provided oversight during implementation of the Cost Savings Program under the Y-12 National Security Complex/Pantex Plant contract consolidation.

SCOPE

We conducted the audit from April 2015 through December 2017, at National Nuclear Security Administration’s Production Office in Oak Ridge, Tennessee. The scope of the audit included Consolidated Nuclear Security, LLC initiatives and National Nuclear Security Administration oversight of Cost Savings Program under the consolidated contract. The audit was conducted under Office of Inspector General project number A15OR032. The scope of the audit does not include the revisions to the contract contained in the September 30, 2017, modification as discussed in the Subsequent Event section of the audit report.

METHODOLOGY

To accomplish the audit objective, we:

- Reviewed the National Nuclear Security Administration request for proposals and CNS bid evaluation;
- Reviewed the Consolidated Nuclear Services, LLC contract proposal, the original CNS contract and the September 30, 2017, contract modification; however, we did not perform additional audit work on the contract modification;
- Analyzed the Consolidated Nuclear Services, LLC Merger and Transformation Plan, Cost Reduction Proposal, Cost Reduction Initiative, baselines, and cost saving validations; and
- Held discussions with National Nuclear Security Administration procurement personnel and reviewed performance evaluation reports.

We conducted this performance audit in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our conclusions based on our audit objective. Accordingly, the audit included tests of controls and compliance with laws and regulations necessary to satisfy the audit objective. We also assessed compliance with the GPRA Modernization Act of 2010 and found that performance measures were being used to evaluate cost savings. Because our review was limited, it would not
necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. We did not utilize computer-processed data to achieve our audit objective and therefore, did not conduct a data reliability assessment.

National Nuclear Security Administration management waived an exit conference on September 26, 2017.
RELATED REPORT

Government Accountability Office

Audit Report on National Nuclear Security Administration: Reports on the Benefits and Costs of Competing Management and Operating Contracts Need to Be Clearer and More Complete (GAO-15-331, March 2015). This report concluded that the National Nuclear Security Administration did not clearly or completely describe all the expected benefits and costs of a new contract to manage and operate the Y-12 National Security Complex and the Pantex Plant. More specifically, the National Nuclear Security Administration failed to clearly and completely describe key assumptions used by the contractor regarding the feasibility of cost savings initiatives or the ability to fully meet the estimated $3.27 billion in cost savings.
FEEDBACK

The Office of Inspector General has a continuing interest in improving the usefulness of its products. We aim to make our reports as responsive as possible and ask you to consider sharing your thoughts with us.

Please send your comments, suggestions, and feedback to OIG.Reports@hq.doe.gov and include your name, contact information, and the report number. Comments may also be mailed to:

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) 253-2162.