



March 2015

# NATIONAL NUCLEAR SECURITY ADMINISTRATION

Reports on the  
Benefits and Costs of  
Competing  
Management and  
Operating Contracts  
Need to Be Clearer  
and More Complete

Accessible Version

# GAO Highlights

Highlights of [GAO-15-331](#), a report to congressional committees

## Why GAO Did This Study

NNSA is responsible for the management and security of the nation's nuclear weapons programs and relies heavily on contractors to carry out this mission. In January 2013, NNSA awarded a \$22 billion consolidated M&O contract for its Pantex and Y-12 sites, which NNSA stated will enhance mission performance and reduce costs.

The National Defense Authorization Act for fiscal year 2013, as amended, requires NNSA to report to Congress on the costs and benefits of the contract competition following the award of an M&O contract. NNSA's report is to address the expected cost savings, competition costs, any disruption or delay in mission activities or deliverables, and any benefits to mission performance or operations resulting from the competition. The act also requires GAO to review and report on NNSA's report.

This report assesses the extent to which NNSA's report addressed each required topic and the clarity and completeness of the information provided. GAO interviewed NNSA officials and reviewed NNSA's statutory reporting requirements, the agency's report and supporting documentation, and federal guides and standards relevant to presenting benefits and costs.

## What GAO Recommends

GAO recommends that NNSA enhance the clarity and completeness of its future reports. In commenting on a draft of this report, NNSA stated that it agreed with GAO's recommendation.

View [GAO-15-331](#). For more information, contact David C. Trimble at (202) 512-3841 or [trimbled@gao.gov](mailto:trimbled@gao.gov).

March 2015

## NATIONAL NUCLEAR SECURITY ADMINISTRATION

### Reports on the Benefits and Costs of Competing Management and Operating Contracts Need to Be Clearer and More Complete

## What GAO Found

The National Nuclear Security Administration's (NNSA) report to Congress on the competition of the consolidated management and operating (M&O) contract for its Pantex Plant in Texas and Y-12 National Security Complex (Y-12) in Tennessee includes information on all the statutorily required topics but does not clearly or completely describe expected benefits and costs. Specifically:

- **Key analyses and assumptions for cost savings estimates.** NNSA's report cites the contractor's 2012 estimate of \$3.27 billion in cost savings. DOE's guidelines relevant to disseminating information state that information should be clear and complete, but NNSA's report does not clearly and completely describe the analysis and key assumptions of the contractor's estimate, such as the feasibility of cost savings initiatives. As a result, NNSA's report does not convey that significant uncertainties exist with the contractor's ability to fully meet its estimated cost savings.
- **Estimate of competition costs.** NNSA's report cites more than \$3 million in contract competition costs. Federal cost accounting standards and the *GAO Cost Estimating and Assessment Guide* (Cost Guide) call for agencies' cost estimates to be complete (i.e., to reflect the full cost of the resources used). The Cost Guide also calls for high-quality cost estimates to discuss any limitations related to assumptions. However, NNSA's estimate of competition costs excludes significant costs, such as more than \$20 million for work by the new contractor over the contract transition period, and it does not discuss all the key assumptions and limitations, such as NNSA's uncertainty about future costs over the life of the contract. Without describing all costs, key assumptions, and limitations, the report does not clearly and completely convey to Congress the costs of the contract competition or the factors that may affect these costs.
- **Description of analysis of disruptions or delays.** NNSA's report states that there was no disruption or delay in mission activities or deliverables due to the competition for the contract. DOE guidelines relevant to the quality of disseminated information call for describing information sources, but NNSA's report does not describe the sources the agency used to conclude that no disruptions or delays occurred. NNSA officials told GAO that they relied largely on informal discussions with knowledgeable NNSA personnel to gather information. Without describing information sources, NNSA's report is not clear about how NNSA determined that no disruptions or delays occurred.
- **Description of unquantified benefits.** NNSA's report describes unquantified benefits the agency expects, such as enhancing mission performance. DOE's guidelines relevant to disseminating information state that it should be clear and complete. However, NNSA's report does not specify what constitutes enhanced mission performance or how the consolidated contract will facilitate its stated benefits. Further, the report does not describe a key data limitation—that cited benefits will not be clear until NNSA finishes negotiating cost saving initiatives with the contractor. Without clear descriptions of the benefits and any limitations, NNSA's report does not clearly and completely convey to Congress the agency's expected benefits, how they will be achieved, or the associated uncertainties.

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**Abbreviations**

CNS	Consolidated Nuclear Security, LLC
Cost Guide	<i>GAO Cost Estimating and Assessment Guide</i>
DOE	Department of Energy
FAR	Federal Acquisition Regulation
FASAB	Federal Accounting Standards Advisory Board
FFRDC	federally funded research and development center
M&O	management and operating
NDA	National Defense Authorization Act

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NNSA	National Nuclear Security Administration
NPO	NNSA Production Office
Pantex	Pantex Plant
RFP	request for proposal
SRS	Savannah River Site
Y-12	Y-12 National Security Complex



# Letter

March 23, 2015

## Congressional Committees

The National Nuclear Security Administration (NNSA), a separately organized agency within the Department of Energy (DOE), is responsible for the management and security of the nation's nuclear weapons programs.<sup>1</sup> NNSA relies heavily on contractors to carry out this mission, often through the use of management and operating (M&O) contracts,<sup>2</sup> to manage and operate, among other things, nuclear weapons production facilities.<sup>3</sup> Historically, two of NNSA's major production sites that contribute to the maintenance of nuclear weapons—the Y-12 National Security Complex (Y-12) in Tennessee and the Pantex Plant (Pantex) in Texas—were managed and operated under separate M&O contracts. In January 2013, NNSA awarded a single M&O contract for both sites,<sup>4</sup> estimated by the agency to be worth over \$22 billion. According to an NNSA press release, this consolidated M&O contract is expected to enhance mission performance and reduce costs.

In our past reports, we have suggested that federal agencies could increase their efficiency and effectiveness by consolidating their physical infrastructure, such as closing offices or other facilities, or consolidating their management functions, such as information-technology or

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<sup>1</sup>Established in 2000, NNSA is responsible for the management and security of DOE's nuclear weapons, nuclear nonproliferation, and naval reactor programs.

<sup>2</sup>M&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 federal agency. Federal Acquisition Regulation (FAR) § 17.601.

<sup>3</sup>To support NNSA's programs to extend the life of existing nuclear weapons and dismantle retired weapons, the agency has production facilities to, among other things, disassemble and assemble the warheads and bombs, repair or replace components, and manufacture components. For information on NNSA's activities for retiring nuclear weapons, see GAO, *Nuclear Weapons: Actions Needed by NNSA to Clarify Dismantlement Performance Goal*, [GAO-14-449](#) (Washington, D.C.: Apr. 30, 2014).

<sup>4</sup>NNSA first awarded the consolidated M&O contract in January 2013. However, NNSA's award of this M&O contract to Consolidated Nuclear Security, LLC (CNS) was the subject of three protests to GAO under our bid protest authority. These challenges were ultimately unsuccessful, and CNS began contract performance in March 2014.

administrative-support services. However, we also found that consolidation initiatives can be immensely complex, politically charged, and costly and are not quick, easy, or automatic ways of producing desired change.<sup>5</sup> Additionally, because of issues we identified with contract and project management at NNSA and its predecessor organizations, including cost overruns in the billions of dollars, since 2009, we have designated NNSA's contract management and oversight as an area at high risk for fraud, waste, abuse, and mismanagement.<sup>6</sup>

The National Defense Authorization Act (NDAA) for fiscal year 2013, as amended in the NDAA for fiscal year 2014, requires the NNSA Administrator to submit a report to congressional defense committees describing the costs and benefits of its competition of M&O contracts not later than 30 days after it awards a contract or, if the contract award is protested, after the date the bid protest on that award is resolved.<sup>7</sup> Specifically, the act requires NNSA's report to include the following topics:

- the expected cost savings resulting from the competition for the contract over the life of the contract, including a description of the assumptions used and analysis conducted to determine such expected cost savings;
- the costs of the competition for the contract, including the immediate costs of conducting the competition and any increased costs over the life of the contract;
- a description of any disruption or delay in mission activities or deliverables resulting from the competition for the contract;

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<sup>5</sup>GAO's previous reports are summarized in GAO, *Streamlining Government: Questions to Consider When Evaluating Proposals to Consolidate Physical Infrastructure and Management Functions*, [GAO-12-542](#) (Washington, D.C.: May 23, 2012). Also see GAO, *Modernizing the Nuclear Security Enterprise: The National Nuclear Security Administration's Proposed Acquisition Strategy Needs Further Clarification and Assessment*, [GAO-11-848](#) (Washington, D.C.: Sept. 20, 2011).

<sup>6</sup>GAO, *High-Risk Series: An Update*, [GAO-13-283](#) (Washington, D.C.: Feb. 14, 2013).

<sup>7</sup>The National Defense Authorization Act for Fiscal Year 2013, Pub. L. No. 112-239, § 3121 (2013), and the National Defense Authorization Act for Fiscal Year 2014, Pub. L. No. 113-66, § 3124 (2013).

- a description of any benefits of the competition to mission performance or operations;
- how the competition for the contract complied with the Federal Acquisition Regulation (FAR) regarding federally funded research and development centers (FFRDC),<sup>8</sup> if applicable; and
- any other matters the Administrator considers appropriate.

