Accessible Version

April 17, 2019

Congressional Committees


The National Nuclear Security Administration (NNSA) is responsible for the management and security of the nation's nuclear weapons programs, among other missions. To carry out this responsibility, NNSA relies heavily on contractors and management and operating (M&O) contracts for its national laboratories and other nuclear-related sites. One of the nuclear-related sites managed under an M&O contract is the Nevada National Security Site (Nevada Site) near Las Vegas, Nevada. According to NNSA, this site supports the stewardship of the nation's nuclear deterrent, provides nuclear and radiological emergency response and training, contributes to arms control initiatives, executes experiments in support of the Department of Energy's (DOE) national laboratories, supports low-level waste material disposition, and works on national security activities, in addition to other missions.

In May 2015, NNSA decided to compete the M&O contract for the Nevada Site, which was set to expire in September 2016, rather than to noncompetitively extend the existing contract with National Security Technologies LLC (NSTec) for an additional 5 years. NNSA released the request for proposals for the new Nevada Site M&O contract in November 2015; proposals were due in December 2015. NNSA received five offers, which it evaluated according to criteria such as past performance, site organization and qualifications of key personnel, and small business participation. In addition, for best value determination, the total price included the reimbursable management team costs for fiscal years 2017 and FY2018, and the total proposed maximum fee for 2017 through 2026. In August 2016, NNSA made an initial contract award to another company but rescinded that award in the same month. After taking additional steps, including requesting and reviewing revised proposals, NNSA awarded the contract to Mission Support

---

1NNSA is a separately organized agency within the U.S. Department of Energy (DOE) that is responsible for the management and security of DOE’s nuclear weapons, nuclear nonproliferation, and naval reactor programs.

2M&O contracts are agreements under which the government contracts for the operation, maintenance, or support, on its behalf, of a government-owned or -controlled research, development, special production, or testing establishment wholly or principally devoted to one or more of the major programs of the contracting agency. Federal Acquisition Regulation (FAR), 48 C.F.R. § 17.601.

3The Nevada Site was previously known as the Nevada Test Site.

4NSTec LLC includes Northrop Grumman Information Technology Inc., AECOM Government Services Inc., CH2M Hill Constructors Inc., and Nuclear Fuel Services Inc.

5The contract was initially awarded to Nevada Site Science Support and Technologies Corporation in August 2016. That award was rescinded because the company had not notified NNSA that Leidos Holdings Inc. merged with Lockheed Martin’s Information Systems & Global Solutions resulting in Leidos Innovation Corporation. According to NNSA officials, the award was rescinded because this meant that Leidos’ past performance had not been evaluated when making the award decision.
and Test Services (MSTS) in May 2017. There were two protests to this award, which were withdrawn by July 2017, according to NNSA officials. The request for revised proposals and protests delayed the transition from NSTec to MSTS, which, according to NNSA officials, took place from August 2017 to December 2017. The contract started on December 1, 2017. MSTS’s contract with NNSA for the Nevada Site is for a base term of 5 years; it also includes five option terms ranging from 10 to 14 months, which can be earned by the contractor on the basis of performance described in the contract, for a total period of performance up to 10 years. The total value of the base term is approximately $2.7 billion dollars.

Under the National Defense Authorization Act (NDAA) for Fiscal Year 2013, as amended, NNSA is required to submit a cost-benefit analysis addressing a range of issues to the congressional defense committees within 30 days of the later of the date of award of a new M&O contract or the date of resolution of a protest with respect to such a contract. NNSA submitted its cost-benefit report to the congressional defense committees in August 2018. The NDAA for fiscal year 2016 requires this report to include, among other things, five required reporting elements pertaining to costs, benefits, and delays or disruptions:

- a clear and complete description of the cost savings expected to result from the competition over the life of the contract, including associated analyses, assumptions, and information sources used to determine such expected cost savings;
- a description of any key limitations or uncertainties that could affect such cost savings, including cost savings that are anticipated but not fully known;
- the costs of the competition and over the life of the contract, including the immediate costs of conducting the competition and any increased costs over the life of the contract;
- a description of any disruptions or delays in mission activities or deliverables resulting from the competition for the contract; and
- a clear and complete description of the benefits expected by the Administrator with respect to mission performance or operations resulting from the competition.

