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November 2021

# DEPARTMENT OF ENERGY

## Improvements Needed to Strengthen Strategic Planning for the Acquisition Workforce

Accessible Version

# GAO Highlight

Highlights of [GAO-22-103854](#), a report to the Committee on Armed Services, U.S. Senate

## Why GAO Did This Study

DOE's federal acquisition workforce is responsible for managing risks throughout the contracting, or acquisition, process. GAO designated DOE contract and project management as a high-risk area because of DOE's record of inadequate contract management.

Senate Report No. 116-48 accompanying the National Defense Authorization Act for Fiscal Year 2020 includes a provision for GAO to review issues affecting DOE's acquisition workforce. This report examines (1) the positions included in DOE's acquisition workforce and the extent to which this workforce receives acquisition-related training and (2) the extent to which DOE has implemented leading practices for effective strategic planning for its acquisition workforce.

GAO's review included the Office of Science, EM, and NNSA, which represented over 75 percent of DOE obligations for contracts in fiscal year 2019. GAO reviewed regulations, policies, and workforce planning documents; interviewed officials; and compared information to leading practices on workforce planning.

## What GAO Recommends

GAO is making four recommendations, including that DOE review criteria for inclusion in the Acquisition Career Management Program and identify gaps in skills and competencies for staff with acquisition responsibilities.

DOE concurred with the four recommendations.

View [GAO-22-103854](#). For more information, contact Allison B. Bawden at (202) 512-3841 or [bawdena@gao.gov](mailto:bawdena@gao.gov).

November 2021

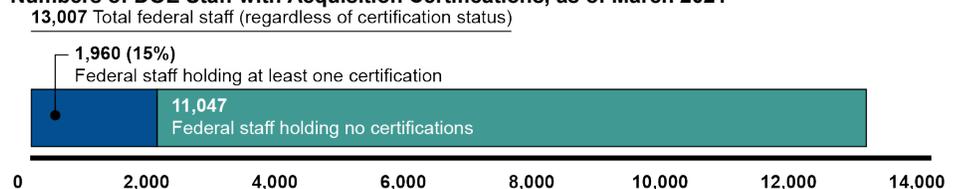
## DEPARTMENT OF ENERGY

### Improvements Needed to Strengthen Strategic Planning for the Acquisition Workforce

## What GAO Found

The Department of Energy (DOE) is one of the largest civilian contracting agencies in the federal government, with about 80 percent of its annual obligations for contracts. Staff in most federal positions in DOE are involved in the acquisition process, according to officials from offices included in GAO's review—the Office of Science, the Office of Environmental Management (EM), and the National Nuclear Security Administration (NNSA). Some of these staff, such as contracting officers, hold federal or DOE acquisition certifications. DOE generally requires acquisition-related training only for certified staff—which represent about 15 percent of DOE's workforce (see figure)—and maintains training requirements for only these staff through the agency's Acquisition Career Management Program.

#### Numbers of DOE Staff with Acquisition Certifications, as of March 2021



Source: GAO analysis of Department of Energy (DOE) data. | GAO-22-103854

DOE generally does not require acquisition-related training for noncertified staff, many of whom may play a critical role in DOE's acquisition process. Office of Federal Procurement Policy guidance states that agencies should consider the functions performed by staff members, such as requirements development by a technical expert, and include any significant acquisition-related positions in their acquisition training programs. By reviewing the criteria for inclusion in its Acquisition Career Management Program and developing training requirements for noncertified staff that meet these criteria, DOE can better ensure it has the capacity to oversee its contracts.

The three DOE offices included in GAO's review have each implemented two of the five leading practices for effective strategic planning for their acquisition workforces, and have partially implemented the remaining three practices. For example, these offices have taken some steps to identify workforce need, but have not fully identified skill and competency gaps—including types and numbers of positions required to close gaps—for their acquisition workforces, as recommended by leading practices.

Further, senior DOE and NNSA officials have raised concerns that they do not have enough staff or staff with the right skills in the acquisition workforce to properly oversee contracts. However, NNSA has conducted limited evaluations of gaps in skills and competencies for some positions in its acquisition workforce, and the other offices in GAO's review have not conducted such analyses. With a more complete and thorough understanding of skill and competency gaps for its acquisition workforce, DOE can improve the information it has available to develop its budget and other strategies to build a workforce with the right skills and of the right size to address the agency's long-standing issues with contract management.

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### **Abbreviations**

DOE	Department of Energy
EM	Office of Environmental Management
FTE	full-time equivalent
M&O	management and operating
NNSA	National Nuclear Security Administration
OFPP	Office of Federal Procurement Policy

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November 16, 2021

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

The Department of Energy (DOE)—including the National Nuclear Security Administration (NNSA), a separately organized agency within DOE—is one of the largest civilian contracting agencies in the federal government. It relies primarily on contractors to carry out its diverse missions related to energy development, basic and applied scientific research, nuclear security, and waste cleanup, among others. In fiscal year 2020, approximately 80 percent of DOE’s \$43 billion in total obligations were for contracts, including contracts to manage and operate its scientific laboratories and engineering and production facilities, construct additional facilities, conduct environmental cleanup, and provide information technology and other support services.

The federal workforce responsible for acquisitions—the process of acquiring goods and services by contract—must be skilled and of the appropriate size to help manage the risks to the agency throughout the acquisition process. In 1990, we designated contract and project management at DOE as a high-risk area because DOE’s record of inadequate management of contractors left the agency vulnerable to waste, fraud, abuse, and mismanagement. In our March 2021 update to our report on high-risk areas, we found that DOE, including NNSA and the Office of Environmental Management (EM), had progressed in its capacity to oversee contracts, both in terms of skill and number of staff.<sup>1</sup> However, we found that NNSA did not have a process to determine the appropriate number of staff needed to award and oversee contracts. Additionally, we found EM faced staffing shortages at one site that may

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<sup>1</sup>GAO, *High Risk Series: Dedicated Leadership Needed to Address Limited Progress in Most High-Risk Areas*, [GAO-21-119SP](#) (Washington, D.C.: Mar. 2, 2021). GAO’s High-Risk List highlights government operations with greater vulnerabilities to fraud, waste, abuse, and mismanagement; or that are in need of transformation to address economy, efficiency, or effectiveness challenges.

impede the office's ability to manage contractors executing two critical capital asset projects at that site.<sup>2</sup>

Our prior work as well as other independent reviews have identified other examples of deficiencies in the training or size of DOE's acquisition workforce that have contributed to negative outcomes. For example, we found in December 2018 that an independent analysis of NNSA's oversight of contractor work to construct the multi-billion dollar Mixed Oxide Fuel Fabrication Facility determined that NNSA staff did not recognize cost and schedule problems early enough during contractor work. A root cause analysis identified that NNSA staff were inexperienced in certain areas of project management and, as a result, did not take the necessary steps at the right time to resolve issues with the contractor. NNSA eventually terminated the project due, in part, to these early shortcomings in contract oversight.<sup>3</sup> Additionally, an April 2020 NNSA internal review found that NNSA program offices were not adequately resourced and lacked the experience required to provide effective technical and programmatic oversight of contractors. For example, the review found that staff did not apply sufficient critical assessment of technical decisions in design processes important for two nuclear weapon modernization programs and recommended that NNSA strengthen its oversight of the work performed by management and operating (M&O) contractors.<sup>4</sup> The review found that limited NNSA staff capacity to

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<sup>2</sup>In addition, in 2021, the National Academies of Sciences, Engineering, and Medicine reported that EM's planned implementation of a new "end-state" contracting model for certain contracts may increase management burden for EM. According to the report, EM implemented the end-state contracting model in an effort to streamline the acquisition process by using single-award contracts with a 10-year draw period during which multiple task orders with very specific work scope and timelines would be issued. The report concluded that this may result in an unwieldy number of task orders requiring a significant amount of oversight. See National Academies of Sciences, Engineering, and Medicine, *Effectiveness and Efficiency of Defense Environmental Cleanup Activities of DOE's Office of Environmental Management: Report 1 (2021)* (Washington, D.C.: 2021).