The act also requires GAO to submit a report to the congressional defense committees that reviews NNSA's report. On June 16, 2014, more than 3 months after the deadline, NNSA submitted its report to Congress.<sup>9</sup> Our report reviews the extent to which NNSA's report addressed each required topic and the clarity and completeness of the information provided.

To assess the extent to which NNSA's report addressed each required topic, we analyzed the statutory reporting requirements in the NDAA and compared them with the information provided in NNSA's report. We excluded two topics from our report. First, we excluded NNSA's compliance with the FAR regarding FFRDCs because the act specifies the topic is applicable only to FFRDCs, and Pantex and Y-12 are not FFRDCs. Second, we excluded the section of NNSA's report on other matters that the Administrator considers appropriate because the NDAA does not specify required content for the section.<sup>10</sup> To assess the clarity and completeness of the report's information, we reviewed DOE and other federal guides or standards relevant to the presentation of information on each required topic and compared them with the

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<sup>8</sup>FFRDCs are intended to meet special, long-term research or development needs of the sponsoring agencies that are integral to their missions and cannot be met as effectively by existing federal or non-FFRDC contractor resources. FAR § 35.017(a)(2).

<sup>9</sup>Department of Energy, National Nuclear Security Administration, *Cost-Benefit Analyses for Competition of Management and Operating Contracts* (Washington, D.C.: May 2014). The report was submitted to Congress in June 2014.

<sup>10</sup>In this section of its report, NNSA describes bid protests in response to the contract award and the outcomes of these protests. We assessed the accuracy of the content in this section and found it to be generally accurate.

information provided in NNSA's report.<sup>11</sup> We also interviewed NNSA officials and reviewed documents pertaining to the contracting process and contract award to clarify and supplement information provided in NNSA's report. Specifically, we interviewed NNSA staff at headquarters, the consolidated field office for the Y-12 and Pantex sites, and NNSA's Albuquerque department that supports M&O contracts. We also reviewed documentation from the contract solicitation, evaluation, award, and transition period. Further, we reviewed documentation of NNSA's acquisition strategy to consolidate contracts; NNSA decision documents describing the assumptions and analysis associated with estimates and information presented in the report to Congress; GAO's three bid-protest decisions issued during the award process; and previous GAO reports on NNSA contract management.<sup>12</sup> We provide more information on our scope and methodology in appendix I.

We conducted this performance audit from June 2014 to March 2015 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.

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## Background

NNSA missions—ensuring a safe, secure, and reliable nuclear deterrent; achieving designated reductions in the nuclear weapons stockpile; and supporting the nation's nuclear nonproliferation efforts—are largely executed at eight sites that comprise the nuclear security enterprise. NNSA sites include three national nuclear weapons design laboratories—Lawrence Livermore National Laboratory in California, Los Alamos National Laboratory in New Mexico, and Sandia National Laboratories in New Mexico and other secondary locations; four nuclear weapons

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<sup>11</sup>We reviewed the following federal guides and standards: DOE, *Final Report Implementing Office of Management and Budget Information Dissemination Quality Guidelines*. 67 Fed. Reg. 62446 (Oct. 7, 2002); GAO, *Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs*, [GAO-09-3SP](#) (Washington, D.C.: March 2009); and Federal Accounting Standards Advisory Board, *Statement of Federal Financial Accounting Standards No. 4: Managerial Cost Accounting Standards and Concepts*, (Washington, D.C.: July 31, 1995).

<sup>12</sup>[GAO-13-283](#) and [GAO-11-848](#).

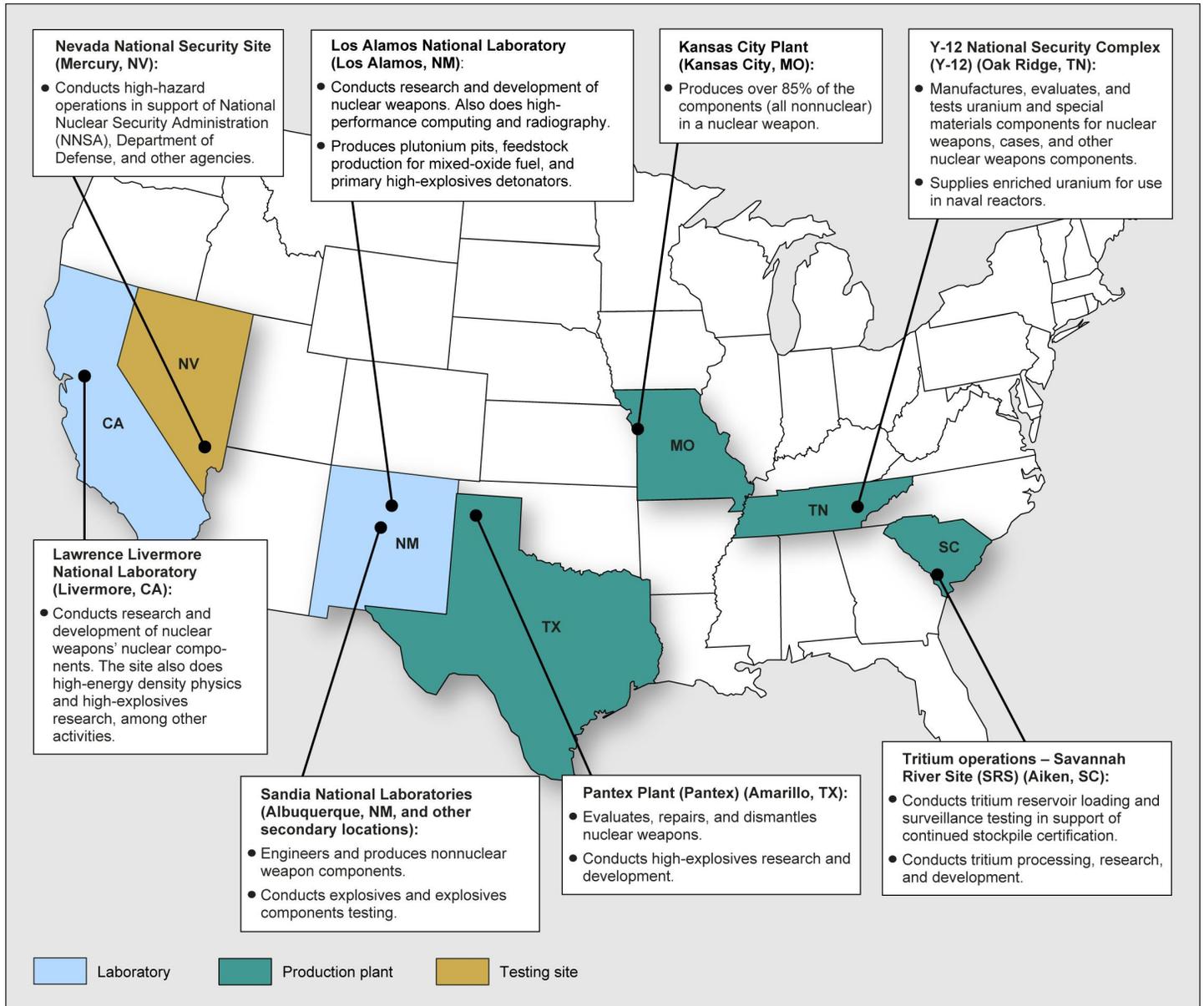
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production plants—the Pantex Plant in Texas, the Y-12 National Security Complex in Tennessee, the Kansas City Plant in Missouri, and tritium operations at DOE’s Savannah River Site (SRS) in South Carolina;<sup>13</sup> and the Nevada National Security Site, formerly known as the Nevada Test Site. As shown in figure 1, each NNSA site has specific responsibilities within the nuclear security enterprise.

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<sup>13</sup>At the Savannah River Site (SRS) in South Carolina, NNSA recycles tritium from existing warheads among other things. Tritium is a heavy isotope of hydrogen and a key component of nuclear weapons.

**Figure 1: National Nuclear Security Administration (NNSA) Nuclear Weapons Design Laboratories, Production Plants, and Testing Sites**



Sources: National Nuclear Security Administration; Map Resources (map). | GAO-15-331

NNSA sites are owned by the government but managed and operated by M&O contractors. DOE and NNSA view the M&O contract model, recognized as a unique contracting mechanism in the FAR, as central to successful mission performance. The basic principle underlying M&O contracts is that the federal government employs highly capable companies and educational institutions to manage and operate government-owned or –controlled, scientific, engineering, and production facilities. An M&O contract is characterized by, among other things, the close relationship between the government and the contractor for conducting work of a long-term and continuing nature. M&O contractors operate and maintain the government-owned facilities and infrastructure deemed necessary to support the nuclear weapons stockpile and to support the capabilities to conduct scientific, technical, engineering, and production activities that ensure the continued safety and reliability of the stockpile; NNSA site offices oversee the day-to-day activities of these contractors.

Historically, the U.S. Army Corps of Engineers' Manhattan Engineer District first used the M&O contract model to develop and produce the first atomic bombs during World War II. Based on the success of that contract model, M&O contracts became the primary business model for NNSA and its predecessor agencies for the national security enterprise.

