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May 2024

# NATIONAL NUCLEAR SECURITY ADMINISTRATION

## Improvements Needed for Overseeing Contractor Workforce Recruitment and Retention Efforts

Accessible Version

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# GAO Highlights

View [GAO-24-106861](#). For more information, contact Allison Bawden at (202) 512-3841 or [bawdena@gao.gov](mailto:bawdena@gao.gov).

Highlights of [GAO-24-106861](#), a report to the Committee on Armed Services, House of Representatives

May 2024

## NATIONAL NUCLEAR SECURITY ADMINISTRATION

### Improvements Needed for Overseeing Contractor Workforce Recruitment and Retention Efforts

#### Why GAO Did This Study

NNSA relies on M&O contractors to help execute the agency's nuclear security missions. These contractors collectively employ around 55,000 people across the nuclear security enterprise, which includes production plants and laboratories. In 2023, the NNSA Administrator testified on, and a congressional commission highlighted, challenges M&O contractors face with workforce recruitment and retention, including a limited applicant pool for technically skilled positions.

A House Armed Services Committee report includes a provision for GAO to review NNSA's M&O contractors' recruiting and retention efforts. This report examines (1) M&O contractors' achievement of planned staffing levels, recruitment and retention challenges, and efforts to address challenges, and (2) how NNSA oversees M&O contractors' recruitment and retention efforts.

GAO analyzed agency and contractor documentation and workforce data and interviewed NNSA officials and M&O contractor representatives about challenges and oversight.

#### What GAO Recommends

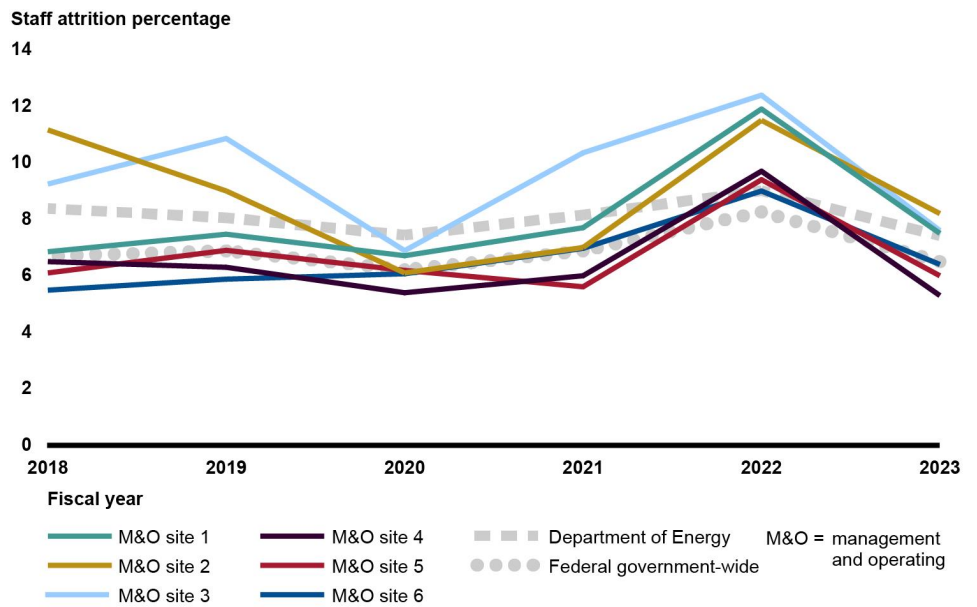
GAO is making two recommendations for NNSA to (1) track the time it takes to review contractors' human resources requests and (2) fully assess and identify the information it needs to oversee M&O contractors' recruitment and retention efforts. NNSA concurred with both recommendations and stated it would take action to address them.

#### What GAO Found

Data from the National Nuclear Security Administration's (NNSA) management and operating (M&O) contractors show they generally met planned staffing levels in fiscal years 2018 through 2022. The data also show that attrition rates—the number of employees who left divided by total employees—are comparable to government rates. These rates spiked in fiscal years 2021 and 2022 during the COVID-19 pandemic when record

numbers of people nationwide quit their jobs. Industry attrition rates are substantially higher but also include a larger employee population. M&O contractors cited challenges in recruiting and retaining employees, such as being able to offer competitive salaries and benefits. The contractors have taken steps to help address challenges. However, NNSA must review requests for changes to compensation or benefits that increase overall contract costs for cost reasonableness, and some contractor representatives cited the time it takes NNSA to review such requests as another challenge. NNSA officials aim to issue decisions about such requests within 60 days, but NNSA does not formally track review times. Such tracking would help NNSA determine if it is meeting its timeline or if it needs to adjust its review process.

### M&O Contractor Attrition Rates Compared to Government Rates



Source: GAO analysis of M&O contractor and Office of Personnel Management data. | GAO-24-106861

### Accessible Data for M&O Contractor Attrition Rates Compared to Government Rates

#### Staff attrition percentage

Fiscal year	site 1	site 2	site 3	site 4	site 5	site 6	Federal government-wide	DOE
2018	6.85	11.16	9.245	6.5	6.1	5.49	6.7	8.38
2019	7.47	9	10.857	6.3	6.9	5.88	6.88	8.05
2020	6.71	6.1	6.889	5.4	6.19	6.07	6.21	7.44
2021	7.7	7	10.35	6	5.61	6.97	6.88	8.15

<b>Fiscal year</b>	<b>site 1</b>	<b>site 2</b>	<b>site 3</b>	<b>site 4</b>	<b>site 5</b>	<b>site 6</b>	<b>Federal government-wide</b>	<b>DOE</b>
<b>2022</b>	<b>11.9</b>	<b>11.5</b>	<b>12.39</b>	<b>9.7</b>	<b>9.4</b>	<b>9</b>	<b>8.26</b>	<b>9.01</b>
<b>2023</b>	<b>7.5</b>	<b>8.2</b>	<b>7.6</b>	<b>5.3</b>	<b>6</b>	<b>6.4</b>	<b>6.5</b>	<b>7.42</b>

Source: GAO analysis of M&O contractor and Office of Personnel Management data. | GAO-24-106861

To support its oversight, NNSA reviews information collected from M&O contractors. However, NNSA may be missing opportunities to use additional information that could inform its oversight of M&O contractors' recruitment and retention efforts. For example, NNSA does not collect information from exit surveys or time needed to fill certain positions—information that could help officials understand why contractors are requesting additional incentives. Fully assessing its information needs for oversight purposes could help NNSA improve its oversight of M&O contractors' recruitment and retention efforts.