<sup>3</sup>GAO, *Project Management: DOE and NNSA Should Improve Their Lessons-Learned Process for Capital Asset Projects*, [GAO-19-25](#) (Washington, D.C.: Dec. 21, 2018). Also see Parsons, Longenecker & Associates, *Root Cause Analysis of Cost Increases: Mixed Oxide Fuel Fabrication Facility and Waste Solidification Building, Savannah River Site, South Carolina* (May 23, 2014).

<sup>4</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 government-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 § 17.601.

evaluate contractors' technical decisions led to incomplete risk mitigation and contributed to failure of a key electrical component related to the two programs.

Like other federal agencies, DOE faces a number of challenges in recruiting, hiring, and retaining its acquisition workforce. Strategic workforce planning can help agencies address these challenges by providing a mechanism for agencies to identify and fill—through hiring, training, and professional development—gaps in the knowledge, skills, and abilities necessary to oversee the acquisition process. However, the federal government has also faced long-standing challenges with strategically planning for its workforce. Gaps in mission-critical skills, due in part to inadequate strategic workforce planning, persist across the federal workforce in fields such as engineering, cybersecurity, and acquisitions. As a result, we designated human capital management, which includes strategic workforce planning, across the federal government as a high-risk area since 2001.<sup>5</sup> To help address challenges with strategic workforce planning, in December 2003 we identified five key principles—or leading practices—that strategic workforce planning should address irrespective of the context in which the planning is done.<sup>6</sup>

The Senate Report No. 116-48 accompanying the National Defense Authorization Act for Fiscal Year 2020 includes a provision for GAO to review issues affecting DOE's acquisition workforce.<sup>7</sup> This report examines (1) the positions included in DOE's acquisition workforce and the extent to which this workforce receives acquisition-related training, and (2) the extent to which DOE has implemented leading practices for effective strategic planning for its acquisition workforce.

To examine the positions included in DOE's acquisition workforce and the extent to which this workforce receives training, we reviewed laws, regulations, and policies pertaining to the acquisition workforce. This included reviewing roles and responsibilities for the Chief Acquisition Officer and Senior Procurement Executive as outlined in guidance from the Office of Management and Budget's Office of Federal Procurement Policy (OFPP) as well as laws on the identification, training, and

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<sup>5</sup>[GAO-21-119SP](#).

<sup>6</sup>GAO, *Human Capital: Key Principles for Effective Strategic Workforce Planning*, [GAO-04-39](#) (Washington, D.C.: Dec. 11, 2003).

<sup>7</sup>S. Rep. No. 116-48, at 389 (2019).

management of the acquisition workforce.<sup>8</sup> We reviewed documentation and interviewed officials from DOE's Office of Acquisition Management to learn about how DOE identifies, trains, and tracks certifications for members of its acquisition workforce. We also analyzed data on certification status for DOE's acquisition workforce as maintained in the Federal Acquisition Institute Training Application System.<sup>9</sup> We assessed the reliability of the data by conducting electronic testing for outliers and missing values, reviewing related documentation, and interviewing knowledgeable agency officials. We found the data to be sufficiently reliable for identifying the number of DOE staff with acquisition certifications.

In addition, we reviewed documentation and interviewed officials from DOE's Office of Science, EM, and NNSA to learn about the general roles and responsibilities of staff involved in the acquisition process. We focused our review on these two program offices and NNSA because they were among the offices with the largest number of staff holding federal or DOE acquisition certifications (as of May 2020) and awarded the highest percentage of total DOE contracting dollars (during fiscal year 2019—the most recent year of data available when we selected offices for review).<sup>10</sup> Together, these three offices represented almost half of all DOE staff holding acquisition certifications in May 2020 and over 75 percent of all DOE obligations for contracts in fiscal year 2019.

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<sup>8</sup>Office of Management and Budget, *Policy Letter 05-01* (Washington, D.C.: Apr. 2005). By statute, the Chief Acquisition Officer is responsible for advising and assisting the head of an executive agency and other agency officials to ensure that the mission of the agency is achieved through the management of the agency's acquisition activities, among other duties. 41 U.S.C. § 1702(b)(1)-(3). By statute, the Senior Procurement Executive is responsible for management direction of the acquisition process of each federal agency, including implementation of the unique procurement policies, regulations, and standard of the agency. 41 U.S.C. § 1702(c)(2). The NNSA Administrator has been designated by statute as the Senior Procurement Executive for NNSA. 50 U.S.C. § 2402(c). The NNSA Administrator has delegated authority to and designated the Deputy Associate Administrator for Acquisition and Project Management as NNSA's Senior Procurement Executive.

<sup>9</sup>In mid-2021, the Federal Acquisition Institute Training Application System was discontinued, and acquisition workforce training data were transitioned to a new platform, Cornerstone OnDemand, maintained by the Defense Acquisition University. DOE provided the data we examined during this review as of March 2021; therefore, the change in platform did not affect our review.

<sup>10</sup>NNSA is a separately organized agency within DOE. However, for ease of reporting, we use the term "program office" to describe the three organizations in our review.

To better understand the roles and responsibilities of staff involved in the acquisition process and how these staff may be included in DOE's definition of its acquisition workforce, we selected a nongeneralizable sample of three contracts from each of the three offices in our review—one M&O contract, one construction contract, and one service contract. We selected contracts from each category that were of similar total contract value. We discussed each of these nine contracts with contracting officers and other knowledgeable staff.

To examine the extent to which DOE has implemented leading practices for effective strategic planning for its acquisition workforce, we reviewed workforce plans, workforce studies, and other documentation on the overall workforce planning process from the Office of Science, EM, and NNSA. We also conducted semi-structured interviews with officials from these offices as well as from DOE's Office of the Chief Human Capital Officer to learn more about how the workforce planning process affects the acquisition workforce. Using information obtained from these sources, we compared the workforce planning process from each office to leading practices for strategic workforce planning identified in our December 2003 report to determine the extent to which these offices are implementing the practices.<sup>11</sup> We used a three-point scale: we rated a practice as "fully implemented" if the office provided evidence that satisfied the leading practice, as "partially implemented" if the office provided evidence that satisfied a portion of the leading practice, and as "not implemented" if the office did not provide evidence that satisfied the leading practice. Two of our analysts independently reviewed documentation on the planning process as well as responses from DOE officials to our semi-structured interview questions and came to full agreement on all assessments. DOE officials had the opportunity to review these initial assessments and provide additional information about the planning process in each office, which we incorporated, as appropriate.

We conducted this performance audit from October 2019 to November 2021 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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<sup>11</sup>[GAO-04-39](#).

## Background

DOE relies on contracts to accomplish most of its work, and many of DOE's largest contracts are M&Os. DOE uses M&O contracts at government-owned or government-controlled establishments, which DOE refers to as sites.<sup>12</sup> In addition, DOE uses contracts to obtain goods or services not necessarily related to managing and operating government-owned sites. For example, DOE uses support service contracts to obtain some information technology services, guard services, and program management services to support DOE operations.

DOE's acquisition process is subject to the Federal Acquisition Regulation, policy from OFPP, the Department of Energy Acquisition Regulation, and internal DOE directives.<sup>13</sup> The acquisition process at DOE and other federal agencies generally includes three phases: contract pre-award, award, and post-award (see fig. 1).

**Figure 1: Phases of the Federal Acquisition Process**



Source: GAO analysis of the Federal Acquisition Regulation. | GAO-22-103854

- The **pre-award** phase begins when an agency determines its requirements and how to acquire them. If an agency determines that the appropriate method for acquiring the goods or services is a contract, the agency prepares and posts a solicitation, which identifies what an agency wants to acquire, provides instructions to would-be

<sup>12</sup>For more information on M&O contracts, see GAO, *Department of Energy: Actions Needed to Strengthen Acquisition Planning for Management and Operating Contracts*, GAO-16-529 (Washington, D.C.: Aug. 9, 2016).

<sup>13</sup>While the Federal Acquisition Regulation sets forth regulatory requirements for the acquisition process government-wide, it allows agencies to issue acquisition regulations that implement or supplement the Federal Acquisition Regulation. See 48 C.F.R. § 1.301(a)(1).

offerors, and identifies the source selection method and criteria that will be used to evaluate offers.