Since the 1980s, however, we and others have identified issues with DOE's and NNSA's oversight of M&O contracts, particularly with respect to managing both costs and mission performance. For example, in the mid-1990s, an internal DOE review team recommended that the department seek to identify contract structures that would better define measurable standards of performance under which contractor accomplishments could be evaluated and fees awarded accordingly.<sup>14</sup> In addition, we have found that cost accounting practices used by M&O contractors have varied, making it difficult for NNSA to compare costs

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<sup>14</sup>Department of Energy, Office of the Deputy Assistant Secretary for Procurement & Assistance Management, *Performance-based Contracting Guide* (Washington, D.C.: May 2000); and Office of Procurement and Assistance Policy, Acquisition Guide Chapter 17.6: Discussion of the Origin, Characteristics and Significance of the Department of Energy's Management and Operating (M&O) Form of Contract (Washington, D.C.: October 2007).

across its sites or accurately identify the total costs across its enterprise.<sup>15</sup> Accordingly, in 2010, we recommended that NNSA develop guidance for consistent collection of information on the total costs to operate and maintain weapons activities facilities and infrastructure. NNSA generally agreed with the recommendation and developed guidance to help collect consistent information from M&O contractors about their total costs.<sup>16</sup>

Beginning in the 1990s, DOE undertook multiple initiatives to improve its management and oversight of M&O contracts. First, according to DOE documentation, the agency began assessing the appropriateness of the M&O contract model when awarding some contracts within the nuclear security enterprise. Specifically, DOE undertook a detailed review of the then existing M&O contracts to determine if the mission requirements remained appropriate for use of the M&O form of contract. As a result of that review, DOE reduced the number of M&O contracts from approximately 52 contracts to 29.<sup>17</sup> Second, in 1996, DOE established a policy emphasizing its preference for competing M&O contracts. Although federal laws generally require agencies to obtain full and open competition when awarding government contracts, prior to 1996, DOE had generally awarded M&O contracts under an exception permitting contracting without providing for full and open competition. Nevertheless, according to a 2009 DOE policy statement, DOE continues to recognize a preference for full and open competition, and exercises, on a case-by-case basis, the authorities available to it to noncompetitively extend an M&O contract when the extension is justified.<sup>18</sup>

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<sup>15</sup>For example, see GAO, *Department of Energy: Additional Opportunities Exist for Reducing Laboratory Contractors' Support Costs*, [GAO-05-897](#) (Washington, D.C.: Sept. 9, 2005), *Department of Energy: Observations on DOE's Management Challenges and Steps Taken to Address Them*, [GAO-13-767T](#) (Washington, D.C.: July 24, 2013), and [GAO-11-848](#).

<sup>16</sup>GAO, *Nuclear Weapons: Actions Needed to Identify Total Costs of Weapons Complex Infrastructure and Research and Production Capabilities*, [GAO-10-582](#) (Washington, D.C.: June 21, 2010).

<sup>17</sup>Department of Energy, Office of Procurement and Assistance Policy, *Acquisition Guide Chapter 17.6: Discussion of the Origin, Characteristics and Significance of the Department of Energy's Management and Operating (M&O) Form of Contract* (Washington, D.C.: October 2007).

<sup>18</sup>See, Department of Energy, *U.S. Department of Energy Policy Regarding the Competition of Contracts to Manage and Operate its National Laboratories* (Washington, D.C.: Dec. 22, 2009).

Even with these initiatives, however, challenges with NNSA's management and oversight of its contracts—including its M&O contracts—remained. For example, according to the 2009 DOE policy statement, DOE observed that contract competition was time-consuming, disruptive, and costly and did not necessarily result in (1) significant competition or a substantively new contractor, (2) cost savings for the government, or (3) substantially improved contractor performance.<sup>19</sup> Further, in April 2014, the Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise, charged with examining the NNSA governance model, described a dysfunctional relationship between NNSA and M&O contractors. Specifically, the panel reported that the trust required for the M&O model has been weakened by unclear accountability for risk and a fee structure and contract approach that invite detailed, tactical oversight rather than a more strategic approach with performance-based standards.<sup>20</sup> In November 2014, the panel made a series of recommendations to improve NNSA's oversight of M&O contracts.<sup>21</sup>

Beginning around 2007, NNSA identified the consolidation of contracts—including its M&O contracts—as a potential strategy to improve performance and reduce costs. For the past several years, NNSA has planned for its vision of an integrated, interdependent nuclear security enterprise characterized by, among other things, fewer, more uniform contracts with multisite incentives and more uniform business practices, technical processes, information management, and program and project management.<sup>22</sup> In 2008, NNSA established an acquisition strategy team that examined 10 contract consolidation options to reduce costs and improve performance. Seven options involved combining various production missions under a single M&O contract. Another three options

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<sup>19</sup>Department of Energy, *U.S. Department of Energy Policy Regarding the Competition of Contracts to Manage and Operate its National Laboratories* (Washington, D.C.: Dec. 22, 2009).

<sup>20</sup>Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise, *Interim Report* (Washington, D.C.: April 2014).

<sup>21</sup>Congressional Advisory Panel on the Governance of the Nuclear Security Enterprise, *A New Foundation for the Nuclear Enterprise* (Washington, D.C.: November 2014).

<sup>22</sup>For example, see NNSA, *Complex 2030: An Infrastructure Planning Scenario for a Nuclear Weapons Complex Able to Meet the Threats of the 21st Century* (Washington, D.C.: Oct. 23, 2006).

looked at combining functional areas, such as construction management and information technology, at multiple sites under a single non-M&O contract. The team completed its analysis in 2009 and, in March 2010, NNSA announced plans to undertake a new acquisition strategy, which was selected from among the options for combining various production missions. Specifically, NNSA decided to conduct a contract competition for a single M&O contract consolidating management and operations at Y-12 and Pantex sites, with a contract option to later add tritium operations at SRS.<sup>23</sup>

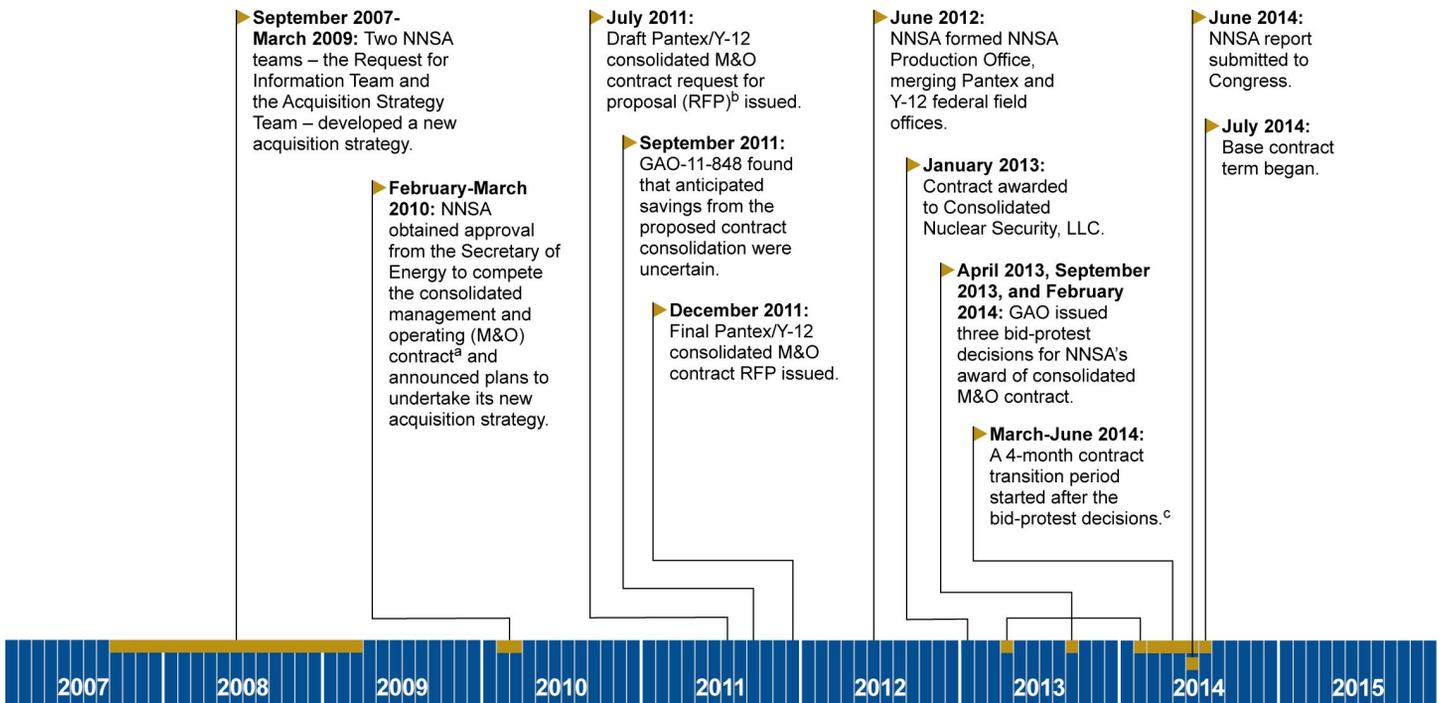
In December 2011, NNSA issued a request for proposals for a consolidated M&O contract for the Pantex and Y-12 sites. NNSA received proposals from three offerors and, after resolution of three bid protests from unsuccessful offerors, awarded the contract to Consolidated Nuclear Security, LLC, which had proposed initiatives estimated to result in \$3.27 billion in total cumulative cost savings over the maximum 10-year contract period.<sup>24</sup> From competition planning to the start of the contract's base term, the contracting process took over 6 years to complete (see fig. 2).