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**Abbreviations**

DOE	Department of Energy
M&O	management and operating
NNSA	National Nuclear Security Administration

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May 29, 2024

The Honorable Mike Rogers  
Chairman  
The Honorable Adam Smith  
Ranking Member  
Committee on Armed Services  
House of Representatives

In fiscal year 2023, the National Nuclear Security Administration (NNSA), a separately organized agency within the Department of Energy (DOE), obligated more than \$18 billion to its management and operating (M&O) contracts.<sup>1</sup> NNSA is responsible for maintaining a safe, secure, and reliable nuclear stockpile, among other missions. The agency relies on and oversees about 55,000 M&O contractor employees who execute the agency's missions across its sites, collectively known as the nuclear security enterprise.<sup>2</sup>

NNSA is experiencing significant growth in its workload. Specifically, we previously found that over the next 2 decades, the U.S. plans to spend tens of billions of dollars to modernize its nuclear weapons stockpile, as well as the research and production infrastructure on which stockpile programs depend.<sup>3</sup> These efforts will take place across the nuclear security enterprise and will depend on significant contributions from the M&O contractor workforce.

NNSA and the M&O contractors face significant challenges related to the recruitment and retention of staff, according to the NNSA Administrator's 2023 testimony before the House Armed Service Committee and the

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<sup>1</sup>The Federal Acquisition Regulation defines management and operating contracts as agreements under which the government contracts for the operation, maintenance, or support, on its behalf, of a government-owned or -controlled research, development, special production, or testing establishment wholly or principally devoted to one or more of the major programs of the contracting agency. 48 C.F.R. § 17.601. These contracts originated from the Manhattan Project during World War II.

<sup>2</sup>The nuclear security enterprise includes eight research laboratories and nuclear weapons production facilities, managed and operated by seven M&O contractors. One of those contracts is for the management and operation of the Savannah River Site, which is currently administered by DOE's Office of Environmental Management.

<sup>3</sup>GAO, *National Nuclear Security Administration: Assessments of Major Projects*, [GAO-23-104402](#) (Washington, D.C.: Aug. 17, 2023).

report from the Congressional Commission on the Strategic Posture of the United States.<sup>4</sup> Both reported that NNSA must compete with other agencies, M&O contractors, and private sector companies for top-tier talent to fill its federal and M&O contractor positions. According to the NNSA Administrator in her March 2023 testimony, NNSA and its M&O contractors draw from a limited applicant pool of people with the skills needed to meet expanded and future mission requirements, and who are also in high demand for both established and emerging industries. Many experienced employees have left NNSA and the M&O contractors for higher paying or more attractive industries. Further, qualified candidates for the most critical skilled positions are in short supply compared with the talent pool for other industries because candidates must be U.S. citizens to obtain a high-level security clearance to work in weapons-related areas.<sup>5</sup>

Additionally, we have previously reported on related issues. Management and oversight of contractors at DOE—including NNSA—has been on GAO’s High Risk List for 3 decades. In our April 2023 update, we highlighted concerns about NNSA having enough employees with the right skills to oversee contracts.<sup>6</sup> Additionally, in November 2023, we identified ongoing workforce challenges at the Kansas City National Security Campus, one of the M&O contractor sites, including challenges

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<sup>4</sup>The Honorable Jill Hruby, Under Secretary for Nuclear Security and Administrator of the National Nuclear Security Administration, DOE, *Testimony Statement Before the House Armed Services Committee Subcommittee on Strategic Forces*, March 28, 2023, and *America’s Strategic Posture: The Final Report of the Congressional Commission on the Strategic Posture of the United States* (Oct. 2023). Congress established this Commission to examine and make recommendations to the President and Congress regarding the long-term strategic posture of the United States. National Defense Authorization Act for Fiscal Year 2022, Pub. L. No. 117–81, § 1687, 135 Stat. 1541, 2126 (2021).

<sup>5</sup>To work with weapons or weapons design information, all candidates must be able to obtain a Q-level clearance, which has similar requirements to a Top Secret clearance in other defense-related agencies.

<sup>6</sup>GAO’s High Risk List highlights government operations with greater vulnerabilities to fraud, waste, abuse, and mismanagement, or that need transformation to address economy, efficiency, or effectiveness challenges. Acquisition and Program Management for NNSA was included in GAO’s April 2023 High Risk List, specifically citing concerns that NNSA does not have enough employees with the right skills in their acquisition workforce to oversee contracts. See GAO, *High-Risk Series: Efforts Made to Achieve Progress Need to Be Maintained and Expanded to Fully Address All Areas*, [GAO-23-106203](#) (Washington, D.C.: Apr. 20, 2023).



filling specialized positions and high attrition of employees with less than 5 years of service.<sup>7</sup>

House Report 117-397 includes a provision directing us to review issues related to recruitment and retention at NNSA.<sup>8</sup> This report focuses on NNSA's M&O contractor employees, and we completed related work on NNSA's federal staff.<sup>9</sup> This report examines (1) M&O contractors' achievement of planned staffing levels, the challenges M&O contractors have faced with recruitment and retention of their employees, and efforts to address challenges; and (2) how NNSA oversees its M&O contractors' recruitment and retention efforts.