- In the **award** phase, agency staff evaluate the offers using the source selection method and criteria described in the solicitation. As necessary, agency staff may negotiate with an offeror on price before selecting an awardee and awarding a contract.
- The **post-award** phase includes contract administration and performance monitoring, where agency staff ensure that the government gets what it paid for in terms of cost, quality, and timeliness. Once all terms of a contract have been met, agency staff carry out administrative procedures to close out the contract files.<sup>14</sup>

Key players in the acquisition process at DOE and other federal agencies include

- **Contracting officers**, who hold warrants that allow them to negotiate a contract on behalf of the government. Only contracting officers may sign, modify, or terminate a contract.
- **Contracting officer's representatives**, who are authorized via a written designation from a contracting officer to perform specific technical or administrative contract functions.
- **Program and project managers**, who help develop accurate government requirements, define measurable performance standards, and manage contractor activities to ensure intended outcomes are achieved.

DOE is organized into program offices, site and field offices, and functional offices. Federal staff involved in the acquisition process at DOE may work in any of these offices, depending on the functions these staff perform.

- **Program offices**, including the three offices in our review, primarily oversee mission-related activities and are responsible for integrating the activities across the multiple sites performing work. Mission-related activities may be defined as programs or projects, with a designated program or project manager.
- **Site offices** provide a federal presence at a site to oversee the day-to-day activities of the contractors as well as site-specific mission support functions, such as safety.

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<sup>14</sup>Federal Acquisition Regulation subpart 4.804 sets forth regulatory requirements for the contract closeout files.

- **Field offices** provide oversight to two or more site offices.
- **Functional offices** provide management, legal, information technology, and other support functions to the program offices and the agency as a whole. Among DOE's functional offices are the Office of Management and the Office of Chief Human Capital Officer.

Within the Office of Management, DOE's Office of Acquisition Management is responsible for (1) establishing acquisition-related policies and guidance for the department and (2) managing DOE's acquisition process. In fulfilling these responsibilities, the Office of Acquisition Management develops, issues, maintains, and interprets acquisition regulations, policies, and guidance; provides assistance and oversight for acquisition activities within the Office of Science, EM, and other DOE offices—exclusive of NNSA—and provides operational acquisition services to DOE headquarters and staff organizations. The key official responsible for setting acquisition policy for DOE is the Director of the Office of Acquisition Management, who also serves as DOE's Senior Procurement Executive. Additionally, many federal civilian agencies, including DOE, are required to have a Chief Acquisition Officer who is responsible for advising and assisting the head of the agency and other agency officials to ensure that the mission of the agency is achieved through the management of the agency's acquisition activities, among other responsibilities. The Chief Acquisition Officer is also responsible for developing strategies and specific plans for hiring, training, and professional development of the acquisition workforce to achieve the performance goals established for acquisition management.<sup>15</sup> The Deputy Secretary of Energy serves as DOE's Chief Acquisition Officer, among other responsibilities.

Within NNSA, the Office of Acquisition and Project Management is responsible for ensuring that NNSA implements DOE's acquisition policies and regulations as well as NNSA's own supplemental directives and procedures. The key officials responsible for setting direction and policy for NNSA are the Associate Administrator for Acquisition and Project Management and the Deputy Associate Administrator for Acquisition and Project Management, who also serves as NNSA's Senior

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<sup>15</sup>The Services Acquisition Reform Act of 2003 requires the head of certain federal civilian agencies with a Chief Financial Officer to appoint or designate a non-career employee to the position of Chief Acquisition Officer to, among other things, advise and assist agency officials to ensure that the agency's mission is achieved through the management of its acquisition activities. See Pub. L. No. 108-136, tit. XIV, § 1421, 117 Stat. 1392, 1663-1676 (codified as amended at 41 U.S.C. § 1702).

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Procurement Executive. NNSA generally follows all DOE acquisition management policy, according to DOE documentation.

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## **Federal Staff in Most Positions Are Involved in the Acquisition Process, but DOE Has Not Established Training Requirements for Positions That Do Not Require Certification**

Federal staff in most positions within DOE offices in our review are involved in the acquisition process, according to DOE officials and related DOE documentation. This includes staff with federal or DOE acquisition certifications, such as contracting officers. While DOE maintains training requirements for certified DOE and NNSA staff through the agency's Acquisition Career Management Program, DOE has not required acquisition-related training for positions that do not require certification, including for noncertified positions that may participate at critical points in the acquisition management process.

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## **Federal Staff in Most Positions in DOE's Largest Program Offices Are Involved in the Acquisition Process**

Officials we spoke with from the Office of Science, EM, and NNSA told us that federal staff in most positions participate in the acquisition process to some extent and, therefore, have acquisition-related responsibilities, at least on a part-time basis. Based on our interviews with these officials and a review of related DOE documentation, we identified positions within DOE's federal workforce that may be involved in the acquisition process. Figure 2 displays some of the acquisition-related responsibilities of DOE's federal workforce by position and by phase of the acquisition process.

**Figure 2: Department of Energy (DOE) Staff with Acquisition-Related Responsibilities by Phase of the Acquisition Process**

		
Pre-award	Award	Post-award
<ul style="list-style-type: none"> <li>• Requirements definition</li> <li>• Acquisition planning</li> <li>• Solicitation preparation</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluation of offers</li> <li>• Price negotiation</li> <li>• Selection of awardee</li> </ul>	<ul style="list-style-type: none"> <li>• Contract administration</li> <li>• Performance monitoring</li> <li>• Contract closeout</li> </ul>
<p><b>Positions that require a certification</b></p>	<p><b>Positions that require a certification</b></p>	<p><b>Positions that require a certification</b></p>
<p><b>Contracting officer</b></p> <ul style="list-style-type: none"> <li>• Participates in all aspects of acquisition planning.</li> <li>• Prepares solicitation.</li> <li>• Ensures planning process complies with agency policy and the Federal Acquisition Regulation.</li> </ul> <p><b>Contracting officer's representative</b></p> <ul style="list-style-type: none"> <li>• Assists contracting officer.</li> <li>• May also serve as subject matter expert.</li> </ul> <p><b>Program or project manager</b></p> <ul style="list-style-type: none"> <li>• Participates in acquisition planning and development of solicitation.</li> <li>• Helps develop requirements.</li> </ul> <p><b>Property manager</b></p> <ul style="list-style-type: none"> <li>• Participates in acquisition planning and development of solicitation.</li> <li>• Serves as subject matter expert.</li> </ul>	<p><b>Contracting officer</b></p> <ul style="list-style-type: none"> <li>• Serves on source evaluation board (which evaluates offers), or equivalent; may serve as chair.</li> <li>• Responsible for price negotiation with offerors, as necessary.</li> </ul> <p><b>Program or project manager</b></p> <ul style="list-style-type: none"> <li>• Serves on source evaluation board or equivalent; may serve as chair.</li> </ul>	<p><b>Contracting officer</b></p> <ul style="list-style-type: none"> <li>• Manages all post-award activities.</li> </ul> <p><b>Contracting officer's representative</b></p> <ul style="list-style-type: none"> <li>• Assists contracting officer.</li> </ul> <p><b>Program or project manager</b></p> <ul style="list-style-type: none"> <li>• Oversees contractor technical and schedule performance.</li> </ul> <p><b>Property manager</b></p> <ul style="list-style-type: none"> <li>• Serves as subject matter expert.</li> </ul>
<p><b>Positions that do not require a certification</b></p>	<p><b>Positions that do not require a certification</b></p>	<p><b>Positions that do not require a certification</b></p>
<p><b>Technical specialist (may include engineers, scientists, safety and security specialists, and human resource specialists)</b></p> <ul style="list-style-type: none"> <li>• Participates in acquisition planning and development of solicitation.</li> <li>• Serves as subject matter expert.</li> <li>• Helps develop requirements.</li> </ul> <p><b>Attorney</b></p> <ul style="list-style-type: none"> <li>• Provides legal counsel.</li> <li>• Reviews solicitation.</li> </ul> <p><b>Program management and agency leadership</b></p> <ul style="list-style-type: none"> <li>• Provides review and approval as needed.</li> </ul>	<p><b>Certain source evaluation board members:</b></p> <ul style="list-style-type: none"> <li>• Technical specialist</li> <li>• Attorney</li> </ul>	<p><b>Technical specialist</b></p> <ul style="list-style-type: none"> <li>• Serves as subject matter expert.</li> </ul> <p><b>Attorney</b></p> <ul style="list-style-type: none"> <li>• Involved as needed for contract administration, such as legal review for any contract changes.</li> </ul> <p><b>Program management and agency leadership</b></p> <ul style="list-style-type: none"> <li>• Provides review and approval as needed, such as for contract modifications.</li> </ul> <p><b>Task monitor</b></p> <ul style="list-style-type: none"> <li>• Helps contracting officer and contracting officer's representative ensure contractor is adhering to requirements.</li> </ul>

Source: GAO analysis of DOE information. | GAO-22-103854

Note: The property manager certification is a DOE certification, which is limited to acquisition functions at DOE. Certifications for other positions shown are Federal Acquisition Certifications, which are recognized by all federal civilian agencies.