In addition, the NDAA requires NNSA’s report on the Nevada Site contract to address two elements pertaining to NNSA’s contracting decisions, including the factors considered and processes used by the Administrator to determine:

- whether to compete or noncompetitively extend the existing M&O contract, and

---

6MSTS LLC includes Honeywell International Inc., Jacobs Engineering Group Inc., and Stoller Newport News Inc.


9The NDAA for fiscal year 2013, as amended, required reporting elements that also require NNSA to report on how a competition complied with federal regulations on whether to continue sponsorship of a site as a federally-funded research and development center (FFRDC). For this review, we excluded this requirement because the Nevada Site is not an FFRDC.
• which activities at Nevada Site should be covered under the M&O contract rather than a different contract.

For each of these elements, the NDAA requires NNSA to provide a detailed description of the analyses conducted to reach the conclusion presented, including any assumptions, limitations, and uncertainties relating to the conclusions.

The NDAA for fiscal year 2016 includes a provision for GAO to review each NNSA cost-benefit report. This report (1) describes changes, if any, NNSA sought under the new Nevada Site contract and how those changes are reflected in the new contract; (2) examines the extent to which NNSA’s 2018 report on the Nevada Site contract addresses the five required reporting elements pertaining to costs and benefits and potential disruptions or delays related to the competition; and (3) examines the extent to which NNSA’s report addresses the two required reporting elements pertaining to its decision to extend or compete the contract and the scope of activities to be covered under the M&O contract.

To describe changes NNSA sought under the new Nevada Site contract and how those changes are reflected in the new contract, we interviewed NNSA officials regarding the changes NNSA sought in competing the contract. We reviewed the contract, the DOE acquisition guide, and source selection documents and we interviewed NNSA officials to identify the changes between the old and the new contracts.

To examine the extent to which NNSA’s 2018 cost-benefit report on the Nevada Site contract addresses the five required NDAA reporting elements, we assessed the extent to which NNSA’s report addressed the NDAA required reporting elements. To conduct our assessment, one reviewer compared the NNSA cost-benefit report on the Nevada Site contract against the reporting elements in the NDAA related to costs, benefits, and delays or disruptions to make an initial determination as to whether it (1) addressed the element with detail, (2) addressed the reporting element without detail, or (3) did not address the reporting element. A second reviewer then corroborated the initial determination. Any differences were reconciled by the two reviewers. We also reviewed supporting documentation and interviewed NNSA officials involved in the Nevada Site contract award process and in the preparation of the report and reviewed federal regulations and guidelines relevant to the required reporting elements, such as the Federal Acquisition Regulation, DOE’s Information Dissemination Quality Guidelines, and the Office of Management and Budget’s Circular A-94: Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs, and compared them with the presentation of information in NNSA’s report.\footnote{Federal Acquisition Regulations System, 48 C.F.R. pts 1-53; Department of Energy, Final Report Implementing Office of Management and Budget Information Dissemination Quality Guidelines, 67 Fed. Reg. 62,446 (October 7, 2002); Office of Management and Budget, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs, OMB Circular No. A-94 (trans. 64) (October 1992; discount rates revised February 2018). Also see GAO, Cost Estimating and Assessment Guide, GAO-09-3SP (Washington, D.C.: March 2009).}

To examine the extent to which NNSA’s report addresses the two required reporting elements pertaining to its decision to extend or compete the contract and the scope of activities to be covered under the M&O contract, we reviewed NNSA documents pertaining to the contracting process and award and the authorization to continue the operation of the Nevada Site under an M&O contract and the scope of that contract. To assess the reliability of the data that NNSA provided, we interviewed NNSA officials about their methods for calculating costs of the competition and transition, and we requested data underlying the amounts NNSA reported in its
2018 cost-benefit report on the Nevada Site contract. We also interviewed NNSA officials about their methods for calculating estimated cost savings, and we requested data underlying those figures used in the cost-benefit report. Based on the results of these steps, we determined that the data were reliable for purposes of calculating costs and cost savings.