To examine the M&O contractors' achievement of planned staffing levels, we collected and analyzed workforce data from six M&O contractors at seven NNSA sites.<sup>10</sup> We compared the contractors' planned and actual staffing levels and interviewed representatives from the six M&O contractors at NNSA sites to determine whether each contractor had achieved its staffing goals. To assess the reliability of the M&O contractor staffing data—including planned and actual staffing levels, attrition rates, and offer to acceptance rates—we interviewed M&O contractors. Our interviews sought to clarify how the data are stored, how the staffing metrics are calculated, and the procedures in place to ensure errors are

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<sup>7</sup>GAO, *National Nuclear Security Administration: Update on Actions to Manage Production Challenges at the Kansas City Site*, [GAO-24-105858](#) (Washington, D.C.: Nov. 16, 2023). That report did not have recommendations. We also previously reported specifically on the M&O contractor's workforce, including in February 2005, finding that NNSA's contractors were generally effective in recruiting and retaining critically skilled workers, though almost 40 percent of these workers were at or near retirement age by 2015. GAO, *National Nuclear Security Administration: Contractors' Strategies to Recruit and Retain a Critically Skilled Workforce Are Generally Effective*, [GAO-05-164](#) (Washington, D.C.: Feb. 2, 2005). That report did not have recommendations.

<sup>8</sup>H.R. Rep. No. 117-397, at 395 (2022).

<sup>9</sup>GAO, *National Nuclear Security Administration: Actions to Recruit and Retain Federal Staff Could Be Improved*, [GAO-24-106167](#) (Washington, D.C.: May 29, 2024).

<sup>10</sup>At the time of our review, the eight sites in the nuclear security enterprise were managed by seven M&O contractors, with two sites—Y-12 and Pantex—managed under one contract. We did not include the Savannah River Site, one of the eight sites in the nuclear security enterprise, in the scope of our review because the contract was managed by Department of Energy's Office of Environmental Management at the time of our review. NNSA did not oversee compliance with the contract provisions regarding the Savannah River Site's contractor workforce, including recruitment and retention efforts, according to NNSA officials. NNSA officials said the Office of Environmental Management coordinates with NNSA when necessary for input on oversight efforts, but the Office of Environmental Management is primarily responsible for the oversight of efforts related to recruitment and retention at the Savannah River Site.

identified. We also reviewed the data we collected to identify any errors or anomalies. We determined the M&O staffing data to be sufficiently reliable to analyze M&O contractors' planned staffing levels and human resources metrics.

To understand the challenges these M&O contractors have faced with recruitment and retention, we reviewed documentation and interviewed representatives from the six M&O contractors in our scope and officials from NNSA offices that work closely with and oversee these M&O contractors. We also asked about steps that the M&O contractors have taken to address those challenges. We analyzed the interview responses by performing a content analysis and summarized responses into themes. We also determined that the information and communication component of internal control is significant to this objective, along with the underlying principle that management should use quality information to achieve its objectives. We reviewed NNSA's use of quality information to determine whether NNSA was using the information to achieve its objectives.<sup>11</sup>

To examine how NNSA oversees the M&O contractors' recruitment and retention efforts, we reviewed NNSA requirements for overseeing the M&O contractors' efforts, including requirements in the M&O contracts and DOE and NNSA documents. We interviewed representatives from the six M&O contractors at NNSA sites and officials from NNSA offices that oversee the M&O contractors to identify the extent of NNSA oversight and challenges with oversight efforts. We found the information and communication component of internal control was also significant to this objective, along with the underlying principles that management should use quality information to achieve its objectives. We compared NNSA's efforts and procedures to oversee M&O contractors' recruitment and retention efforts to this component and the underlying principles.<sup>12</sup> We also compared NNSA's oversight efforts with M&O contract requirements related to management of the M&O workforce and applicable policies and procedures.

We conducted this performance audit from July 2022 to May 2024 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

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<sup>11</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: Sept. 10, 2014).

<sup>12</sup>[GAO-14-704G](#).

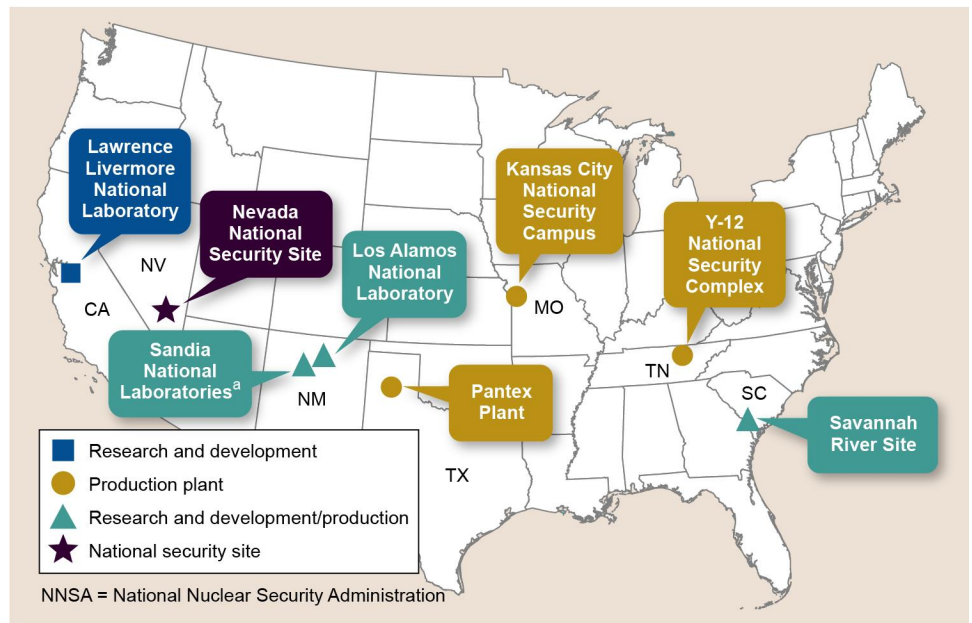
the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## Background

### Roles and Responsibilities of NNSA's Federal Workforce and M&O Contractors

NNSA's federal workforce and the M&O contractors share the responsibilities for executing the work of the nuclear security enterprise. (See fig. 1 for a map of the sites included in the nuclear security enterprise, and see app. I for more detailed information on the current contractors that manage and operate these sites.)