Officials from the Office of Science, EM, and NNSA told us that the types of positions involved in the acquisition process for a given contract can vary depending on the type, complexity, and risk of the contract; the anticipated contract value; and the types of goods or services to be obtained under the contract's scope of work. For example, if a contract is for security services, staff with security expertise may be involved

throughout the acquisition process. Similarly, for an acquisition where an offer might be received from a small business, a small business specialist may be involved in the acquisition to help ensure competition. Some M&O contracts may be subject to collective bargaining agreements with employee unions, and these acquisitions may involve one or more human resource specialists to review negotiation parameters, according to NNSA officials.

DOE requires that staff in some positions hold an acquisition certification and does not require such a certification for staff in other positions. Certification helps federal agencies ensure consistent competencies and standards for staff in certain positions when performing acquisition-related work across the federal government. Acquisition certifications at DOE are of two types: (1) Federal Acquisition Certifications, which are recognized by all civilian agencies as evidence that a staff member meets core education, training, and experience requirements to perform certain acquisition functions, and (2) DOE acquisition certifications, which are limited to acquisition functions at DOE. DOE bases its requirements for which staff are to hold certifications on the primary responsibilities of those positions and, in some cases, on federal requirements associated with those responsibilities.<sup>16</sup> As shown in table 1, DOE staff with certifications represent about one quarter or less of federal staff in each of the three offices in our review and 15 percent of federal staff in all DOE offices.

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<sup>16</sup>This includes a federal requirement that all contracting officers, who are the only employees who can enter into and sign contracts on behalf of the federal government, issued a new warrant after 2006 must generally hold the appropriate certification.

**Table 1: Numbers of Staff with Federal and Department of Energy (DOE) Acquisition Certifications, as of March 2021**

	Total in all DOE offices <sup>a</sup>	Office of Science	Office of Environmental Management (EM)	National Nuclear Security Administration (NNSA)
<b>Federal Acquisition Certification</b>				
Contracting	606	86	124	128
Contracting Officer's Representative	1,077	71	157	295
Program/Project Manager	159	12	54	46
<b>DOE acquisition certification</b>				
Purchasing	11	3	1	0
Financial Assistance	215	46	26	15
Technical Project Officer	337	7	11	11
Personal Property Manager	26	5	11	6
Total federal staff holding at least one certification <sup>b</sup>	1,960	178	306	415
Total federal staff (regardless of certification status)	13,007	817	1,152	2,504 <sup>c</sup>
Percent of federal staff with federal or DOE acquisition certification	15	22	27	17

Source: GAO analysis of DOE data. | GAO-22-103854

Note: Individuals may hold multiple certifications.

<sup>a</sup>DOE data represent the total number of federal staff with certifications across all DOE offices, including federal staff in the Office of Science, EM, and NNSA with certifications.

<sup>b</sup>Totals presented here may differ from the sum across all certifications because staff may hold more than one certification.

<sup>c</sup>Total shown is a headcount and differs from NNSA's authorized staff levels, which for fiscal year 2021 is limited to 1,890 full-time equivalents in certain offices.

As shown in figure 2, above, staff in positions that do not require certifications participate in critical parts of the acquisition process, such as preparation of the contract solicitation and selection of the awardee. These positions include attorneys and technical specialists, among others. EM's general operating guidelines on the acquisition process state that a model pre-award acquisition team—which is responsible for developing a contract's statement of work and criteria for evaluating offers, among other important duties—should include an attorney and, as needed, technical specialists, such as engineers and scientists. Documentation we reviewed from the Office of Science on post-award contract administration activities for the Lawrence Berkeley National Laboratory states that support staff include those with expertise in human resources, budget or finance, and legal issues, and that these staff are necessary to ensure successful execution of contract administration

activities. A June 2018 Office of Personnel Management (OPM) study of NNSA reported that staff in technical positions, such as engineers and scientists, spent at least some of their time on acquisition-related responsibilities.<sup>17</sup> For example, staff in NNSA's Office of Defense Nuclear Nonproliferation in positions classified by OPM as General Physical Science reported spending 16 percent of their time on "procurement and contracting," according to the study. Within NNSA's Office of Acquisition and Project Management, staff in positions classified as Environmental Engineering reported spending 44 percent of their time on procurement and contracting.

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### DOE Has Not Established Training Requirements for Staff in Positions That Do Not Require Certifications

While DOE has established training requirements for federal staff in positions that require federal or DOE acquisition certifications, DOE has not established acquisition-related training requirements for federal staff in positions that do not require certifications, even if these staff may play a critical role in the acquisition process.

**Staff in positions that require certifications.** As required by law, DOE maintains an Acquisition Career Management Program, which establishes requirements for training and career development for the agency's acquisition workforce.<sup>18</sup> According to DOE documentation, the program is designed to increase the proficiency of DOE's acquisition workforce through competency-based training and helps ensure that DOE's acquisition workforce has the necessary skills and knowledge to meet the challenges of the acquisition environment. This documentation states that a properly trained and prepared acquisition workforce is vital to meeting DOE's mission needs efficiently and effectively.

OFPP policy identifies the types of positions that DOE, at a minimum, must include in this program—specifically, positions generally requiring a federal acquisition certification and any other significant acquisition-related positions.<sup>19</sup> DOE has developed its Acquisition Career

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<sup>17</sup>U.S. Office of Personnel Management, *Workload and Organizational Analysis Findings and Results for the National Nuclear Security Administration* (Washington, D.C.: June 2018).

<sup>18</sup>See 41 U.S.C. § 1702(b)(3)(G).

<sup>19</sup>Office of Management and Budget, *Policy Letter 05-01*.

Management Program to manage certification requirements for staff seeking or holding any of the three federal acquisition certifications established by OFPP and the Federal Acquisition Institute: Contracting, Contracting Officer's Representative, and Program/Project Manager. These include training and experience requirements. For example, to obtain a Federal Acquisition Certification in Contracting, a staff member must complete courses in contract planning and execution, cost and price analysis, and performance-based reimbursement, among other courses, as well as have at least 1 year of contract work experience.<sup>20</sup> DOE also uses its Acquisition Career Management Program to manage DOE acquisition certifications, including certifications in Purchasing, Financial Assistance, Personal Property Management, and for Technical Project Officers. DOE has developed training and experience requirements for these certifications. DOE also uses its Acquisition Career Management Program to manage continuing education for federal or DOE certifications with a requirement that staff obtain a specified number of education credits every 2 years.<sup>21</sup>

**Staff in positions that do not require certifications.** DOE has generally not established acquisition-related training requirements for staff in positions that do not require federal or DOE acquisition certifications.<sup>22</sup> Some noncertified staff receive limited acquisition-related training if they serve on a source evaluation board, which evaluates offers during the award phase of the acquisition process. For example, within the Office of Science and EM, officials told us that staff with and without acquisition certifications take a 12-hour source selection training course developed by DOE's Offices of Acquisition Management and General Counsel

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<sup>20</sup>These requirements pertain to a level I Contracting certification. Levels II and III require additional training and experience. Higher levels of certification are required to serve as a Contracting Officer on larger contracts.

<sup>21</sup>According to officials, NNSA maintains a Nuclear Weapon Acquisition Professional Certification Program, which provides program management training and certification for staff with contract oversight responsibilities related to maintaining the nation's nuclear weapons stockpile. Certifications under this program are specific to NNSA and are not included in DOE's Acquisition Career Management Program.