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<sup>23</sup>As we reported in September 2011, NNSA officials told us that NNSA rejected the acquisition team's proposal to include the Los Alamos National Laboratory's production mission as a future option in the consolidated M&O contract on the grounds that laboratory's research and development mission were too diverse and complex to separate. The agency also decided not to pursue for, the time being, a proposal to consolidate the nonnuclear production carried out by the Kansas City Plant and the Sandia National Laboratories. See [GAO-11-848](#). In summer 2014, NNSA officials told us the agency has no current plans to consolidate additional M&O contracts.

<sup>24</sup>In addition to placing the Y-12 and Pantex sites under a single M&O contract, the contract includes responsibility for designing and overseeing construction of the Uranium Processing Facility at Y-12 and, if NNSA exercises the option, for future operation of tritium operations at SRS. The contract describes the Uranium Processing Facility project as NNSA's solution to meeting its mission need for enriched uranium—by consolidating Y-12's existing enriched uranium processing and manufacturing into a single facility, while eliminating the high cost and risk of maintaining Y-12's aging infrastructure. However, as we previously reported, NNSA is currently considering alternatives to the Uranium Processing Facility due to budget constraints, rising costs, and competition from other high-priority projects within NNSA. See GAO, *Nuclear Weapons: Some Actions Have Been Taken to Address Challenges with the Uranium Processing Facility Design*, [GAO-15-126](#) (Washington, D.C.: Oct. 10, 2014).

**Figure 2: Timeline of National Nuclear Security Administration’s (NNSA) Competition for the Consolidated Y-12 and Pantex Management and Operating (M&O) Contract**



Sources: GAO; National Nuclear Security Administration (NNSA). | GAO-15-331

<sup>a</sup>Management and operating (M&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 federal agency. FAR § 17.601.

<sup>b</sup>A request for proposal (RFP) is a solicitation document used in negotiated acquisitions to communicate government requirements to prospective contractors and to solicit proposals.

<sup>c</sup>GAO adjudicates bid protests to resolve disputes concerning the award of federal contracts. NNSA's award of this M&O contract to Consolidated Nuclear Security, LLC (CNS) was the subject of three GAO bid protests. In January 2013, two unsuccessful offerors filed protests challenging the award, and NNSA issued a stay of performance of the contract until resolution of the protest process. In April 2013, GAO issued a decision partially sustaining the protests. In June 2013, one of the protesters filed another protest challenging the agency's then-ongoing corrective action; in September 2013, GAO issued a decision dismissing and denying that protest. In November 2013, after NNSA reaffirmed its award of the contract to CNS, the same offeror filed another protest challenging the NNSA's decision to re-award the contract to CNS following completion of the corrective action; in February 2014, GAO denied this protest and NNSA lifted the stay of performance permitting CNS to proceed with performance of the contract. See GAO decisions: Nuclear Production Partners LLC; Integrated Nuclear Production Solutions LLC, B-407948 et al., Apr. 29, 2013, 2013 CPD ¶ 112; Nuclear Production Partners LLC, B-407948.9, Sept. 24, 2013, 2013 CPD ¶ 228; and Nuclear Production Partners LLC, B-407948.10, B-407948.11, Feb. 27, 2014, 2014 CPD ¶ 86.

The contract includes a 5-year base period with options of up to 5 additional years—two 2-year option periods, and a final 1-year option period. To be awarded the contract options, the contract requires the

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contractor to meet performance requirements and achieve certain cost savings, as evaluated at the beginning of years 4, 6, and 8. For example, to be awarded a first 2-year contract extension, the contractor must have achieved at least 80 percent of the cost savings that it proposes to achieve by the end of contract year 3. The contract also provides for the contractor to earn (1) a cost savings incentive fee, which is a share of cost savings its initiatives achieve,<sup>25</sup> and (2) a fee depending on the quality of its performance.

According to NNSA officials, compared with other NNSA contracts, this consolidated M&O contract has unique mandatory saving provisions—that is, the contractor must identify cost savings and realize them in order to keep performing the contract beyond its 5-year base term—and has a fee structure weighted to strongly incentivize cost savings. For example, under the consolidated contract, in some years the contractor might earn more in the estimated cost saving incentives fees than it earns in fees for mission performance.

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## NNSA's Report Addresses All Required Topics but Does Not Clearly or Completely Describe Expected Benefits and Costs

NNSA's report includes information on all of the topics required by the NDAA for fiscal year 2013, as amended; however, it does not reflect guidance or standards developed by DOE, GAO, and the Federal Accounting Standards Advisory Board (FASAB) relevant to clearly or completely describing expected benefits and costs. Specifically, NNSA's report describes (1) the expected cost savings resulting from the contract competition, (2) the agency's estimate of the costs of the competition for the contract, (3) any disruption or delay in mission activities or deliverables resulting from the competition, and (4) any benefits of the competition to mission performance or operations.<sup>26</sup> For each of these required topics, however, NNSA's report did not clearly describe the benefit or cost, including either certain assumptions, such as those affecting the feasibility of achieving the estimated cost savings, or the

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<sup>25</sup>The contract allows the contractor to earn a 35 percent share of savings over 2 years, the first year in which savings are realized and the following year. The contractor cannot share any savings related to employee benefits.

<sup>26</sup>NNSA's report also discusses two other mandated topics (1) NNSA's compliance with the FAR regarding federally funded research and development centers (FFRDCs), which the report states is not applicable for the consolidated contract because Pantex and Y-12 are not FFRDCs, and (2) other matters that the Administrator considers appropriate, which is a description of the outcome of the bid protests. As discussed earlier, we did not include these topics in our review.

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underlying analysis or data source. Further, for certain topics, the report does not include complete information, for example, excluding some of the costs of competition and, therefore, it may understate actual costs.

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**NNSA's Report Describes Expected Cost Savings but Does Not Explain Certain Aspects of the Analyses and Assumptions Used**

NNSA's report describes the expected cost savings resulting from the competition for the contract over the life of the contract and some aspects of the analyses and the assumptions used to determine such expected cost savings as required by the NDAA for fiscal year 2013, as amended, but it does not clearly and completely describe some other key aspects of the analyses and assumptions. Specifically, NNSA's report states that, based on NNSA's evaluation of the contractor's 2012 estimate of \$3.27 billion in cost savings, the agency expects that the contractor will achieve more cost savings over the life of the contract than NNSA's 2010 estimate of \$1.152 billion.<sup>27,28</sup> NNSA's report also briefly describes the processes the agency used to develop its 2010 estimate of cost savings and to evaluate the feasibility of the cost savings estimates proposed by the contractors competing for the contract. It also includes seven assumptions associated with NNSA's 2010 estimate; for example, the 2010 estimate assumes the contractor would have the flexibility to restructure the workforce and would be required to align current and future employee benefits with those provided by industry.

NNSA's report, however, does not clearly and completely describe the analysis and assumptions associated with its evaluation of the contractor's \$3.27 billion estimate, which NNSA officials told us is the target for expected cost savings over the life of the contract. According to

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<sup>27</sup>NNSA's report does not specify that NNSA's and the contractor's estimates of costs are not directly comparable. According to NNSA officials, the main reason that the contractor's estimate is over \$2 billion larger than NNSA's estimate is that it included more areas of possible cost savings than NNSA's estimate did. Specifically, the officials said the NNSA cost savings estimate was focused on only merger-related cost savings—that is, workforce reduction allowed from efficiencies resulting from consolidating the contract—whereas, the contractor's estimate included merger-related as well as other types of cost savings, such as possible changes in workforce benefits.

<sup>28</sup>In GAO's 2014 bid protest decision, we found that NNSA had performed a comprehensive analysis of every proposed cost savings initiative, making numerous judgments—based on the substantial experience and technical expertise of the agency's personnel and consultants—regarding the multiple cost savings initiatives proposed by each of the offerors. In the decision, GAO concluded that the bid protest failed to demonstrate that the agency's various judgments and comparative assessments were, in any material way, unreasonable. See GAO, Nuclear Production Partners LLC, B-407948.10, B-407948.11, Feb 27, 2014, 2014 CPD ¶ 86.

DOE's guidelines relevant to the quality of disseminated information, the presented information should be clear, complete, and useful.<sup>29</sup> We found NNSA's report is not clear or complete because it does not describe (1) key aspects of NNSA's and the contractor's analysis and (2) certain key assumptions and information associated with the estimate.

First, the report does not clearly describe key aspects of the cost savings analysis. For example, the report describes the estimated cost savings as cumulative savings over the life of a 10-year contract (i.e., the 5-year base term, as well as the optional 5 additional years) but does not explain how cumulative cost savings are calculated. According to NNSA officials, when calculating cumulative cost savings, the contractor did not estimate new cost savings each year and total them. Rather, as directed by NNSA during the contract competition, the contractor's analysis assumed that new savings in the first or any subsequent year would be sustained and accumulated for the remainder of the 10 years; the contractor calculated cumulative cost savings by totaling estimates of both new cost savings and the associated sustained cost savings over each remaining year of the contract.<sup>30</sup> Thus, if the contractor were to achieve \$327 million in savings in the first year and sustain those savings over the remaining years of the contract, cumulative savings of \$3.27 billion could be achieved without any new or additional savings. Without describing how the contractor's cumulative cost savings were calculated, NNSA's report may give Congress an unrealistic expectation that the contractor will attain a large amount of new cost savings each year.<sup>31</sup>

Second, NNSA's report does not describe certain key assumptions and information associated with the cost savings estimate, some of which

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<sup>29</sup>DOE's information quality guidelines for maximizing the quality, objectivity, utility, and integrity of information disseminated to the public call for information to be presented clearly and completely and with consideration for its usefulness to its intended users, among other things. DOE, *Final Report Implementing Office of Management and Budget Information Dissemination Quality Guidelines*. 67 Fed. Reg. 62446 (Oct. 7, 2002).