**Figure 1: Laboratories, Production Plants, and Testing Sites Included in NNSA's Nuclear Security Enterprise**



Sources: GAO presentation of NNSA information; Map Resources (map). | GAO-24-106861

#### Accessible Text for Figure 1: Laboratories, Production Plants, and Testing Sites Included in NNSA's Nuclear Security Enterprise

- Lawrence Livermore National Laboratory – Research and development
- Nevada National Security Site – National security site

- Sandia National Laboratories – Research and development/production
- Los Alamos National Laboratory – Research and development/production
- Kansas City National Security Campus – Production plant
- Pantex Plant – Production plant
- Y-12 National Security Complex – Production plant
- Savannah River Site – Research and development/production

Sources: GAO presentation of NNSA information; Map Resources (map). | GAO-24-106861

<sup>a</sup>Sandia National Laboratories has two primary locations in Albuquerque, New Mexico and Livermore, California.

Note: We did not include the Savannah River Site in the scope of our review. At the time of our review, the contract was managed by the Department of Energy's Office of Environmental Management, and NNSA did not oversee compliance with the contract provisions regarding the site's contractor workforce, including recruitment and retention efforts.

**Federal workforce.** The agency's federal workforce had about 1,800 full-time equivalent employees in fiscal year 2022. The federal workforce

- provides a strategy and framework for accomplishing NNSA's missions at the sites;<sup>13</sup>
- manages portfolios, programs, and projects—including budget and funding—as well as acquisition and contract administration; and
- oversees the M&O contractors to ensure they are performing effectively and complying with contract and other applicable requirements, including ensuring the safety and security of employees, consistent with DOE's oversight policy.<sup>14</sup> If NNSA determines contractors are performing satisfactorily, it can choose to award financial incentives such as fees or additional contract terms, in accordance with contract provisions.

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<sup>13</sup>NNSA's site governance directive establishes this framework for the federal workforce and M&O contractors to help ensure effective mission performance and operations at the sites. See National Nuclear Security Administration, *NNSA Site Governance*, SD 226.1C (Washington, D.C.: Oct. 1, 2019).

<sup>14</sup>Department of Energy, *Policy for Federal Oversight and Contractor Assurance Systems*, DOE P 226.2 (Washington, D.C.: Aug. 9, 2016) and *Implementation of Department of Energy Oversight Policy*, DOE Order 226.1B, Chg 1 (Admin Chg) (Washington, D.C.: May 2022). In addition to the terms and conditions of the contract, M&O contractors are also required to follow other applicable requirements, including DOE orders, supplemental directives, and NNSA policies.

**M&O contractors.** The six M&O contractors in our review employed about 55,000 employees in fiscal year 2022 at the seven sites they manage and operate. These contractors

- manage day-to-day site operations, including managing the facilities and infrastructure of each site and ensuring worker security and safety;
- execute program and project activities across the nuclear security enterprise;
- carry out much of the work necessary to meet NNSA's missions, such as research and development, weapons production, and nuclear waste disposal, among other things;
- ensure the safety, security, and reliability of the nuclear stockpile;
- work to detect potential or actual defects in the nuclear stockpile to replace components or extend the life of warheads and bombs; and
- assure the effective management of their human resources and provide the availability of critical skills and capabilities to accomplish NNSA's mission needs, according to requirements in each of the M&O contracts.

Scientists, engineers, and technicians who have highly specific skillsets and experience perform much of the work at NNSA's contractor-operated facilities. Direct, hands-on experience in the nuclear security enterprise is often required to gain proficient skills and carry out this work, and many of these skillsets may not be transferable from other industries, according to NNSA's *Fiscal Year 2024 Stockpile Stewardship and Management Plan*.<sup>15</sup> For example, since NNSA no longer conducts underground tests of nuclear weapons, the workforce must be capable of ensuring the safety, security, and reliability of the nuclear stockpile without conducting these tests. The workforce also must have the maintenance and surveillance skills necessary to detect potential or actual defects in the nuclear stockpile to replace components or extend the life of the warheads.

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## NNSA's Oversight Role for M&O Contractor Recruitment and Retention

NNSA's Contractor Human Resources Branch, through its Office of Partnership and Acquisition Services, is responsible for overseeing the

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<sup>15</sup>National Nuclear Security Administration, *Fiscal Year 2024 Stockpile Stewardship and Management Plan*, (Washington, D.C.: Nov. 2023).

M&O contractors' human resources functions, including recruitment and retention.<sup>16</sup> The Contractor Human Resources Branch works directly with M&O contractors' human resources leaders to review and determine approval of requests related to actions that alter contractor workforce compensation or benefits. In addition to the Contractor Human Resources Branch, nine other NNSA officials or offices may need to review or approve a M&O contractor human resources request, such as the Contracting Officer, General Counsel, or the NNSA Administrator. In general, any human resources actions that are precedent setting, cost increasing, or highly sensitive need NNSA approval, according to NNSA officials. For example, NNSA is responsible for reviewing and approving the M&O contractors' annual compensation increase packages and benefits costs for its workforce. NNSA's guidance identifies over 40 actions requiring approval or review, with multiple NNSA offices' involvement depending on the action.

NNSA evaluates the performance of M&O contractors through annual evaluations. The Performance Evaluation and Measurement Plan is developed before the beginning of each fiscal year (that is, the beginning of the evaluation period). It establishes expectations for the site's contractor performance and describes how the responsible NNSA offices will evaluate and measure performance against those expectations.<sup>17</sup> The plan provides the blueprint for how the evaluations will be used to determine award fees, award terms, and any other incentives. The Performance Evaluation Report is developed at the end of each evaluation period. NNSA uses this report to document the performance rating and, in some cases, the fees and other incentives that will be awarded to the contractor.

As part of NNSA's Mission Enablement goal, as defined in the Performance Evaluation and Measurement Plan, NNSA evaluates several performance objectives to determine whether the M&O contractor effectively and efficiently managed the safe and secure operations of the site. One such objective included in each of the M&O contractors' plans specifically mentions the delivery of efficient, effective, and compliant business operations of human resources to support the strategic management of recruiting and retention programs.

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<sup>16</sup>NNSA's Office of Partnership and Acquisition Services was established in 2022 to focus on acquisition management, specifically managing the life cycle of M&O contracts.