<sup>22</sup>Staff in various positions, such as attorneys, may obtain education or training related to acquisitions prior to their employment at DOE and, therefore, may have knowledge of acquisitions-related issues. However, this education and training is independent of DOE requirements.

before participating on a board.<sup>23</sup> Similarly, NNSA officials told us that staff serving on its source evaluation boards receive a briefing from NNSA's Office of General Counsel before serving. DOE officials also told us that staff are free to take acquisition-related training, such as from the Federal Acquisition Institute or commercial vendors, if they choose.

Other than the training for those serving on a source evaluation board, DOE generally has not established training requirements for staff in positions that do not require federal or DOE acquisition certifications. OFPP policy requires DOE to determine significant acquisition-related positions to be included in the Acquisition Career Management Program by considering the functions performed by a given position, and it does not limit inclusion in the program to those positions requiring an acquisition certification. The policy describes some of these functions, including some functions we identified as being carried out by noncertified positions at DOE, such as requirements development by a technical expert and legal review by an attorney.<sup>24</sup> However, DOE has based its criteria for determining the workforce managed under the agency's Acquisition Career Management Program on whether a given staff member holds or is seeking a federal or DOE acquisition certification, and it has not based its criteria necessarily on the acquisition-related responsibilities of that staff member. DOE officials told us the existing criteria meets the OFPP policy letter because it includes the positions listed in the policy. Because DOE has narrowly interpreted OFPP policy and because staff that do not hold an acquisition certification are not included in DOE's Acquisition Career Management Program, DOE has not developed training requirements for staff in those positions that do not require federal or DOE certifications.

As previously discussed, our prior work has shown that a properly trained federal workforce is critical to the acquisition process at DOE. By limiting training requirements through its Acquisition Career Management Program to staff with certifications, DOE is missing an opportunity to ensure that other staff with significant acquisition-related responsibilities

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<sup>23</sup>In July 2020, EM also launched an Acquisition Corps initiative to broaden the pool of trained contracting staff available to serve on source evaluation boards, including hiring additional staff. According to EM officials, this initiative will help ensure that EM has trained and experienced staff available to build a sustainable and repeatable source selection process. EM does not plan to dedicate staff through this initiative to other acquisition management activities, but Acquisition Corps staff may support these activities in a secondary capacity.

<sup>24</sup>Office of Management and Budget, *Policy Letter 05-01*.

have the training needed to successfully perform their responsibilities. By more broadly assessing the criteria for inclusion in the agency’s Acquisition Career Management Program, consistent with OFPP policy, and by developing training requirements, if necessary, for noncertified staff that participate in the acquisition process, DOE can better ensure it has the capacity to effectively oversee its contracts.

## DOE Has Not Fully Implemented All Leading Practices for Strategic Planning for its Acquisition Workforce

Offices within DOE are responsible for planning for their own workforces, and the Office of Science, EM, and NNSA have fully implemented two of the five leading practices for strategic planning for their acquisition workforces. However, these offices have partially implemented the remaining three leading practices: involving top management and other stakeholders, determining critical skills and competencies, and developing workforce planning strategies designed to address gaps in skills and competencies (see table 2).

**Table 2: Extent to Which Selected Department of Energy Offices Have Implemented Leading Practices for Strategic Planning for Their Acquisition Workforces**

	Office of Science	Office of Environmental Management	National Nuclear Security Administration
<b>Leading practice</b>			
Involve top management, employees, and other stakeholders in strategic planning	Partially implemented	Partially implemented	Partially implemented
Determine critical skills and competencies needed to achieve current and future programmatic results	Partially implemented	Partially implemented	Partially implemented
Develop workforce planning strategies designed to address gaps in critical skills and competencies that need attention	Partially implemented	Partially implemented	Partially implemented
Build administrative and other capabilities to support workforce planning strategies	Fully Implemented	Fully Implemented	Fully Implemented
Monitor and evaluate progress toward human capital goals and programmatic results	Fully Implemented	Fully Implemented	Fully Implemented

Source: GAO analysis of Department of Energy information. | GAO-22-103854

**Involve top management, employees, and other stakeholders in strategic planning.** Our prior work has shown that strategic workforce planning is most likely to succeed if an agency's top management sets the overall direction and goals of workforce planning, and if its management involves employees and other stakeholders in developing and implementing workforce strategies.<sup>25</sup>

We found that the Office of Science, EM, and NNSA have partially implemented this leading practice for their acquisition workforces by involving their management in workforce planning. Specifically, the Office of Science, EM, and NNSA develop plans for their overall workforces, including for their acquisition workforces, annually—typically as part of their budget formulation processes—with involvement from senior managers and office and program directors, according to officials and planning documentation. In addition, NNSA performed a one-time detailed evaluation of workforce size in 2018 by assembling a strategic review group composed of NNSA's Chief of Staff and leadership from human resources, budget, and program offices.

However, top management representing the acquisition workforce at an agency-wide level is not actively involved in workforce planning within the Office of Science, EM, and NNSA because DOE has not established a process for top agency management to participate in offices' workforce planning efforts. According to federal law, an agency's Chief Acquisition Officer is responsible for developing strategies and specific plans for hiring, training, and professional development of the acquisition workforce to achieve the performance goals established for acquisition management.<sup>26</sup> However, this official at DOE—who also serves as the Deputy Secretary of Energy—does not play an active role in acquisition workforce planning within the Office of Science, EM, or NNSA.

DOE has delegated certain duties of this position, such as aspects of professional development, to DOE's and NNSA's Senior Procurement Executives. However, based on our interviews with agency officials and a review of related documentation, we found that these officials have had limited involvement in developing plans for the acquisition workforce

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<sup>25</sup>[GAO-04-39](#)

<sup>26</sup>See 41 U.S.C. § 1702(b)(3)(H)(ii). OFPP guidance states that an agency's Chief Acquisition Officer shall provide substantial input into agency strategic plans regarding the acquisition workforce. See Office of Management and Budget, *Policy Letter 05-01*. DOE's Chief Acquisition Officer is responsible for DOE and NNSA.

within the Office of Science, EM, and NNSA. Officials from DOE's Office of Acquisition Management told us that the Chief Acquisition Officer and DOE's Senior Procurement Executive do not have oversight of the offices' workforce planning efforts and, therefore, do not have a formal role in the workforce planning process. According to officials from the Office of Acquisition Management, the Senior Procurement Executives and other senior acquisition officials across the agency meet regularly as part of DOE's Acquisition Council where opinions, leading practices, and lessons learned may be shared, including related to workforce planning. However, officials told us that offices are responsible for their workforce planning, including for the acquisition workforce.

According to leading practices, having dedicated top leadership that is clearly and personally involved provides organizational vision that is important for change, and it provides a cadre of champions to ensure that planning strategies are thoroughly implemented and receive sustained attention over time.<sup>27</sup> The effort can also integrate workforce planning efforts with other key management planning efforts, such financial management, to ensure initiatives work together to achieve the agency's goals. By establishing a process for the Chief Acquisition Officer's participation in planning efforts for the acquisition workforce, DOE can better ensure successful implementation of planning strategies, which could help ensure that the offices obtain and retain a qualified workforce to improve acquisition outcomes.

**Determine critical skills and competencies.** Our prior work has shown that identifying critical skills and competencies is essential for workforce planning because it enables agencies to identify the workforce needed to achieve current and future programmatic goals.<sup>28</sup> We found that the Office of Science, EM, and NNSA have partially implemented this leading practice for their acquisition workforces.

Under the Acquisition Career Management Program, for staff in positions requiring a Federal Acquisition Certification, DOE follows the skill and competency requirements for each certification maintained by the Federal

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<sup>27</sup>[GAO-04-39](#).

<sup>28</sup>[GAO-04-39](#). A skill is a learned physical or cognitive ability to complete a specific task. Meeting a competency or set of competencies denotes qualification to carry out assigned responsibilities. It requires relevant knowledge, skills, and abilities, which are gained largely from professional experience, training, and certifications. GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 2014).