<sup>30</sup>NNSA's RFP directs cumulative cost savings to be calculated as the sum of any new cost savings in contract year 1 multiplied by 10, plus any new cost savings in year 2 multiplied by 9, and so forth, plus any new cost savings in year 10 multiplied by 1.

<sup>31</sup>In addition, the report does not explain another aspect of the NNSA and contractor analyses, that is, the reported cost savings are reduced by estimated costs of implementing the cost savings initiatives and thus reflect analyses of *net* cost savings.

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raise questions about the feasibility of attaining the \$3.27 billion target. For example,

- **NNSA’s report does not explain that the contractor is expected to propose new cost savings initiatives to replace those that NNSA had deemed infeasible.** When evaluating the proposed cost savings initiatives during the contracting process, NNSA deemed some of the selected contractor’s proposed cost savings initiatives to be infeasible.<sup>32</sup> Nevertheless, according to NNSA officials, the agency intends to hold the contractor accountable for pursuing the \$3.27 billion target, including requiring the contractor to achieve at least 80 percent of the scheduled target at certain intervals to continue performing the contract. NNSA officials responsible for estimating and tracking cost savings under the contract told us that they assume the contractor will pursue the full \$3.27 billion by proposing new, alternative cost savings initiatives to replace the initiatives that NNSA has deemed infeasible.<sup>33</sup> They added that, although the contractor recently proposed some new cost savings initiatives, NNSA has not yet approved them.<sup>34</sup>
- **NNSA’s report does not fully describe key assumptions and information about the contractor’s ability to pursue certain cost savings initiatives.** A senior NNSA official in the Office of Acquisition Management told us that reducing labor costs represents a large share of cost savings to be achieved under the consolidated contract, and NNSA’s report states the contractor’s flexibility to restructure the workforce is a key assumption in achieving cost savings. In a 2011

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<sup>32</sup>According to NNSA officials, the agency has not publicly released the results of its evaluation of the feasibility of bidders’ proposed cost savings, information that the agency considers procurement sensitive, and, hence remains for official use only. GAO’s bid protest decision describes how NNSA evaluated the contractor’s proposed cost savings and the associated cost savings initiatives, in part by judging the percentage of each of cost savings initiatives NNSA considered to be feasible. See GAO, *Nuclear Production Partners LLC*, B-407948.10, B-407948.11, Feb 27, 2014, 2014 CPD ¶ 86.

<sup>33</sup>NNSA officials told us that the cost savings initiatives will become clearer in the contractor’s Merger Transformation Plan, and in more detail in annual Cost Reduction Proposals. NNSA officials told us the contractor has submitted the plan and an annual cost reduction proposal, but NNSA had not completed its review of these documents at the time of NNSA’s report or our review.

<sup>34</sup>In its March 2015 comments on a draft of this report, NNSA reported that it is already receiving benefits from the new contract, such as savings from changes to employee benefits and staff re-engineering.

report, however, we found that a number of NNSA site officials were skeptical about whether staff reductions of the magnitude anticipated in NNSA's estimate of cost savings were possible under the planned consolidated contract.<sup>35</sup> For example, some site officials said that some support functions, such as security and oversight, would not experience any efficiency under a consolidated contract because those functions would require the same number of staff at each specific site regardless of the management structure. If the contractor is not able to achieve workforce reductions of the amount or as quickly as proposed, it may not be able to fully achieve the \$3.27 billion in proposed cumulative cost savings during the contract. Moreover, according to NNSA officials responsible for estimating cost savings under the contract, the contractor's \$3.27 billion estimated cost savings assumes that the contractor will be able to add tritium operations at SRS at the end of the first contract year. However, NNSA officials also told us that, if this option is exercised later than expected, or not at all, the cost savings would be smaller than expected, resulting in cumulative cost savings of less than \$3.27 billion.

- **NNSA's report does not describe the critical importance of developing a new cost accounting system to verify cost savings.** According to NNSA officials, the existing cost accounting system must be improved to make costs sufficiently transparent so that NNSA can verify that planned cost savings actually occur. They also stated NNSA's verification of the cost savings is critical under the contract for determining whether the contract can be extended beyond the initial 5-year base period. NNSA and the contractor are currently developing such an improved cost accounting system. If such a system is not developed in time to document that the contractor has achieved at least 80 percent of the cost savings it proposed over the first 3 years of the contract, NNSA may have to recompetete the contract for the years after the 5-year base contract, according to NNSA officials. As a result, the contractor may not have the full 10 years of the contract to achieve the costs savings target as was assumed in its estimate.

DOE's guidelines relevant to information quality call for presenting complete and useful information. When discussing why the NNSA report does not describe certain information, NNSA officials told us that the

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<sup>35</sup>[GAO-11-848](#).

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NDAAs did not provide detailed guidance on what NNSA was required to report for each topic. Nevertheless, by not describing NNSA's own views about the expected cost savings—including a clear description of the analysis and key assumptions and information underlying the expected savings of up to \$3.27 billion—NNSA's report is not complete and does not convey to Congress that significant uncertainties exist with the contractor's ability to fully meet its estimated cost savings and NNSA's ability to verify whether and to what extent such savings actually occur.

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**NNSA's Estimate of Competition and Increased Contract Costs Does Not Describe All Costs or Associated Limitations**

NNSA's report describes what the agency estimates to be the costs of the contract competition, as required by the NDAAs for fiscal year 2013, as amended, but the report excludes certain immediate costs and potential future costs arising from the contract competition and does not describe certain limitations associated with NNSA's cost estimate. Specifically, to respond to the act's requirement to describe the costs of the contract competition—including the immediate costs of conducting the competition<sup>36</sup> and increased future costs over the life of the contract<sup>37</sup>—NNSA reports a total competition cost of \$3.3 million for contracting activities from September 2007 through February 2014, excluding federal salary costs. Of that total cost, NNSA reports that \$2.1 million was incurred during the acquisition planning phase from September 2007 through February 2010 and includes costs for federal travel, contract support services, and multiple supporting studies. The remaining \$1.2 million reflects costs for activities from March 2010 through February 2014, including costs for federal travel, holding public meetings, and technical support. In addition, NNSA reports incurring \$458,000 to hire two additional cost accountants to oversee cost baseline development and validation of cost savings from August 2012 through February 2014, which NNSA officials said was excluded from NNSA's total cost estimate but is nevertheless presented in the report. NNSA's report states that there are no other increased costs anticipated over the life of the contract.

We identified several immediate competition costs and potential increased costs over the life of the contract that NNSA excluded from its

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<sup>36</sup>Immediate costs of conducting the contract competition are those that NNSA incurred from September 2007 through February 2014, including acquisition planning through contract award.

<sup>37</sup>Increased costs over the life of the contract are increased costs incurred or anticipated after the March 2014 start of the contract transition term.

estimate of the costs of the competition. Federal cost accounting standards and the GAO Cost Estimating and Assessment Guide (Cost Guide) both call for agencies' cost estimates to be complete—that is, to reflect the full cost of the resources used, including both direct and indirect costs.<sup>38,39</sup> In addition, GAO's Cost Guide indicates that high-quality cost estimates should discuss any limitations of the analysis because of uncertainty or biases surrounding data or assumptions.<sup>40</sup> Nevertheless, NNSA's description of competition costs does not (1) include all significant costs of the competition or (2) discuss limitations to its estimate based on data used and assumptions made by NNSA. We identified multiple, potentially significant costs—both immediate costs of conducting the contract competition and increased costs over the life of the contract—that were excluded from NNSA's total estimated competition cost of \$3.3 million.<sup>41</sup>

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<sup>38</sup>Federal Accounting Standards Advisory Board, *Statement of Federal Financial Accounting Standards No. 4: Managerial Cost Accounting Standards and Concepts* (Washington, D.C.: July 31, 1995). The Federal Accounting Standards Advisory Board (FASAB) is responsible for issuing accounting standards for the U.S. government. These standards are recognized as generally accepted accounting principles for the federal government. The FASAB concepts and standards are aimed at providing reliable and timely information on the full cost of federal programs, their activities, and outputs. The resulting information is expected to be usable by Congress and federal executives in making decisions about allocating federal resources, and by program managers in making managerial decisions to improve operating economy and efficiency.

The FASAB *Statement of Federal Financial Accounting Standards No. 4: Managerial Cost Accounting Standards and Concepts* states that agencies should report the full cost of outputs produced, where 'outputs' means products and services generated from the consumption of resources. Full costs should include the costs of resources consumed that directly or indirectly contribute to the output, including direct and indirect costs. Direct costs are those that can be directly identified with a specific NNSA activity; indirect costs are costs of resources that are jointly used but not specifically identifiable with a specific activity, such as administrative expenses.

<sup>39</sup>Our cost estimating guidance was drawn from the best practices of federal cost estimating organizations and industry. See [GAO-09-3SP](#). In developing this guide, GAO cost experts assessed measures consistently applied by cost estimating organizations throughout the federal government and industry and considered best practices for the development of reliable cost-estimates. Also see [GAO-09-3SP](#) for additional details on the development of these best practices.

<sup>40</sup>[GAO-09-3SP](#).

<sup>41</sup>NNSA's report cites \$458,000 incurred by the agency to hire two cost accountants to oversee cost baseline development from August 2012 through February 2014, but NNSA officials responsible for writing the report told us that these costs are not included in the reported \$3.3 million total cost of the competition.