<sup>17</sup>The Performance Evaluation and Measurement Plan is jointly developed at each site by NNSA and the M&O contractor and approved and issued by the site's Contracting Officer prior to the beginning of each fiscal year, according to NNSA officials.

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## M&O Contractors Generally Met Planned Staffing Levels, but Reported Still Facing Challenges Recruiting and Retaining Workers

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### M&O Contractors Generally Achieved Planned Staffing Levels With Attrition Rates Comparable to Government, But Attrition Has Fluctuated Since Fiscal Year 2021

According to our analysis of M&O contractor data, six of the seven NNSA M&O contractor sites in our review generally achieved their planned staffing levels each year since fiscal year 2018 or 2020, based on available data.<sup>18</sup> The seventh M&O contractor site tracks hiring progress, rather than staffing levels, and was able to achieve planned hiring to accomplish NNSA's mission for the years in our review, according to M&O contractor representatives.

Annually, each of the M&O contractors determines the staffing levels it needs to perform the work required by NNSA. These planned staffing levels vary in the level of detail across the M&O contractors but are generally developed for each subunit within the contractor's organization. For example, the M&O contractors generally develop separate planned staffing levels for missions and operations areas—such as science and technology, weapons, and administrative occupations—which are each included in the larger plan for the site. M&O contractors may change their plans throughout the fiscal year depending on changes to mission needs, available funding, or other factors.

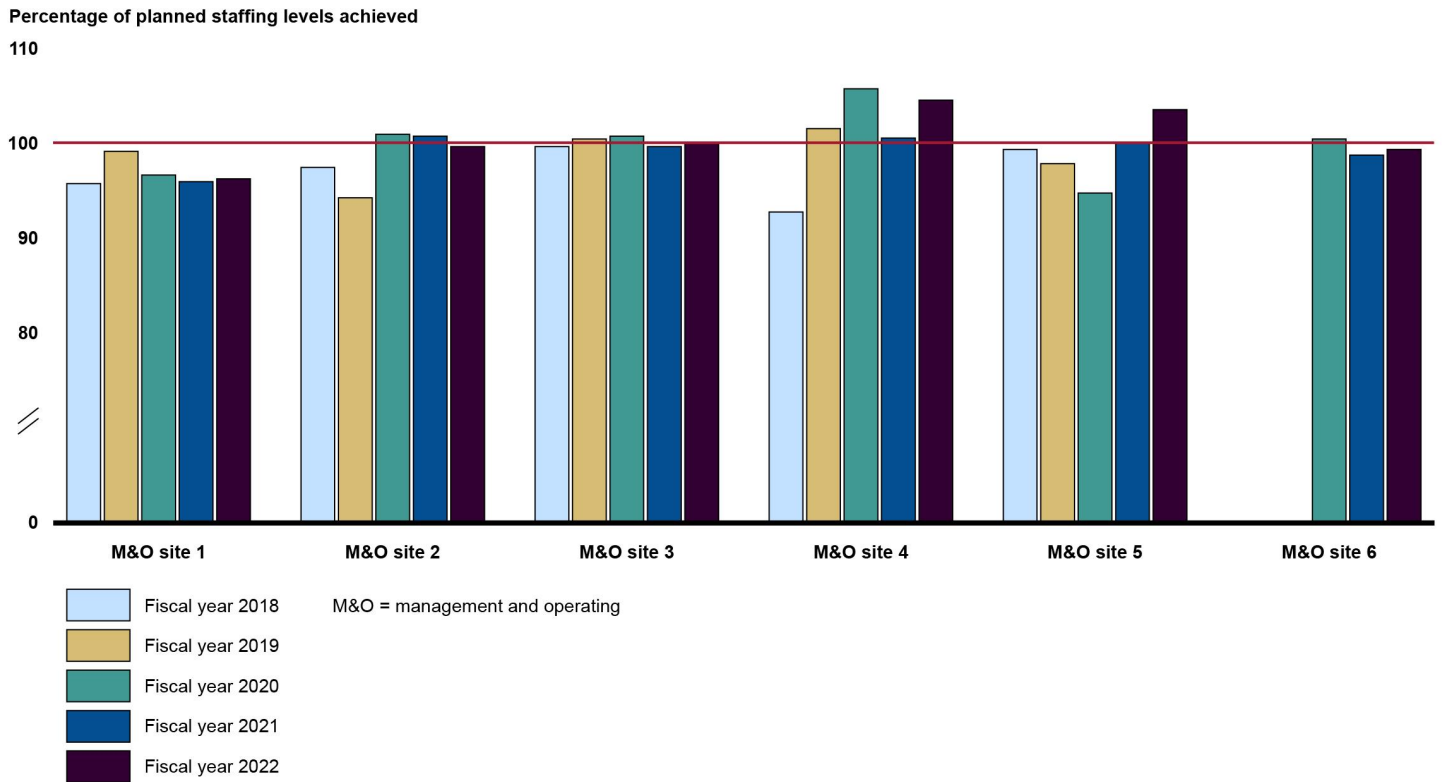
Each of the M&O contractors consistently achieved at least 93 percent of its planned staffing levels in the years we reviewed, with most sites achieving 100 percent of their planned staffing levels—or close to it—in most years. Figure 2 shows levels of staffing achieved at the six sites that track by planned staffing levels. As noted earlier, one of the seven sites in our review tracks hiring goals as opposed to overall staffing levels. According to NNSA data, the site achieved 115 percent of its hiring goals in fiscal year 2022, and representatives from the site said they continue to execute NNSA's mission and generally do so within the allowable costs based on their actual hires. According to M&O contractor representatives

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<sup>18</sup>We limited our review of planned and actual staffing data to the years that the current M&O contractor held the contract. Five of the sites had data back to fiscal year 2018 and one site had data back to fiscal year 2020.

from each of the sites, contractors have changed or implemented new recruiting and retention strategies to help meet planned staffing levels.