Acquisition Institute. For example, for staff in positions requiring a Contracting certification, DOE follows the Federal Acquisition Institute's competencies for this certification, which include categories such as source selection planning, bid evaluation, negotiation, problem solving, and customer service. Under the source selection planning competency, DOE staff with a Contracting certification must show an ability to "document a source selection plan that is consistent with public law, regulations, policy, and other guidelines." Under the Acquisition Career Management Program, for staff in positions requiring a DOE certification, DOE has developed its own skill and competency requirements. For example, for staff in positions requiring a Personal Property Management Certification, DOE has developed requirements including competence in contract planning, execution, and management, as well as knowledge of government property management systems.

According to officials, NNSA has developed additional competencies to be included in career path guides for its contracting officers and program managers. Competencies include areas such as communication, critical thinking, technical expertise, and business acumen. In addition, in 2018, NNSA implemented competencies, such as problem solving and self-management, which apply to all NNSA staff and are not specific to the acquisition workforce. According to NNSA documentation, this effort was designed to promote a learning culture by strengthening staff skills in competencies that are universal to NNSA's mission.

However, DOE, including the three offices in our review, does not have similar sets of competencies for staff that perform acquisition-related functions but do not have certifications. DOE has not determined critical skills and competencies for these positions because, as discussed previously, DOE's Acquisition Career Management Program governs training for its acquisition workforce and, due to DOE's narrow interpretation of OFPP policy, DOE does not include noncertified staff with acquisition-related responsibilities in its program. Therefore, DOE has not determined through this program, or other efforts, the necessary skills and competencies upon which training requirements for these staff would be based. By determining critical skills and competencies for all staff with acquisition-related responsibilities, including noncertified staff, DOE can better ensure that its staff have the skills and competencies necessary to effectively manage the acquisition process.

**Develop strategies to address gaps in skills and competencies.**

According to leading practices, once an agency identifies the skills and competencies that its workforce needs to achieve current and future

programmatic results, it can develop policies and other strategies to address gaps in skills and competencies between its current and ideal workforce.<sup>29</sup> This includes consideration of the appropriate types of positions and size for the workforce. A complete and thorough understanding of skill and competency gaps within an agency's existing workforce, as well as the size of the workforce needed to perform the work, is critical because it allows an agency to identify needs and set priorities against the realities of limited budgets and other resources. This best positions an agency to develop the right workforce planning strategies for mission success.

We found that the Office of Science, EM, and NNSA have partially implemented this leading practice. Specifically, these offices have taken some steps to partially identify workforce need, and senior DOE and NNSA officials have raised concerns that they do not have enough staff with the right skills in their acquisition workforces to oversee their contracts. However, these offices have not fully assessed their needs by completely and thoroughly identifying skill and competency gaps or determining the ideal size and composition of their acquisition workforces.

- **Office of Science.** Officials from the Office of Science described a workforce planning process where annual budget fluctuations dictate if and where vacant positions are filled in the office's organizational chart, with management determining which positions to fill first. Officials said they use available data when making planning decisions for the acquisition workforce, such as the number of contract actions per staff member and total dollar value of a contract, but this did not include information on gaps in skills and competencies within the workforce.
- **EM.** Officials from EM described a budget-driven workforce planning process similar to the Office of Science that indicated an understanding of existing vacancies within the workforce. However, it did not include a thorough evaluation and understanding of gaps in skills and competencies within the workforce. EM's headquarters workforce plan for fiscal years 2020 through 2024 included an analysis of fiscal year 2019 workforce vacancy data by function, such as business analysis, legal support, and contracting. The analysis identified vacancies in these and most other functions. However, the analysis did not include a discussion of gaps in skills and competencies within EM's existing workforce. Further, the analysis

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<sup>29</sup>[GAO-04-39](#).

noted that vacancies identified did not fully depict the optimum workforce in position or size required to support EM's mission, but the analysis did not include complete information describing this optimum workforce, such as an analysis of required skills and competencies.

- **NNSA.** As with the other two offices in our review, NNSA officials told us that many of their decisions related to the workforce are driven by existing vacancies and are constrained by the annual budget. Additionally, NNSA is constrained by a statutory cap on its number of full-time equivalent (FTE) positions, which limits the total number of federal positions for each fiscal year.<sup>30</sup> NNSA officials told us this statutory cap hinders NNSA's ability to manage the acquisition process. Officials pointed to a July 2020 NNSA staffing study that concluded that the federal workforce within NNSA's Office of Acquisition and Project Management could be optimized if its number of staff—169 at the time of the study—was increased by over 50 percent, which would require an increase to the statutory cap or a justification to Congress for exceeding the cap.

NNSA has performed limited evaluations of workforce need, including identifying gaps in competencies for some positions in its acquisition workforce, but NNSA's efforts do not include a complete and thorough evaluation and understanding of gaps in skills and competencies across NNSA's entire acquisition workforce. In 2018, NNSA conducted a study with OPM that included an analysis of staff workload data by function and business process. The study evaluated the number of staff optimal to complete work and concluded that NNSA was understaffed relative to its workload.<sup>31</sup> In part due to this study, NNSA requested and received an increase to its FTE cap in 2019, but as of July 2021, NNSA had not yet filled the 200 new positions. According to officials, in 2019, NNSA sent a survey to contracting officers in an effort to validate the competency model under its contracting career path and to assess competency strengths and gaps among these members of its acquisition workforce. Through this survey, NNSA identified gaps across all competencies assessed

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<sup>30</sup>The National Defense Authorization Act for Fiscal Year 2013 limited the total number of NNSA employees in the Office of the Administrator to 1,825 beginning on October 1, 2014. This statute was amended to decrease the number to 1,690 in fiscal year 2015 and amended again to increase it to 1,890 beginning in fiscal year 2020. NNSA cannot exceed the statutory cap unless the Administrator submits a justification to congressional defense committees. 50 U.S.C. § 2441a(a)(2).

<sup>31</sup>U.S. Office of Personnel Management, *Workload and Organizational Analysis Findings and Results for the National Nuclear Security Administration* (Washington, D.C.: June 2018).

and developed recommendations on how to close some of the gaps. However, this gap analysis and resulting recommendations was limited to contracting officers and their supervisors, and it did not include other members of NNSA's acquisition workforce.

DOE has access to some workforce competency gap information made available through the biennial Acquisition Workforce Competency Survey, administered by OFPP and the Federal Acquisition Institute, which identifies workforce strengths and competency gaps across the government for staff holding federal acquisition certifications. DOE officials said the survey provides federal managers with helpful information for planning or evaluating acquisition career management programs. However, this survey has not been conducted since 2018.<sup>32</sup>

In the absence of complete and thorough information on gaps in skills and competencies, the Office of Science, EM, and NNSA rely on available workforce gap information—primarily information about vacancies in the workforce. As a result, these offices have developed planning strategies driven largely by their existing staffing levels and the resource constraints imposed by the annual budget cycle rather than a full understanding of the workforce needed for mission success. Our prior work has identified skill gaps across federal agencies, including DOE, as a contributor rendering certain government operations at greater risk for fraud, waste, abuse, and mismanagement.<sup>33</sup> With a more complete and thorough understanding of skill and competency gaps for its acquisition workforce, DOE and its offices can improve the information available for developing budgets and other strategies for building a workforce with the right skills and of the right size to address the agency's long-standing issues with contract management.

**Build administrative and other capabilities to support workforce planning strategies.** According to leading practices, as an agency develops workforce planning strategies, it is important that the agency also build the administrative, educational, and other capabilities

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<sup>32</sup>DOE, through its Procurement Management and Review program, also periodically assesses the effectiveness of the acquisition process at site and other offices managing contracts. DOE officials said these reviews can be used to inform workforce planning. However, these reviews do not include examinations of gaps in workforce skills and competencies.

<sup>33</sup>[GAO-21-119SP](#).

necessary to support planning strategies.<sup>34</sup> Further, we previously found that managers and supervisors can be more effective in using human capital strategies that involve flexibilities if they are aware of when these flexibilities can be used and how to use the agency's processes for ensuring consistency, equity, and transparency.

We found that the Office of Science, EM, and NNSA have implemented this leading practice for the planning strategies these offices currently have in place for their acquisition workforces. For example, we found that these offices have educated managers on the availability and use of existing human capital flexibilities, such as recruitment incentives, student loan repayment programs, and use of direct-hire authority.<sup>35</sup> Site office and other managers we interviewed from the Office of Science, EM, and NNSA were aware of the availability of human capital flexibilities.