We found that NNSA's estimate of the immediate costs excludes both indirect costs, such as the cost of general administrative expenses incurred by NNSA offices responsible for conducting the contract competition, and the direct costs of federal salaries for personnel involved in conducting the contract competition. The report notes that federal salary costs are not included in NNSA's estimate but does not explain why NNSA excluded them.<sup>42</sup> More than 70 federal employees participated in the competition process from 2007 through 2014.

We found that NNSA's estimate of contract competition costs does not include any increased costs over the life of the contract, but we identified multiple, potentially significant costs, including the following:

- Over \$20 million in costs incurred by the new contractor after the contract award for its work during the 4-month transition period, during which the new contractor prepared to assume responsibility for management and operation of Pantex and Y-12.<sup>43</sup>
- The cost savings incentive fee included in the contract fee structure, estimated at \$262 million, to be paid to the new contractor out of the \$3.27 billion proposed savings over the 10-year contract period. Under the contract, the contractor is eligible to earn an incentive fee of up to 35 percent of the net cost savings achieved, though the contractor cannot earn any of the savings related to employee

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<sup>42</sup>The FASAB *Statement of Federal Financial Accounting Standards No. 4: Managerial Cost Accounting Standards and Concepts* states that direct costs include salaries and other benefits for employees who work directly on an output.

<sup>43</sup>While the 4-month contract transition period had not yet ended when NNSA submitted its report to Congress, the agency had an estimate of the contractor's transition costs exceeding \$20 million at the time of report submission.

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benefits.<sup>44</sup> This incentive fee is paid to the contractor out of the net savings realized for NNSA under the contract.<sup>45</sup>

- The cost for the new contractor to execute approved cost savings initiatives over the contract period. Given the magnitude of expected cost savings and the 62 cost savings initiatives originally proposed by the new contractor, execution costs are likely to be significant. However, the report does not specify the amount of these execution costs or disclose that they were accounted for in the cost savings estimates described elsewhere in the report. Specifically, according to NNSA officials, the cost savings estimates described in NNSA's report are net of implementation costs, meaning that both NNSA's and the contractor's estimates reflect total savings minus unspecified costs for the contractor to execute its approved cost savings initiatives.
- The cost of exercising the contract option to phase in SRS tritium operations at the end of the first year of the contract, should NNSA elect to do so.
- The cost for the agency to continue contracting with two cost accountants to support cost baseline development and validation of cost savings accomplishments beginning in March 2014 and continuing over the life of the contract.

Table 1 shows the costs of the contract competition that NNSA included in its report, as well as some that it did not.

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<sup>44</sup>NNSA officials involved in the competition process cited two provisions in the consolidated contract that differ from the prior contracts and are intended to create stronger incentives for the new contractor to pursue cost savings: achievement of cost savings is mandatory, rather than optional, for the contractor; and the contractor may share in 35 percent of the nonbenefit cost savings as opposed to 10 percent under the previous contracts.

<sup>45</sup>According to the consolidated contract between NNSA and the contractor, net savings is defined as the difference between hard savings and execution costs. Hard savings are those savings that directly reduce the overall cost of operations; execution costs can include administrative costs, development costs, and DOE/NNSA costs, and implementation costs associated with the contractor's cost saving proposals.

**Table 1: Costs Included and Not Included in NNSA’s Report on Competition of the Consolidated Management and Operating Contract at Its Pantex and Y-12 Sites**

Cost element	Included in National Nuclear Security Administration’s (NNSA) report
Immediate costs of conducting the contract competition (September 2007-February 2014)	
\$3.3 million reported as total competition costs	Yes
\$458,000 cost to hire two cost accountants to oversee cost baseline development	Yes
Unquantified federal salaries for over 70 staff involved in the competition process	No
Unquantified costs of general administrative expenses incurred by NNSA offices responsible for conducting the contracting process	No
Increased costs over the life of the contract (March 2014-June 2024)	
Over \$20 million in transition costs to the new contractor	No
Estimated \$262 million cost savings incentive fee to be paid to the new contractor	No
Unquantified costs for the new contractor to execute approved cost savings initiatives <sup>a</sup>	No
Unquantified costs for NNSA to exercise the Savannah River Site tritium operations contract option	No
Unquantified costs for continued support from hired cost accountants during contract transition period and contract term	No

Sources: GAO and NNSA. | GAO-15-331.

Note: GAO identified competition costs not included in NNSA’s report based on interviews with NNSA officials and review of NNSA documentation from the contract solicitation, evaluation, award, and transition period, including the public summaries of GAO’s three bid-protest decisions issued during the award process, the final contract, and the contract transition plan submitted to NNSA by the selected contractor.

<sup>a</sup>NNSA officials told us that the competition cost estimate excludes the costs for the contractor to execute approved cost savings initiatives. They also said that these costs were accounted for in the cost savings estimates described elsewhere in NNSA’s report, but the accounting for these costs is not disclosed in the report.

NNSA officials responsible for writing the report identified three reasons for excluding certain competition costs from the agency’s estimate. Specifically, NNSA (1) included only those immediate costs that could be quantified and directly attributed to the contract competition; (2) did not have data on staff time spent conducting the contract competition because NNSA did not have a system to isolate staff time spent on the competition, as opposed from time spent on other duties; and (3) was uncertain about future costs over the life of the contract and did not have data about these costs because the new cost accounting system that will be used to track contract costs is under development. Additionally, the same NNSA officials told us that they reported no increased competition costs over the life of the contract because they assumed that the act required them to report those costs only if NNSA expected them to exceed cost savings, and NNSA further assumed that the consolidated

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contract fee structure, which emphasizes cost savings, will ensure that costs over the life of the contract do not exceed the cost savings realized. We recognize there is uncertainty associated with future costs and estimates, however, NNSA's report does not describe these limitations to its estimate of competition costs or associated data and assumptions. Without describing these assumptions and limitations, which created uncertainty regarding total competition costs, NNSA's report does not clearly and completely convey to Congress the immediate or anticipated costs to the agency, or the factors that may affect these costs, of the contract competition.

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**NNSA's Description of Disruptions or Delays Does Not Specify the Data Sources Used**

NNSA's report includes a description of any disruption or delay in mission activities or deliverables resulting from the competition for the contract, as required by the NDAA for fiscal year 2013, as amended. Specifically, the report states that the contracting process raised concerns about workforce uncertainty, but that there was no disruption or delay in mission activities or deliverables resulting from the competition for the contract. The report does not, however, describe the sources of information NNSA used to determine that no disruptions or delays occurred. DOE guidelines for information quality call for disseminated information to describe the sources of information used.<sup>46</sup> NNSA officials responsible for writing the report told us that, when gathering information in response to this required topic, they relied largely on informal discussions with federal personnel in the NNSA Production Office (NPO) responsible for overseeing and documenting contractor performance at Pantex and Y-12, including during the contract competition. NPO personnel told us that they based their responses on their day-to-day oversight of the contractors' performance and familiarity with information contained in available performance evaluation reports, which are formally prepared for the sites quarterly and annually. NNSA officials told us that they were generally unsure of what to report because, other than the required topics, the NDAA provided no guidance on what NNSA was required to report. Nevertheless, without a description of the sources of information used, NNSA's report does not clearly describe to Congress how it determined

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<sup>46</sup>See DOE, *Final Report Implementing Office of Management and Budget Information Dissemination Quality Guidelines*. 67 Fed. Reg. 62446 (Oct. 7, 2002). These guidelines state that DOE Elements should (to the extent possible, consistent with security, privacy, intellectual property, trade secrets, and confidentiality protections) identify the sources of the disseminated information.

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that no disruptions or delays to mission performance occurred as a result of the contract competition.

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**NNSA's Report Does Not Clearly Describe Certain Benefits of the Competition to Mission Performance or Operations**

NNSA's report describes benefits of the competition to mission performance and operations, as required by the NDAA for fiscal year 2013, as amended in fiscal year 2014, but it does not clearly describe certain unquantified benefits, their importance, or how they will be achieved through the contract. Specifically, NNSA's report describes multiple unquantified benefits the agency expected through the contract competition—including strengthening NNSA's ability to move toward a fully integrated and interdependent enterprise, enhancing mission performance, reducing costs, strengthening partnerships, improving stakeholder confidence, improving mission capability, and generating savings to be reinvested in the nuclear security enterprise. According to DOE's guidelines relevant to the quality of disseminated information, the presented information should be clear and complete, among other things.<sup>47</sup> However, NNSA's report does not clearly describe the stated benefits. For example, it does not specify what constitutes a fully integrated and interdependent enterprise or enhanced mission performance, who the partners or stakeholders are, the areas in which stakeholder confidence will be improved, or whether the reduced costs it describes are the same as or different than the costs savings discussed elsewhere in the report.