**Figure 2: Selected M&O Contractors' Achieved Staffing Levels Compared with Planned Staffing Levels, Fiscal Years 2018–2022**



Source: GAO analysis of M&O contractor data. | GAO-24-106861

**Accessible Data for Figure 2: Selected M&O Contractors' Achieved Staffing Levels Compared with Planned Staffing Levels, Fiscal Years 2018–2022**

**Percentage of planned staffing levels achieved**

Site	2018	2019	2020	2021	2022
M&O site 1	95.8	99.2	96.7	96	96.3
M&O site 2	97.5	94.3	101	100.8	99.7
M&O site 3	99.7	100.5	100.8	99.7	100.1
M&O site 4	92.8	101.6	105.8	100.6	104.6
M&O site 5	99.4	97.9	94.8	100.1	103.6
M&O site 6			100.5	98.8	99.4

Source: GAO analysis of M&O contractor data. | GAO-24-106861



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Note: M&O site 6 did not have data prior to fiscal year 2020. We excluded one of the seven M&O sites in our review from our analysis because the site tracks hiring goals as opposed to overall planned staffing levels.

M&O contractors did cite challenges with meeting planned hiring goals with some positions, including science and engineer positions and radiological control technicians. These occupations often require unique skillsets to perform the work, and there is often a limited pool of candidates from which to recruit.

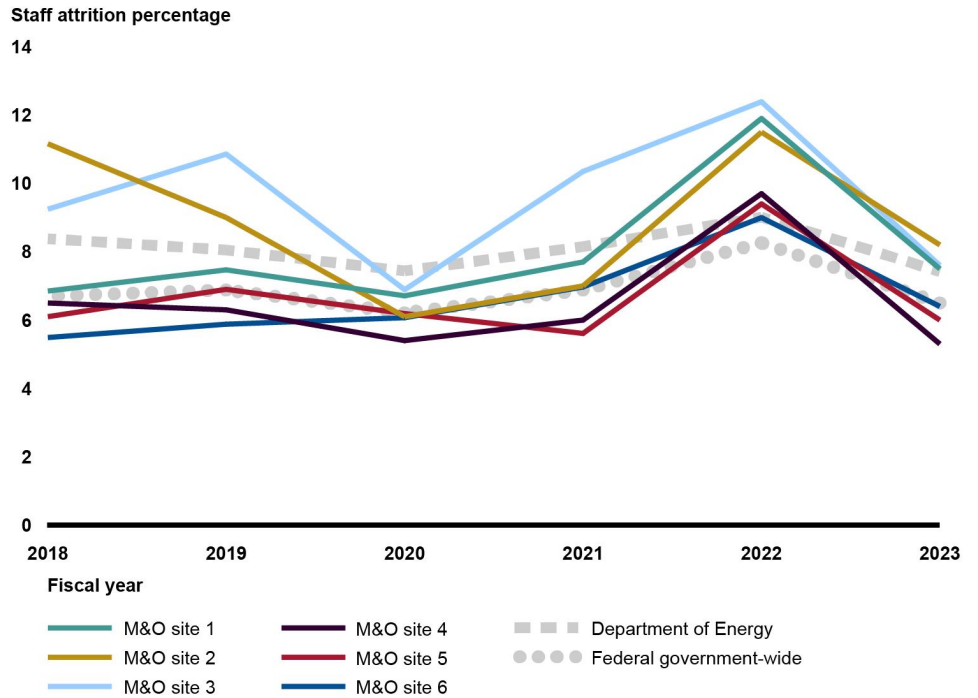
Additionally, each of the M&O contractors generally experienced attrition rates—a key indicator of workforce retention—that were comparable to the rates experienced by DOE and the federal government.<sup>19</sup> M&O attrition rates include retirements, voluntary separations, and involuntary separations. Retirements contribute from about a quarter to over half of the overall attrition at the M&O sites, with involuntary and voluntary separation contributing the rest of the attrition rate. NNSA officials and M&O contractor representatives from each site said they typically compare the M&O contractors' attrition rates with the government-wide average, rates from similar industries, or the other sites in the nuclear security enterprise to determine whether attrition rates are reasonable. In addition, one M&O contractor said it sets an internal benchmark of 10 percent to determine when attrition rates are becoming a cause for concern.

Since fiscal year 2018, M&O contractor attrition rates have fluctuated from 5.3 percent to over 12 percent (see fig. 3).

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<sup>19</sup>According to representatives from each of the M&O contractors, attrition rates are generally calculated by the number of employees who left the organization during a year divided by the total number of employees at the beginning of the year.

**Figure 3: Management and Operating (M&O) Contractor Attrition Rates at National Nuclear Security Administration Sites Compared with Department of Energy and Government-Wide, Fiscal Years 2018–2023**



Source: GAO analysis of M&O contractor and Office of Personnel Management data. | GAO-24-106861

**Accessible Data for Figure 3: Management and Operating (M&O) Contractor Attrition Rates at National Nuclear Security Administration Sites Compared with Department of Energy and Government-Wide, Fiscal Years 2018–2023**

**Staff attrition percentage**

Fiscal year	site 1	site 2	site 3	site 4	site 5	site 6	Federal government-wide	DOE
2018	6.85	11.16	9.245	6.5	6.1	5.49	6.7	8.38
2019	7.47	9	10.857	6.3	6.9	5.88	6.88	8.05
2020	6.71	6.1	6.889	5.4	6.19	6.07	6.21	7.44
2021	7.7	7	10.35	6	5.61	6.97	6.88	8.15
2022	11.9	11.5	12.39	9.7	9.4	9	8.26	9.01
2023	7.5	8.2	7.6	5.3	6	6.4	6.5	7.42

Source: GAO analysis of M&O contractor and Office of Personnel Management data. | GAO-24-106861

Note: The M&O attrition rates generally include both full-time and part-time permanent employees and term employees, which are employees hired for a specific term of employment, according to NNSA officials. The federal government-wide and Department of Energy rates include non-seasonal full-time permanent employees. One site was not included because the site calculates attrition by calendar year. The calendar year attrition rates for 2018 to 2023 ranged from 3.6 to 10.1 percent.