DOE has also developed agency-wide guidelines for using human capital flexibilities. For example, DOE has issued authorization and guidance on direct-hire authority for positions deemed in severe shortage or where there is a critical hiring need. Guidelines for human capital flexibilities provide well-defined and documented decision-making criteria to help ensure flexibilities are consistently applied. NNSA has also developed written procedures on its recruitment, relocation, and retention incentives program and its student loan repayment program.

Although our review found that DOE has educated managers about available human capital flexibilities, we found in prior work that EM's use of these flexibilities at one site has been ineffective, leading to site office staffing shortages. In our November 2020 report, we recommended that EM identify and fully analyze how additional use of flexibilities might address staffing shortages.<sup>36</sup> EM concurred with our recommendation but, as of November 2021, had not taken steps to address the recommendation.

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<sup>34</sup>[GAO-04-39](#).

<sup>35</sup>Direct-hire authority gives a federal agency the ability to fill vacancies without regard to certain sections of title 5 United States Code when OPM determines there is a critical hiring need or a severe shortage of candidates exists.

<sup>36</sup>GAO, *Nuclear Waste Disposal: Better Planning Needed to Avoid Potential Disruptions at Waste Isolation Pilot Plant*, [GAO-21-48](#) (Washington, D.C.: Nov. 19, 2020).

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**Monitor and evaluate progress toward goals.** According to leading practices, when developing workforce strategies, agencies should also consider how to measure success of the strategies they choose to implement.<sup>37</sup> Monitoring and evaluating agency progress toward human capital goals and the contribution that human capital results have made toward achieving program goals provides management a way to measure success and serves as a feedback mechanism to fine tune future strategies.

We found that the Office of Science, EM, and NNSA have implemented this leading practice for the planning strategies these offices currently have in place for their acquisition workforces. For example, NNSA regularly monitors progress toward achieving goals by tracking progress on hiring and attrition. However, according to NNSA's hiring status reports as of June 2021, it was below its hiring targets across the workforce, which could negatively affect programmatic results.<sup>38</sup> Officials from the Office of Science told us they monitor current workforce totals, along with current approved vacancy data, to inform budget formulation and to make decisions on whether to fill vacancies or create new positions. EM also has a process in place to monitor staffing data and hiring actions.

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## Conclusions

Effective management of the acquisition process from pre-award planning through post-award performance monitoring and contract closeout is important across the federal government. It is of critical importance at DOE because the agency depends so heavily upon the work of contractors to carry out its missions. Because most of DOE's federal workforce performs acquisition functions as part of job responsibilities at least some of the time, effective management of the acquisition process at DOE relies on an assessment of training needs across DOE's entire federal workforce. DOE sets training requirements through its Acquisition Career Management Program; yet the program is limited to staff seeking or holding acquisition certifications, with non-certified staff having no training requirements, even if some of these staff participate at critical points in the acquisition management process. This approach limits

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<sup>37</sup>GAO-04-39.

<sup>38</sup>These data were for the total workforce and not specific to NNSA's acquisition workforce.

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DOE's ability to build a workforce with the skills necessary to effectively manage the acquisition process.

However, training is just one part of an overall planning strategy necessary for DOE to build a federal workforce with the capacity to effectively manage the agency's acquisition process. Fully implementing leading practices can help DOE identify ways to improve strategic planning for its acquisition workforce. While DOE is already meeting some leading practices, based on our review of the three offices representing most of DOE's spending on contracts, the agency can improve its efforts in other leading practices by better involving top management, by determining critical skills and competencies for all staff with acquisition-related responsibilities, and by more completely identifying skills and competency gaps for its acquisition workforce. Further, implementing leading practices for effective strategic planning would allow DOE to understand the resources the agency requires to build and maintain a federal workforce with the capacity—both in terms of skill and size—to effectively manage the agency's acquisition process and address concerns senior DOE and NNSA officials have expressed about whether their acquisition workforces are appropriately sized. While planning cannot occur in a vacuum separated from the realities of budget and other resource constraints, effective strategic planning that results in accurate information on agency need allows DOE to support budget requests, discussions on NNSA's statutory FTE cap, and other efforts to obtain the resources the agency requires for effective management of the acquisition process and to ensure agency missions are met.

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## Recommendations for Executive Action

We are making the following four recommendations to DOE:

The Chief Acquisition Officer should assess the agency's criteria for determining the workforce managed under the agency's Acquisition Career Management Program to ensure that, in addition to positions requiring acquisition certifications, any significant acquisition-related positions at DOE and NNSA are included in the program, in accordance with OFPP Policy Letter 05-01. The Chief Acquisition Officer should also ensure that training requirements are developed for acquisition-related positions added to the program. (Recommendation 1)

The Chief Acquisition Officer should establish a process for top management's participation in future strategic acquisition workforce

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planning efforts with program offices and NNSA. This process should include specific roles for the Chief Acquisition Officer and the Senior Procurement Executives for DOE and NNSA. (Recommendation 2)

The Chief Acquisition Officer should determine critical skills and competencies for DOE and NNSA staff with acquisition-related responsibilities in positions that do not require a federal or DOE acquisition certification and ensure these skills and competencies inform training requirements. (Recommendation 3)

The Chief Acquisition Officer should work with program and other offices, including NNSA, to lead ongoing and thorough analyses to identify gaps in skills and competencies for the agency's acquisition workforce and develop strategies to address identified gaps. This should include an analysis of the appropriate size of the acquisition workforce. (Recommendation 4)

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## Agency Comments

We provided a draft of this report to DOE for review and comment. In its comments, reproduced in appendix I, DOE concurred with all four of our recommendations. We look forward to DOE implementing our recommendations, and believe that action beyond that described by DOE may be required to fully implement one of our recommendations. In response to our recommendation that DOE's Chief Acquisition Officer work with offices to lead ongoing and thorough analyses to identify gaps in skills and competencies for the agency's acquisition workforce, DOE stated that it plans to meet this recommendation through existing tools—specifically, DOE's Procurement Management and Review program and the Acquisition Workforce Competency Survey, administered by OFPP and the Federal Acquisition Institute. We encourage DOE to explore development of additional tools beyond these because, as we note in our report, DOE's Procurement Management and Review program does not include examinations of gaps in workforce skills and competencies and the Acquisition Workforce Competency Survey has not been conducted since 2018.

DOE also provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Secretary of Energy, the Administrator of NNSA, and

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Letter

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other interested parties. In addition, the report is available at no charge on GAO's website at <https://www.gao.gov>.

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If you or your staff members have any questions about this report, please contact me at (202) 512-3841 or [bawdena@gao.gov](mailto:bawdena@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 key contributions to this report are listed in appendix II.

A handwritten signature in black ink, appearing to read "Allison Bawden". The signature is fluid and cursive, with the first name "Allison" written in a larger, more prominent script than the last name "Bawden".

Allison B. Bawden  
Director, Natural Resources and Environment

# Appendix I: Comments from the Department of Energy



Department of Energy  
Washington, DC 20585

Ms. Allison B. Bawden  
Director, Natural Resources and Environment  
U.S. Government Accountability Office  
441 G Street NW  
Washington, DC 20548

Dear Ms. Bawden,

The U.S. Department of Energy (DOE) appreciates the opportunity to comment on the Government Accountability Office's (GAO) draft report entitled, "Department of Energy: Improvements Needed to Strengthen Strategic Planning for the Acquisition Workforce" (GAO-22-103854). The attachment to this letter contains DOE's response to the draft report's four recommendations as well as technical and general comments of DOE, National Nuclear Security Administration, and the Office of Environmental Management to the report.

If you have questions regarding this response, please contact Ms. Lisa Simmons at (202) 287-1420 or [Lisa.Simmons@hq.doe.gov](mailto:Lisa.Simmons@hq.doe.gov).

Sincerely,

**Ingrid Kolb**  
Ingrid Kolb  
Director, Office of Management

Digitally signed by Ingrid Kolb  
Date: 2021.10.25 13:14:55 -0400

Attachments  
DOE Responses to Report Recommendation  
DOE Technical and General Report Comments

**GAO Draft Report on “DEPARTMENT OF ENERGY:  
Improvements Needed to Strengthen Strategic Planning for the Acquisition Workforce”  
(GAO-22-103854)**

**Report Recommendations**

**Recommendation 1:** The Chief Acquisition Officer should assess the agency’s criteria for determining the workforce managed under the agency’s Acquisition Career Management Program to ensure that, in addition to positions requiring acquisition certifications, any significant acquisition-related positions at DOE and NNSA are included in the program, in accordance with OFPP Policy Letter 05-01, and that training requirements are developed for acquisition-related positions added to the program.