We conducted this performance audit from September 2018 to April 2019 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 objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

NNSA Sought Lower Costs and Improved Performance in Competing the Nevada Site M&O Contract, and the New Contract Contains Supporting Clauses

In competing the Nevada Site contract NNSA officials told us they sought to lower costs to the government and to establish new terms and conditions that would lead to better contractor performance.

Specifically, we identified that NNSA sought to achieve cost savings and improved contractor performance by including contract clauses that change how (1) fees are awarded to the contractor, (2) contractors’ indirect cost rates are calculated, (3) new or revised contractor employee benefit plans are approved, (4) construction projects are managed and accounted for separate from the M&O contract, and (5) more descriptive, specific, and performance-based requirements in the statement of work are used to support management and the oversight of the contractor.

- **Award fee.** Clauses in the new Nevada Site M&O contract reduce the available award fee to 4.4 percent of the contract value, down from 7 percent under the prior contract. NNSA estimates this will save $112 million over a 10-year contract term in comparison to the costs of extending the prior contract over this same period. It also brings the percentage of fee available into line with M&O contracts for other sites.11 However, the estimated cost savings presume that all other costs will remain the same as under the prior contract over the next 10 years, and that NNSA will exercise all five option terms included in the contract—for a total term of 10 years—even though exercising these options depends on contractor performance, among other factors.

- **Indirect cost rates.** The new indirect rate provision included in the contract provides the government with additional information about the types of indirect costs12 incurred and submitted by the contractor. This new clause requires the contracting officer and the contractor to negotiate and execute a written indirect rate agreement

---

11A cost-plus-award-fee contract is a cost-reimbursement contract that provides for a fee consisting of (1) a base amount (which may be zero) fixed at inception of the contract and (2) an award amount, based upon a judgmental evaluation by the Government, sufficient to provide motivation for excellence in contract performance. FAR 48 C.F.R. §16.305.

12Direct costs, such as salaries for employees and costs for leasing equipment, can be attributed to a specific project. Indirect costs are not directly attributable to a specific project but are necessary for the general operation of an organization managing a project. Such costs can include depreciation on buildings and equipment; the costs of operating and maintaining facilities; and general administration and expenses, such as salaries and expenses for some management, personnel administration, and accounting staff. See GAO, National Science Foundation: Actions Needed to Improve Oversight of Indirect Costs for Research, GAO-17-721 (Washington, D.C.: Sept. 28, 2017).
to include agreed-upon indirect rates, among other things. We have previously reported on challenges NNSA’s M&O contractors have had in managing their indirect costs and how these challenges contribute to NNSA lacking reliable information on the total costs of its programs. This new clause will further advance NNSA’s ability to collect cost information more consistently. This in turn will help NNSA determine the full cost of delivering a program and allow it to assess the reasonableness of this cost estimate, or at least establish a baseline for comparison to other programs. According to NNSA officials, this change in the contract will provide additional information about the types of indirect costs incurred and submitted by the contractor.

- **Approval of new or revised employee benefit plans.** A human resource clause in the new Nevada Site contract reduced the need for the NNSA contracting officer to provide prior approval of certain new or revised contractor benefit plan changes. According to NNSA officials, the new requirement allows the contractor to more quickly and effectively adjust benefits to changing industry standards, which they believe could allow for new efficiencies and possible cost reduction as contractors save money in the cost of preparing approval packages for changes that do not result in increased cost to the government, while the government receives faster implementation of benefit changes that may reduce costs.

- **Separately managing certain construction projects.** A new contract clause allows NNSA to incorporate terms and conditions for construction projects not otherwise contained in the M&O contract into the M&O contract. These are accounted for separate from the M&O contract, which, according to NNSA officials, may allow for potential cost savings in comparison to managing these activities as part of the general scope of the M&O contract. Specifically, managing certain construction projects under separate contract line items allows the government to determine strategy and contract type on a case-by-case basis.