Attrition rates for most sites declined in fiscal year 2020 and then increased in fiscal years 2021 and 2022. In its *Fiscal Year 2022 Stockpile Stewardship and Management Plan*, NNSA attributed a lower number of separations, which includes retirements, voluntary separations, and involuntary separations, in fiscal year 2020 at three of the M&O contractor sites to effects of the COVID-19 pandemic, including economic uncertainties causing workers to stay at their jobs.<sup>20</sup> In fiscal year 2021, M&O contractor attrition rates started to increase, which in part can be attributed to effects of the COVID-19 pandemic and the labor market in general, according to M&O contractor workforce data information from NNSA's *Fiscal Year 2024 Stockpile Stewardship and Management Plan*.<sup>21</sup> According to an article from the U.S. Bureau of Labor Statistics, a record number of people across the country quit their jobs at that time.<sup>22</sup>

In response to higher attrition rates, NNSA authorized M&O contractors to provide a mid-year compensation adjustment in 2022, providing the M&O contractors with the flexibility to implement salary increases based on their needs.<sup>23</sup> NNSA officials said because of these efforts, they have seen M&O contractor attrition rates decrease from over 10 percent to around 8 percent in fiscal year 2023. M&O contractor attrition rates declined in 2023, consistent with industry and government attrition, returning to levels more consistent to those before the spikes in 2021 and 2022.

To provide context for these attrition rates, we reviewed separation data from the U.S. Bureau of Labor Statistics. Our review indicated there is not a comparable "industry" for the M&O contractors, which NNSA officials

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<sup>20</sup>National Nuclear Security Administration, *Fiscal Year 2022 Stockpile Stewardship and Management Plan*, March 2022.

<sup>21</sup>National Nuclear Security Administration, *Fiscal Year 2024 Stockpile Stewardship and Management Plan*, November 2023.

<sup>22</sup>Vincent Amanor-Boadu, "Empirical Evidence for the 'Great Resignation,'" *Monthly Labor Review* (Nov. 2022), accessed December 13, 2023, <https://www.bls.gov/opub/mlr/2022/article/empirical-evidence-for-the-great-resignation.htm>.

<sup>23</sup>According to NNSA officials, the mid-year compensation adjustment was, in part, in response to a September 2022 NNSA internal review—referred to as the Enhanced Mission Delivery Initiative—that broadly examined the relationship between NNSA and its M&O contractors to improve the agency's ability to meet mission deliverables. The report discussed compensation for the M&O contractors' workforces and recommended some flexibilities NNSA could provide. We have ongoing work evaluating NNSA's implementation of the Enhanced Mission Delivery Initiative's recommendations. National Nuclear Security Administration, *Evolving the Nuclear Security Enterprise: A Report of the Enhanced Mission Delivery Initiative* (Washington, D.C.: Sept. 2022).

and M&O contractor representatives confirmed. However, we concluded that a reasonable proxy is the U.S. Bureau of Labor Statistics' Professional and Business Services category, which includes scientific and technical services workforces that are similar to the M&O contractors' workforces. The U.S. Bureau of Labor Statistics' separation data includes a broader range of types of employees than the M&O contractors' data or the government-wide and DOE data, in part causing the annual separation rates to be substantially higher than the M&O contractor, government-wide, and DOE attrition rates.<sup>24</sup> Between fiscal year 2018 and 2023, the total annual separation rate for the Professional and Business Services category was between about 58 and 65 percent. In addition, M&O contractors' workforces can include occupations similar to those in the Manufacturing sector, which saw rates between 32 and 41 percent in the same timeframe.<sup>25</sup>

Another measure of effectiveness in recruiting is “offer to acceptance rates”—or the percentage of offers that an employer extends to external candidates that are accepted. M&O contractors' offer to acceptance rates have ranged from 80 percent to 93 percent from fiscal year 2018 to 2022, according to available contractor data. M&O contractor representatives from each site cited several reasons why candidates sometimes decline job offers with the M&O contractors, including compensation and benefits, location, or the hiring process taking too long. For example, officials at one site told us that candidates often have more than one job offer, making the site's ability to match compensation from competitors an important factor when recruiting. NNSA officials said they review offer to acceptance rates for critical skills or hard to fill positions at each site as a

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<sup>24</sup>The U.S. Bureau of Labor Statistics reports separation rates in its monthly Job Openings and Labor Turnover Survey reports. Similar to the M&O contractors' data and the government-wide and DOE attrition rates, the U.S. Bureau of Labor Statistics defines separations as including voluntary separations, involuntary separations initiated by the employer, and other separations, including retirement, death, disability, and transfers to other locations of the same firm. However, the U.S. Bureau of Labor Statistics' total separation rates include full-time, part-time, permanent, short-term, seasonal, salaried, and hourly employees. In contrast, the M&O contractors' data generally includes only full-time and part-time permanent and term employees and the government-wide and DOE data generally includes only permanent, full-time employees. This leads the industry rates to be higher than the M&O contractors', government-wide, and DOE rates. One M&O contractor provided us data that included temporary employees—in addition to the data provided in the figure above—and its attrition rate more than doubled to about 25 percent per year.

<sup>25</sup>According to the U.S. Bureau of Labor Statistics, the Manufacturing sector includes those engaged in the mechanical, physical, or chemical transformation of materials, substances, or component into new products, including work in plants, factories, or mills, among others.

way to understand and monitor recruitment, and generally view a rate near 80 percent as a good result.

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### M&O Contractors Reported Facing Hiring Challenges, and NNSA Does Not Formally Track the Length of Its Review Times for Compensation Adjustment Requests

Although the M&O contractors generally achieved planned staffing levels, officials from three contractor sites said that achieving them has entailed a considerable effort and representatives from all six M&O contractor sites identified challenges in recruiting and retaining their workforces. Representatives from the six M&O contractors told us they face the following ongoing challenges related to recruitment and retention of employees:

**Competitive salaries and benefits.** Representatives from all six M&O contractors discussed challenges with being competitive in the hiring market, which affects both recruiting and retention, due to limits on the compensation and benefits they can offer. For example, one M&O contractor representative noted that the contractor is limited in its ability to provide salary increases since the contractor can only provide salary increases that are comparable to others in the market, as described in the M&O contractor's Compensation Increase Plan.<sup>26</sup> The contractor representative added that they can compete with competitors for employees on the base salary, but private industry can offer bonuses and stock options that M&O contractors cannot, making it difficult to compete on the total compensation levels when recruiting employees. Another contractor representative noted that higher salaries and more generous benefits at other employers, such as vacation time, have caused some candidates to accept other offers or leave the site for employment opportunities with enhanced compensation and benefits.