***Management Response:*** Concur.

The Department of Energy (DOE) is fully compliant with OFPP Policy Letter 05-01. DOE Order 361.1C, Acquisition Career Management Program, defines the acquisition workforce as “DOE employees who support acquisition functions and occupy positions in Contracting, Purchasing, Financial Assistance, Property Management, Project Management, Program Management, Contractor Human Resource Management, Contracting Officers, and Contracting Officer’s Representatives, consistent with the statutory intent of P.L. 104-106.” This definition includes individuals who do not hold an acquisition certification. However, DOE will review the Acquisition Career Management Program and assess if other acquisition-related positions should be added to the program. Any appropriate changes would be incorporated into DOE Order 361.1C and approved by the Chief Acquisition Officer (CAO), through the Department’s Directives program.

Estimated Completion Date: December 31, 2022.

**Recommendation 2:** The Chief Acquisition Officer should establish a process for top management’s participation in future strategic acquisition workforce planning efforts with program offices and NNSA. This process should include specific roles for the Chief Acquisition Officer and the Senior Procurement Executives for DOE and NNSA.

***Management Response:*** Concur.

The Department of Energy Acquisition Council (DAC) is a key communication tool for senior acquisition members. The DAC is chaired by the Senior Procurement Executives (SPEs) for the DOE and the NNSA. The DAC provides a forum for DOE and NNSA senior acquisition officials to provide ideas and solutions for improving the acquisition workforce competencies and capacity. DOE and NNSA will review and assess its processes and the roles of CAO and SPEs in strategic workforce efforts to determine if there is a need to further clarify DOE leadership coordination with the DAC on acquisition workforce planning.

Estimated Completion Date: April 30, 2022.

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**Appendix I: Comments from the Department of Energy**

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**Recommendation 3:** The Chief Acquisition Officer should determine critical skills and competencies for DOE and NNSA staff with acquisition-related responsibilities in positions that do not require a federal or DOE acquisition certification and ensure these skills and competencies inform training requirements.

**Management Response:** Concur.

DOE recognizes the importance of engaging the entire workforce in its mission, regardless of whether these individuals hold a certification. DOE and the Office of General Counsel developed a course entitled “Source Selection for the Source Evaluation Board” for Source Selection individuals with or without an acquisition certification. However, DOE will review the Acquisition Career Management Program and assess if other acquisition-related positions and training should be added to the program. Any appropriate changes would be incorporated into DOE Order 361.1C and approved by the CAO, through the Department’s Directives program.

Estimated Completion Date: December 31, 2022.

**Recommendation 4:** The Chief Acquisition Officer should work with program and other offices, including NNSA, to lead ongoing and thorough analyses and identification of gaps in skills and competencies for the agency’s acquisition workforce and strategies to address identified gaps. This should include an analysis of the appropriate size of the acquisition workforce.

**Management Response:** Concur.

The DOE Procurement Management and Review (PMR) program is integral to verifying and validating the effectiveness of the DOE acquisition activities’ pre-award, post-award, and management systems and processes, including the activities’ acquisition workforce management. The inquiries include human capital related questions as they relate to levels of certification, warrant amounts, annual staff turnover, identification of functional roles and responsibilities, evaluation of succession plans for growing future leaders, retirements, and methods to develop and maintain staff capabilities, e.g., training: formal, informal, on-the-job; and mentoring. In addition, DOE uses the Acquisition Workforce Competency Survey (AWCS), administered collaboratively by the Office of Federal Procurement Policy and the Federal Acquisition Institute to federal civilians to identify the strengths and priority training needs of the federal civilian acquisition workforce; gauge the developmental progress of the acquisition community in targeted areas; and improve acquisition human capital planning.

DOE will review and assess data from the PMRs and AWCS, which are both ongoing processes. Any identified gaps will be considered for revisions to DOE Order 361.1C. Revisions to Order 361.1C would be approved by the CAO, through the Department’s Directives program.

Estimated Completion Date: December 31, 2022.

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## Agency Comment Letter

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### Text of Appendix I: Comments from the Department of Energy

#### Page 1

**Department of Energy**  
Washington, DC 20585

Ms. Allison B. Bawden  
Director, Natural Resources and Environment  
U.S. Government Accountability Office  
441 G Street NW  
Washington, DC 20548

Dear Ms. Bawden,

The U.S. Department of Energy (DOE) appreciates the opportunity to comment on the Government Accountability Office's (GAO) draft report entitled, "Department of Energy: Improvements Needed to Strengthen Strategic Planning for the Acquisition Workforce" (GAO-22-103854). The attachment to this letter contains DOE's response to the draft report's four recommendations as well as technical and general comments of DOE, National Nuclear Security Administration, and the Office of Environmental Management to the report.

If you have questions regarding this response, please contact Ms. Lisa Simmons at (202) 287-1420 or [Lisa.Simmons@hq.doe.gov](mailto:Lisa.Simmons@hq.doe.gov).

Sincerely,  
Ingrid Kolb  
Director, Office of Management

#### Attachments

DOE Responses to Report Recommendation  
DOE Technical and General Report Comments

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Page 2

**GAO Draft Report on “DEPARTMENT OF ENERGY: Improvements Needed to Strengthen Strategic Planning for the Acquisition Workforce” (GAO-22-103854)**

**Report Recommendations**

**Recommendation 1:** The Chief Acquisition Officer should assess the agency’s criteria for determining the workforce managed under the agency’s Acquisition Career Management Program to ensure that, in addition to positions requiring acquisition certifications, any significant acquisition-related positions at DOE and NNSA are included in the program, in accordance with OFPP Policy Letter 05-01, and that training requirements are developed for acquisition-related positions added to the program.

***Management Response:*** Concur.

The Department of Energy (DOE) is fully compliant with OFPP Policy Letter 05-01. DOE Order 361.1C, Acquisition Career Management Program, defines the acquisition workforce as “DOE employees who support acquisition functions and occupy positions in Contracting, Purchasing, Financial Assistance, Property Management, Project Management, Program Management, Contractor Human Resource Management, Contracting Officers, and Contracting Officer’s Representatives, consistent with the statutory intent of P.L. 104-106.” This definition includes individuals who do not hold an acquisition certification. However, DOE will review the Acquisition Career Management Program and assess if other acquisition-related positions should be added to the program. Any appropriate changes would be incorporated into DOE Order 361.1C and approved by the Chief Acquisition Officer (CAO), through the Department’s Directives program.

Estimated Completion Date: December 31, 2022.

**Recommendation 2:** The Chief Acquisition Officer should establish a process for top management’s participation in future strategic acquisition workforce planning efforts with program offices and NNSA. This process should include specific roles for the Chief Acquisition Officer and the Senior Procurement Executives for DOE and NNSA.

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**Management Response:** Concur.

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Estimated Completion Date: April 30, 2022.

Page 3

**Recommendation 3:** The Chief Acquisition Officer should determine critical skills and competencies for DOE and NNSA staff with acquisition-related responsibilities in positions that do not require a federal or DOE acquisition certification and ensure these skills and competencies inform training requirements.

**Management Response:** Concur.

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Estimated Completion Date: December 31, 2022.

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**Management Response:** Concur.

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Estimated Completion Date: December 31, 2022.

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## Appendix II: GAO Contact and Staff Acknowledgments

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### GAO Contact:

Allison B. Bawden, (202) 512-3841 or [bawdena@gao.gov](mailto:bawdena@gao.gov)

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### Staff Acknowledgments:

In addition to the contact named above, Hilary Benedict (Assistant Director), Ramsey Asaly (Analyst-in-Charge), Lidiana Cunningham, Robert Gudea, and Kathy Pedalino made key contributions to this report. In addition, key support was provided by Ellen Fried, Cindy Gilbert, Steven Lozano, Heather B. Miller, and Jeanette Soares.

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## Public Affairs

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