Additionally, the report does not clearly describe the importance of the benefits or how NNSA's decision to award the consolidated contract will lead to the benefits described. NNSA has stated elsewhere that these benefits could help address a major problem in the nuclear security enterprise, and the consolidated contract is one of multiple strategies being used to find cost savings to fund the agency's broader vision for its

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<sup>47</sup>DOE, *Final Report Implementing Office of Management and Budget Information Dissemination Quality Guidelines*. 67 Fed. Reg. 62446 (Oct. 7, 2002).

enterprise.<sup>48</sup> For example, the 2008 charter of NNSA's acquisition strategy team, which examined various consolidation options for M&O contracts, describes a problem with NNSA's ability to execute mission requirements as an efficient enterprise within available resources, which undermine NNSA's stakeholders' confidence.<sup>49</sup> The charter states NNSA has an opportunity to address this problem by developing an acquisition strategy that drives a fully integrated and interdependent enterprise, enhances mission performance, reduces costs, strengthens partnerships and improves stakeholder confidence—which are the same expected benefits that NNSA's report cites for the consolidated contract. However, NNSA's report neither describes this enterprise problem nor the importance of the consolidated contract as a step toward addressing it. Further, the report does not explain how the consolidated contract would specifically facilitate achieving these expected benefits—a linkage which, based on our discussions with NNSA officials, relies on unstated assumptions. For example, a senior NNSA official responsible for acquisition management told us that NNSA assumed the consolidated contract would improve mission performance and reduce costs, and that these benefits would then lead to improved stakeholders' confidence—

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<sup>48</sup>In 2008, when NNSA was devising an acquisition strategy regarding consolidated contracts, the NNSA Administrator called for a transformation of the complex to a smaller, safer, more secure and less expensive enterprise, because the existing nuclear security enterprise was too big and expensive, particularly as its physical infrastructure was becoming more costly to maintain, operate, and secure. One main tenet of the transformation was creating an integrated, interdependent enterprise, and among the ways considered to pay for the transformation was to shift NNSA's contracting strategy to more uniform contracts with incentives for cost savings over multiple sites. See Thomas D'Agostino, NNSA Administrator, "Complex Transformation & Strategic Weapons in the 21st Century," (Washington, D.C.: Jan. 31, 2008). The 2008 charter of NNSA's acquisition strategy team states the acquisition strategy is one part of the plan to achieve weapons complex efficiencies and transformation. NNSA, *Acquisition Strategy Team Charter* (n.p.: October 2008). More recently, NNSA has cited the consolidated contract as one of several management efficiency initiatives, which are part of its commitments to identify cost savings and to reduce annual indirect and overhead costs to enable NNSA to focus more of its human and financial resources on the core missions and their delivery to customers. See NNSA, *Role of the Nuclear Security Enterprise and Potential Efficiencies: Report to Congress* (Washington, D.C.: Oct. 2013) and DOE, *Fiscal Year 2014 Stockpile Stewardship and Management Plan* (Washington, D.C.: June 2013).

<sup>49</sup>NNSA, *Acquisition Strategy Team Charter* (October 2008).

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particularly its Department of Defense customer's confidence—in NNSA's ability to provide deliverables on schedule and within costs.<sup>50</sup>

According to NNSA officials, because the act required that the agency's report be submitted before the base term of the contract had begun—when cost savings initiatives of the contract were still being negotiated with the contractor—the agency cannot more clearly describe these benefits. NNSA officials told us that the expected benefits cited in the report were mostly drawn from precompetition documents analyzing the contract consolidation strategy, rather than from an analysis specifically for the report. They also said that after NNSA finishes negotiating cost saving initiatives with the contractor, the agency can better define the specific benefits expected under the consolidated contract. We agree that completing such contract negotiations should better position NNSA to define the specific benefits expected under the contract; however, the report does not describe this limitation and the resulting uncertainty about the unquantified expected benefits. Without clearly describing benefits, their importance, any limitations, or how they will be achieved through the contract, NNSA's report does not clearly and completely convey to Congress the extent to which the stated benefits will result from the contract competition.

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## Conclusions

By consolidating the M&O contract for the Y-12 and Pantex sites, NNSA aims to secure substantial cost savings and enhance mission performance at those sites. NNSA's report to Congress on the benefits and costs of competing this consolidated contract included all of the topics required by the NDAA for fiscal year 2013, as amended in fiscal year 2014. Nevertheless, NNSA did not always adhere to DOE's information quality guidelines, federal cost accounting standards, or GAO's best practices guidance relevant to the clear and complete presentation of information on each of the required topics about benefits and costs. For example, NNSA's report appears to have excluded hundreds of millions of dollars of competition costs. Further, the report does not describe (1) key aspects of the cost savings analysis, (2) key assumptions about expected costs and benefits, (3) data limitations that agency officials told us were creating uncertainties, or (4) information

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<sup>50</sup>NNSA seeks to manage the nuclear weapons stockpile to meet Department of Defense requirements by providing it with the military capabilities to implement national deterrence and assurance policy.

sources used to assess whether disruptions or delays to mission performance occurred. As a result, NNSA's report does not clearly and completely convey to Congress the agency's expectations for cost savings, benefits, and contract competition costs over the life of the contract, or the basis for its conclusions about disruptions or delays. We recognize that some future costs and benefits could not be fully known when NNSA was writing the report and that the agency is taking actions that may help clarify these costs and benefits, but NNSA's report does not acknowledge these important uncertainties. Going forward, since the NDAA for fiscal year 2013, as amended, requires NNSA to report to Congress about the associated benefits and costs each time it awards an M&O contract at one of its facilities, NNSA has the opportunity to improve the clarity and completeness of its future reports, so that the information provided is more useful for congressional decision making and oversight.

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## Recommendation for Executive Action

To enhance the usefulness of NNSA's future reports to Congress describing the costs and benefits of its competition of M&O contracts under the requirements contained in Section 3121 of the National Defense Authorization Act for fiscal year 2013, as amended, we recommend that the NNSA Administrator take steps to ensure that future reports 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. In particular, future reports should clearly and completely describe costs and benefits, including the agency's expectations, as well as the associated analysis, assumptions, information sources, and key limitations and uncertainties about costs and benefits described. The description of uncertainties should include key excluded or unspecified costs and benefits, such as those that are anticipated but not fully known at the time of report writing.

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## Agency Comments and Our Evaluation

We provided a draft of this report to NNSA for review and comment. NNSA provided written comments, which are summarized below and reprinted in appendix II. In its written comments, NNSA stated that it concurred with GAO's recommendation and plans to provide additional detail in future iterations of its required reports on the costs and benefits of competing M&O contracts.

NNSA also identified two areas where it believes additional contextual information should be provided. First, NNSA's letter noted that it successfully defended against bid protests of the contract award based

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on the rigorous, well-documented analysis NNSA conducted to support its contract award decision. We have added text to our report to clarify that GAO's 2014 bid protest decision examined NNSA's evaluation of proposed cost savings to ensure that it was reasonable and consistent with the solicitation's evaluation criteria and procurement statutes and regulations. Our legal conclusion was that NNSA's evaluation—which involved numerous judgments about proposed cost savings based on the substantial experience and technical expertise of the agency's personnel and consultants—was reasonable. Second, NNSA's letter noted that it is already receiving benefits from the new contract, citing \$80 million annually in award fee savings and other savings from changes already made in employee benefits and staffing. We did not report on these savings because the scope of our report was limited to reviewing NNSA's report to Congress, and NNSA did not include these savings in its report. Further, at the time of our audit work, NNSA officials told us that the agency had not yet developed the cost accounting system needed to verify and approve cost savings.

NNSA also provided technical comments that we incorporated as appropriate.

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We are sending copies of this report to the appropriate congressional committees, the Secretary of Energy, the Administrator of NNSA, 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 about this report, please contact me at (202) 512-3841 or [trimbled@gao.gov](mailto:trimbled@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report are listed in appendix III.



David C. Trimble  
Director, Natural Resources and Environment

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*List of Committees*

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

The Honorable Mike Simpson  
Chairman  
The Honorable Marcy Kaptur  
Ranking Member  
Subcommittee on Energy and Water Development  
Committee on Appropriations  
House of Representatives

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# Appendix I: Scope and Methodology

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The National Defense Authorization Act (NDAA) for fiscal year 2013, as amended in the NDAA for fiscal year 2014, requires the National Nuclear Security Administration (NNSA) to submit a report to congressional defense committees describing the costs and benefits of its competition of management and operating (M&O) contracts not later than 30 days after it awards a contract or, if the contract award is protested, after the date the bid protest on that award is resolved.<sup>1</sup>

The act required NNSA's report to include the following topics:

- the expected cost savings resulting from the competition for the contract over the life of the contract, including a description of the assumptions used and analysis conducted to determine such expected cost savings;
- the costs of the competition for the contract, including the immediate costs of conducting the competition and any increased costs over the life of the contract;
- a description of any disruption or delay in mission activities or deliverables resulting from the competition for the contract,
- a description of any benefits of the competition to mission performance or operations;
- how the competition for the contract complied with the Federal Acquisition Regulation regarding federally funded research and development centers (FFRDC),<sup>2</sup> if applicable; and
- any other matters the Administrator considers appropriate.

The act also requires GAO to submit a report to the congressional defense committees that reviews NNSA's report. On June 16, 2014, more than 3 months after the deadline, NNSA submitted its report to

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<sup>1</sup>The National Defense Authorization Act for Fiscal Year 2013, Pub. L. No. 112-239, § 3121 (2013), and the National Defense Authorization Act for Fiscal Year 2014, Pub. L. No. 113-66, § 3124 (2013).

<sup>2</sup>FFRDCs are intended to meet special, long-term research or development needs of the sponsoring agencies that are integral to their missions and cannot be met as effectively by existing federal or non-FFRDC contractor resources. FAR § 35.017(a)(2).

Congress.<sup>3</sup> Our report reviews the extent to which NNSA's report addressed each required topic and the clarity and completeness of the information provided.