- **Statement of work.** The new contract contains a more descriptive, specific, and performance-based statement of work than the previous contract. For example, according to NNSA officials, the previous statement of work regarding financial management requirements was more general, in that it broadly referred to the contractor’s use of generally accepted accounting principles, cost accounting standards, statutory requirements, and applicable DOE/NNSA directives. In contrast, the statement of work in the new contract is more specific concerning these requirements, stating, for example, that the contractor shall support NNSA’s Planning, Programming, Budgeting, and Evaluation process by providing financial data for five specifically named management software programs. According to NNSA officials, in order to have the contractor meet these requirements under the prior contract, the contract would have had to be modified, and the contractor would likely have negotiated for additional costs associated with the modification. By competing the contract and including this more specific scope of work, the costs of the work are built into the contract.

NNSA’s Report Addressed One of the Five Required Reporting Elements Pertaining to Costs, Benefits, and Delays or Disruptions with Detail but Addressed the Other Four Without Detail

The five required reporting elements in NNSA’s cost-benefit reports that are related to costs, benefits, and delays or disruptions are (1) expected cost savings, (2) key limitations or uncertainties that could affect the cost savings, (3) costs of the competition and increased costs over the life of the contract, (4) any disruptions or delays to mission activities, and (5) expected benefits resulting from the competition. For each of these elements, the NDAA requires NNSA to provide a detailed description of the analyses the agency conducted to reach the conclusion presented in the report, including any assumptions, limitations, and uncertainties relating to the conclusions. As a result, we assessed the extent to which the descriptive information NNSA reported on these elements was detailed and found that, of these elements, NNSA’s report addressed one with detail but addressed the other four without detail. See table 1 for a summary of our assessment of how well NNSA’s report addressed the required reporting elements.

Table 1: Summary Assessment of the Extent to Which NNSA’s Cost-Benefit Report for Competing the Management and Operating Contract for the Nevada National Security Site Addressed Required Reporting Elements

<table>
<thead>
<tr>
<th>Required Reporting Element</th>
<th>GAO assessment of how the report addressed the element</th>
<th>Support for GAO’s assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost savings</td>
<td>Addressed without detail</td>
<td>The report states that the contract will result in savings of approximately $112 million over a 10-year contract period, but it does not provide a clear, complete, or detailed description of the associated analyses, assumptions made, and information sources used to determine the savings.</td>
</tr>
<tr>
<td>Limitations or uncertainties that could affect the cost savings</td>
<td>Addressed without detail</td>
<td>The report includes general statements about potential additional savings that may result from updated terms and conditions in the new contract, but it does not discuss limitations or uncertainties associated with the assumptions that could affect the contractor’s ability to achieve the estimated cost savings.</td>
</tr>
<tr>
<td>Costs of competition and increased costs over the life of the contract</td>
<td>Addressed without detail</td>
<td>The report provides costs of competition and high-level descriptions of how these costs were calculated, but it does not include a detailed description of the analyses or clarify certain data sources or elements of the methodology that the agency used.</td>
</tr>
<tr>
<td>Disruptions or delays to mission activities</td>
<td>Addressed with detail</td>
<td>The report states that there were no disruptions or delays to mission accomplishments during the Nevada Site contract competition period, providing the analysis of three metrics to make this determination.</td>
</tr>
<tr>
<td>Benefits expected to result from the competition</td>
<td>Addressed without detail</td>
<td>The report identifies other benefits NNSA anticipates from the competition in terms of workforce stability and small business participation, but it does not clearly and completely describe these potential benefits.</td>
</tr>
</tbody>
</table>

Source: GAO analysis of the National Nuclear Security Administration’s (NNSA) Cost-Benefit Analysis for Competition of Management and Operating Contracts for the Nevada National Security Site | GAO-19-349R

More specifically, we found the following with respect to these five elements:

- **Cost savings.** NNSA’s report addressed this reporting element without detail. The report states that the contract will save the U.S. government approximately $112 million over a 10-year contract period. However, it does not provide a clear, complete, or detailed description of the associated analyses, assumptions made, and information sources used to determine the savings. For example, the report does not explain that the savings depend on extending the contract beyond the 5-year base term to include the additional 5 years of option terms. According to the contract, the decision to exercise the options will be based on the contractor’s performance, among other factors. An NNSA official provided us with separate documentation showing how the cost savings were calculated over the base and option years. NNSA officials stated that they estimated the savings over the entire 10 years because it is likely that the option years will be exercised.