To assess the extent to which NNSA's report addressed each of the required topics and the clarity and completeness of the information provided, we analyzed the statutory reporting requirements contained in the NDAA of fiscal year 2013, as amended, and compared them with the information NNSA provided in its report. Further, we assessed the accuracy of the content in the report section on other matters that the Administrator considers appropriate, but we do not report on it here because the NDAA does not specify required content for the section, and we found NNSA's description of other matters to be generally accurate.<sup>4</sup> We excluded from our review NNSA's compliance with the Federal Acquisition Regulation regarding FFRDCs because the act specifies the topic is applicable only to FFRDCs, and Pantex and Y-12 are not FFRDCs.

Further, we reviewed federal guidelines or standards relevant to the presentation of information on each of the required topics and compared them with the presentation of information in NNSA's report. Such guidance included Department of Energy Final Report Implementing Office of Management and Budget Information Dissemination Quality Guidelines;<sup>5</sup> the GAO Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs;<sup>6</sup> and the Federal Accounting Standards Advisory Board, Statement of Federal

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<sup>3</sup>Department of Energy, National Nuclear Security Administration, *Cost-Benefit Analyses for Competition of Management and Operating Contracts* (Washington, D.C.: May 2014). The report was submitted to Congress in June 2014.

<sup>4</sup>For this discretionary topic, NNSA describes the bid protests about the contract award and the outcomes of the protests. Specifically, its report states that after remedying the issue GAO identified in its first protest decision, NNSA successfully defended its corrective action and award decision.

<sup>5</sup>DOE, *Final Report Implementing Office of Management and Budget Information Dissemination Quality Guidelines*. 67 Fed. Reg. 62446 (Oct. 7, 2002).

<sup>6</sup>[GAO-09-3SP](#).

Financial Accounting Standards No. 4, Managerial Cost Accounting Standards and Concepts.<sup>7</sup>

We also interviewed NNSA officials and reviewed key documents pertaining to the contracting process and award. Specifically, we interviewed NNSA officials involved in the contracting process and in writing NNSA's report to Congress, including staff at NNSA headquarters in Washington, D.C.; the consolidated federal field office for the Y-12 and Pantex sites; and the M&O Contract Support Department in NNSA's Albuquerque Complex. We also reviewed documentation from the contract solicitation, evaluation, award, and transition period, including the public summaries of GAO's three bid-protest decisions issued during the award process,<sup>8</sup> the final contract, and the contract transition plan submitted to NNSA by the selected contractor. Further, we reviewed documentation of NNSA's acquisition strategy, including reports from the NNSA Acquisition Strategy Team and related documents describing the assumptions and analysis associated with estimates and information presented in the report to Congress. In addition, as context for NNSA's acquisition strategy, we examined documentation on NNSA's enterprise strategy, including NNSA's environmental impact statement and the associated record of decision for complex transformation and prior GAO reports on NNSA contract management.

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<sup>7</sup>Federal Accounting Standards Advisory Board, *Statement of Federal Financial Accounting Standards No. 4: Managerial Cost Accounting Standards and Concepts* (Washington, D.C.: July 31, 1995).

<sup>8</sup>GAO adjudicates bid protests to resolve disputes concerning the award of federal contracts. NNSA's award of this M&O contract to Consolidated Nuclear Security, LLC (CNS) was the subject of three GAO bid protests. In January 2013, two unsuccessful offerors filed protests challenging the award, and NNSA issued a stay of performance of the contract until resolution of the protest process. In April 2013, GAO issued a decision partially sustaining the protests. In June 2013, one of the protesters filed another protest challenging the agency's then-ongoing corrective action; in September 2013, GAO issued a decision dismissing and denying that protest. In November 2013, after NNSA reaffirmed its award of the contract to CNS, the same offeror filed another protest challenging the NNSA's decision to re-award the contract to CNS following completion of the corrective action; in February 2014, GAO denied this protest and NNSA lifted the stay of performance permitting CNS to proceed with performance of the contract. See GAO decisions: Nuclear Production Partners LLC; Integrated Nuclear Production Solutions LLC, [B-407948](#) et al., Apr. 29, 2013, 2013 CPD ¶ 112; Nuclear Production Partners LLC, [B-407948.9](#), Sept. 24, 2013, 2013 CPD ¶ 228; and Nuclear Production Partners LLC, [B-407948.10](#), [B-407948.11](#), Feb. 27, 2014, 2014 CPD ¶ 86.

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We conducted this performance audit from April 2014 to March 2015 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. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

# Appendix II: Comments from the National Nuclear Security Administration



**Department of Energy**  
National Nuclear Security Administration  
Washington DC 20585

March 12, 2015

OFFICE OF THE ADMINISTRATOR

Mr. David Trimble  
Director  
Natural Resources and Environment  
Government Accountability Office  
Washington, DC 20458

Dear Mr. Trimble:

Thank you for the opportunity to review and comment on the Government Accountability Office (GAO) draft report titled *Management and Operating Contracts: Opportunities Exist for NNSA to Make Its Benefits and Costs Reports Clearer and More Complete (GAO-15-331)*. As noted in the report, the National Nuclear Security Administration (NNSA) met all of the requirements set by Congress for the cost and benefit report, and concurs with GAO's recommendation to provide additional detail in future iterations of this report.

As a result of our new contract, we are receiving benefits not acknowledged in the draft report. As you know, NNSA was successful in defending against protests of the contract award based on the rigorous, well-documented analysis conducted to support its decision. In addition, we are achieving \$80M in annual award fee savings, approved benefits savings, and staff reengineering savings without having to conduct involuntary separations. We believe this is important contextual information which should be provided along with the recommended opportunities for continued improvement. This will help ensure the reader receives balanced information regarding the costs and benefits reported by NNSA.

In addition to the information above, we have provided technical and general comments under separate cover for your consideration to further enhance the clarity of the report. We are committed to clear and transparent reporting, and my leadership team stands ready to work with GAO to discuss any of our comments prior to issuance of the final report. If you have any questions regarding this response, please contact Dean Childs, Director, Audit Coordination and Internal Affairs, at (301) 903-1341.

Sincerely,

A handwritten signature in black ink, appearing to read "Madelyn R. Credon".

Madelyn R. Credon  
Principal Deputy Administrator



Printed with soy ink on recycled paper

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# Appendix III: GAO Contact and Staff Acknowledgments

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## GAO Contact

David C. Trimble, (202) 512-3841 or [trimbled@gao.gov](mailto:trimbled@gao.gov)

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## Staff Acknowledgments

In addition to the individual named above, Nathan Anderson (Assistant Director), Terry Hanford, Alison O'Neill, and Kate France Smiles made key contributions to this report. Also contributing to this report were Richard Burkard, Pamela Davidson, Dan C. Royer, Anne Stevens, Kiki Theodoropoulos, and William T. Woods.

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# Appendix IV: Accessible Data

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**Data for Figure 1: National Nuclear Security Administration (NNSA) Nuclear Weapons Design Laboratories, Production Plants, and Testing Sites**

1. Lawrence Livermore National Laboratory (Livermore, CA):
  - Conducts research and development of nuclear weapons' nuclear components. The site also does high-energy density physics and high-explosives research, among other activities.
  - Kansas City Plant □(Kansas City, MO):
  - Produces over 85% of the components (all nonnuclear) in a nuclear weapon.
2. Los Alamos National Laboratory (Los Alamos, NM):
  - Conducts research and development of nuclear weapons. Also does high- performance computing and radiography.
  - Produces plutonium pits, feedstock production for mixed-oxide fuel, and primary high-explosives detonators.
3. Sandia National Laboratories (Albuquerque, NM, and other secondary locations):
  - Engineers and produces nonnuclear weapon components.
  - Conducts explosives and explosives components testing.
4. Nevada National Security Site (Mercury, NV):
  - Conducts high-hazard operations in support of National Nuclear Security Administration (NNSA), Department of Defense, and other agencies.
5. Tritium operations – Savannah River Site (SRS) (Aiken, SC):
  - Conducts tritium reservoir loading and surveillance testing in support of continued stockpile certification.
  - Conducts tritium processing, research, and development.
6. Y-12 National Security Complex (Y-12) (Oak Ridge, TN):
  - Manufactures, evaluates, and tests uranium and special materials components for nuclear weapons, cases, and other nuclear weapons components.
  - Supplies enriched uranium for use in naval reactors.
7. Pantex Plant (Pantex) (Amarillo, TX):
  - Evaluates, repairs, and dismantles nuclear weapons.
  - Conducts high-explosives research and development.

**Data For Figure 2: Timeline of National Nuclear Security Administration's (NNSA) Competition for the Consolidated Y-12 and Pantex Management and Operating (M&O) Contract**

**Timeline:**

- September 2007-March 2009: Two NNSA teams – the Request for Information Team and the Acquisition Strategy Team – developed a new acquisition strategy.
- February-March 2010: NNSA obtained approval from the Secretary of Energy to compete the consolidated management and operating (M&O) contract and announced plans to undertake its new acquisition strategy.
- July 2011: Draft Pantex/Y-12 consolidated M&O contract request for proposal (RFP)<sup>b</sup> issued.
- September 2011: GAO-11-848 found that anticipated savings from the proposed contract consolidation were uncertain.
- December 2011: Final Pantex/Y-12 consolidated M&O contract RFP issued.
- June 2012: NNSA formed NNSA Production Office, merging Pantex and Y-12 federal field offices.
- January 2013: Contract awarded to Consolidated Nuclear Security, LLC.
- April 2013, September 2013, and February 2014: GAO issued three bid-protest decisions for NNSA's award of consolidated M&O contract.
- March-June 2014: A 4-month contract transition period started after the bid-protest decisions.

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