- **Limitations or uncertainties that could affect the cost savings.** NNSA’s report addressed this reporting element without detail. The report includes general statements about potential additional savings because of updated contract terms and conditions but does not provide a detailed analysis to support these statements. The report states that, although they were not quantifiable at the time the report was prepared, the implementation of strategic and governance initiatives are expected to result in future cost savings as well as new efficiencies that are only achieved through competition. However, the report does not provide a detailed description of which strategic and governance initiatives are reflected in the new contract and does not specify how the competition will lead to additional cost savings and efficiencies. NNSA officials stated that the primary benefit from new terms and conditions in the contract is greater transparency, which they believed would provide NNSA with greater insight into the contractor’s costs and enable NNSA to better manage these costs. For example, the new contract requires periodic reports from the contractor that include direct costs incurred.

In addition, the report does not discuss limitations or other uncertainties associated with the assumptions that could affect the contractor’s ability to achieve the estimated cost savings. For example, as noted above, it does not explain that the savings depend on extending the contract beyond the 5-year base term to include the additional 5 years of option terms. In addition, NNSA calculated the estimated savings by comparing the estimated costs under the new contract to the estimated costs for the prior contract if it had been extended 10 years. However, according to a DOE memo on the contracting strategy for the Nevada Site, DOE was only considering extending the contract for 5 years. Additionally, according to DOE’s acquisition planning requirements, the maximum extension for a contract is 5 years. Thus, estimating the costs under the prior contract for 10 years was not a sound assumption. NNSA officials stated that they made a 10-year contract extension assumption because it was the
- **Costs of competition and increased costs over the life of the contract.** NNSA’s report addressed this reporting element without detail. The report provides costs of competition broken down into federal labor and travel costs for basic procurement, federal salary during transition, and contractor transition costs. It also provides high-level descriptions of how these costs were calculated. However, NNSA’s report does not include a detailed description of the analyses or clarify certain data sources or elements of the methodology that the agency used. For example, the report does not specify a transition period and does not provide specific sources for data used in determining federal and contractor costs. For the contractor transition cost estimate, the report indicates that NNSA based the estimate on sources, such as “staffing plans” and “compensation system plans” that are not clearly defined or elaborated.

NNSA provided a spreadsheet to us that included details of the federal procurement and transition costs. Additionally, NNSA officials told us that the transition period was from August 2017 to December 2017 and that they collected information from MSTS related to their transition costs. However, NNSA officials stated that they did not include detailed information in the report because of its sensitivity and because it was intended to be a high level report to Congress.

- **Disruptions or delays to mission activities.** NNSA’s report addressed this reporting element with detail. According to the NNSA report, there were not any disruptions or delays to mission accomplishments during the contract competition period. The report cited the analysis of three metrics in place before and during the competition: (1) safety statistics, (2) safeguards and security performance, and (3) delivery performance. NNSA officials said that they chose safety and security as measures because changes in the number of safety or security incidents could indicate a problem during the competition or transition. According to the report, there was no degradation in safety or safeguards and security performance during the competition and no significant decrease in delivery rate for the Nevada Site.

- **Expected benefits resulting from the competition.** NNSA’s report addressed this reporting element without detail. The report identifies other anticipated benefits from the competition in terms of workforce stability and small business participation. However, it does not clearly and completely describe these potential benefits. For example, the report indicates that performance impacts from competition and transitions are generally temporary and insignificant because, while senior leadership changes, the vast majority of the current workforce remains. Therefore, it is unclear how the new contract would increase workforce stability. NNSA officials stated that they believed there would be greater workforce stability because there is less attrition when there is a newly awarded contract with a potential 10-year period of performance, rather than an extension of an existing contract for 5 years, because the employees feel there is more job security and worry less about losing their defined benefits.
In addition, the report states that the new contract advances DOE’s and NNSA’s small business objectives by increasing small business use by 11 percent over the 5-year contract base term. However, the report does not describe how additional small business participation is beneficial. NNSA officials told us that they believed increased small business participation would result in greater capacity to perform mission-critical work, more competition, and better value for the taxpayer.

In general, NNSA officials stated that the report on the Nevada Site contract competition did not include detailed information on costs, benefits, delays, and disruptions because it was intended to be a high-level report to Congress. According to NNSA officials, a report including all of the details and supporting data would be a very lengthy report and of little practical value to congressional decision makers.

In our March 2015 report on the benefits and costs of NNSA’s M&O contract competition, we found that NNSA’s report did not clearly or completely describe the expected costs and benefits of the consolidated M&O contract for the Pantex and the Y-12 sites. NNSA agreed with our recommendation that the NNSA Administrator take steps to ensure that future reports to Congress describing the costs and benefits of its competition of M&O contracts under the requirements of the NDAA reflect DOE’s information quality guidelines, federal cost accounting standards, and GAO’s best practices guidance relevant to the clear and complete presentation of information on each of the required topics. We continue to believe that by including in future reports the required detailed description of the analyses conducted for each of the required reporting elements from the NDAA, congressional decision makers and DOE will have important information about the costs and benefits of the M&O contracting, thereby facilitating oversight by Congress and the agency.

NNSA’s Report Addressed One of the Two Required Reporting Elements on Its Decision to Compete the Contract and the Scope of Activities That Should Be Covered Under the M&O Contract

NNSA’s report addressed one required reporting element related to the Federal Acquisition Regulation (FAR) provisions for M&O contracts. The NNSA report states that a decision was made to pursue a full and open competition for the follow-on contract to manage and operate the Nevada Site. NNSA found that all the considerations listed in the FAR for replacing an incumbent contractor for the use of an M&O contract applied and were met with respect to the operation of the Nevada Site. The NNSA report did not address an evaluation of which activities at the Nevada Site, if any, could be covered under a contract other than the M&O contract. While conducting this assessment is a required reporting element, there are no explicit requirements to do so for M&O contracts under the FAR or DOE Acquisition Regulation. In addition, the NNSA report did not include a specific evaluation of which activities at the Nevada Site could be covered under a contract other than the M&O contract. However, at the Nevada Site, some functions—such as for site security and construction projects—are already


separately contracted, in contrast to other sites where the security function is part of the M&O contract, according to NNSA officials.

Agency Comments

We provided a draft of this report to NNSA for review and comment and for sensitivity review. NNSA provided technical comments on the draft which we have incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Secretary of Energy, the Administrator of the National Nuclear Security Administration, and other interested parties. In addition, the report is available at no charge on the GAO website at http://www.gao.gov.

If you or your staff members have any questions concerning this report, please contact me at (202) 512-3841 or bawdena@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report were William Hoehn (Assistant Director), Kevin Tarmann (Analyst-in-Charge), Kevin Bray, Pamela Davidson, Tim Guinane, Greg Marchand, Cynthia Norris, Oliver Richard, Maria Stattel, and Tatiana Winger.

Allison Bawden
Director,
Natural Resources and Environment
List of Committees

The Honorable James M. Inhofe  
Chair  
The Honorable Jack Reed  
Ranking Member  
Committee on Armed Services  
United States Senate  

The Honorable Lamar Alexander  
Chairman  
The Honorable Dianne Feinstein  
Ranking Member  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
United States Senate  

The Honorable Adam Smith  
Chairman  
The Honorable Mac Thornberry  
Ranking Member  
Committee on Armed Services  
House of Representatives  

The Honorable Marcy Kaptur  
Chairwoman  
The Honorable Mike Simpson  
Ranking Member  
Subcommittee on Energy and Water Development, and Related Agencies  
Committee on Appropriations  
House of Representatives  

(103054)