**Location and workplace flexibilities.** The locations of some sites and the degree of workplace flexibilities they can offer also play a role in the M&O contractors' ability to recruit and retain employees. For example, representatives from two M&O contractors said that being in a remote

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<sup>26</sup>The Compensation Increase Plan is an analysis of the pay of M&O contractor employees' jobs benchmarked to the pay of similar jobs in approved salary surveys to determine allowable salary increases at the labs, plants, and sites. These salary surveys are identified by M&O contractors and are approved by NNSA, according to NNSA officials. The Compensation Increase Plan is an annual requirement, and NNSA must approve if the proposed increase presented by the contractor exceeds the salary budget projection.

location or in a high cost of living area creates a challenge with recruitment and retention of employees. A representative from another contractor noted the crime rate in the area around the site and quality of the public school system make recruiting challenging as well. Representatives from two of the six contractors also cited their inability to offer widespread remote work to the same degree as competitors as a challenge to recruitment and retention. Representatives attributed the inability to telework in part due to the nature of the work not being conducive to remote work, such as requiring on-site presence or classified work.

**Available pool of skilled or experienced candidates.** The M&O contractors have faced challenges in recruiting and retaining employees in critical occupations, such as nuclear engineers and technicians, due to the necessity of highly specialized skills or direct, hands-on experience in the nuclear security enterprise required to carry out the job responsibilities. For example, representatives from four of the six M&O contractors said there is a limited candidate pool to fill critical occupations that are above entry level. In one case, representatives said their hiring managers prefer candidates with experience, as managers have limited time to train new staff. The contractor representatives added that candidates with more relevant experience can immediately contribute with less oversight. This may further limit the population from which M&O contractors can recruit.

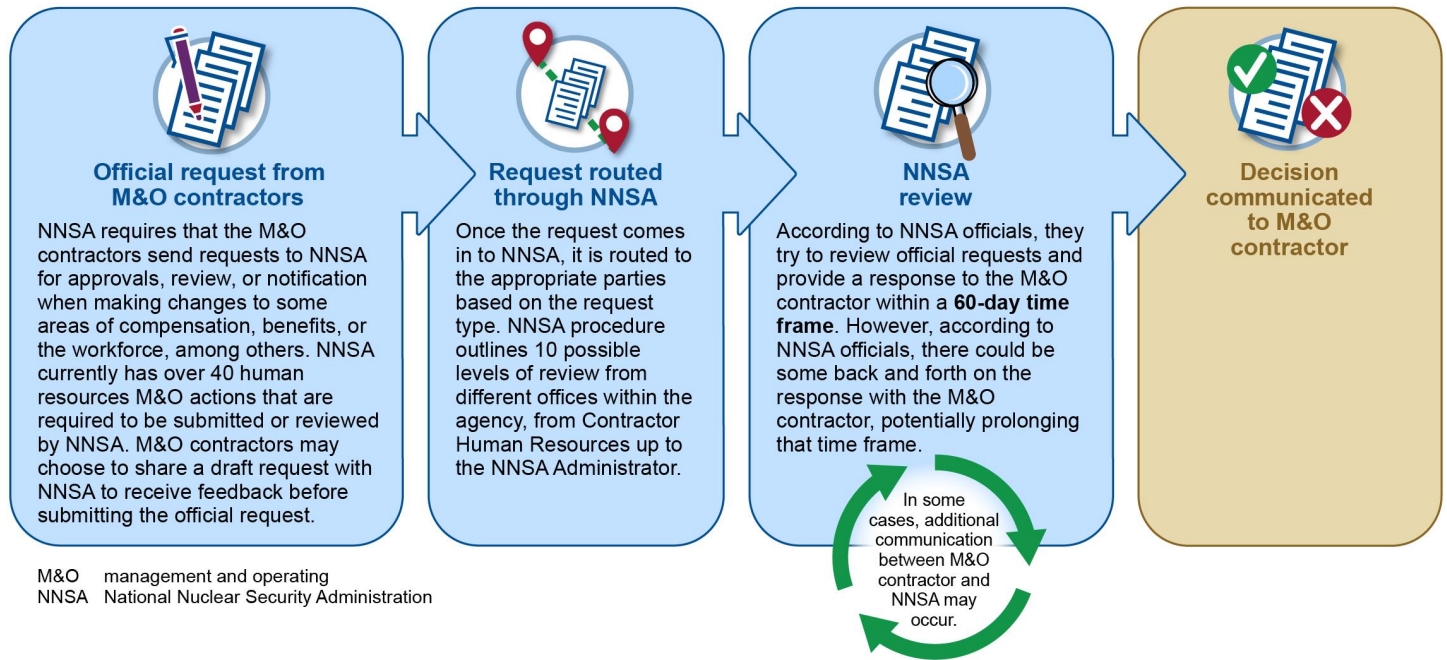
**Length of time for some NNSA approvals.** Three of the six M&O contractors identified challenges with NNSA's process to approve some human resource requests, including the time it takes and number of actions that need to be approved by NNSA (see fig. 4). In fiscal year 2022, NNSA's Contractor Human Resources Branch received and processed 39 requests from the M&O contractors, in addition to its regular reviews of compensation and benefits plans as defined by contract, according to NNSA officials.<sup>27</sup> These requests are generally for changes to the compensation or benefits for sites' workforces as a whole and include requests that are precedent setting, cost increasing, or highly sensitive, according to NNSA officials. For example, NNSA officials said one site requested to add paid paternity leave to its benefits package. According to NNSA officials, the approval of paid paternity leave at one site would set a precedent for other sites to request this as well. NNSA

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<sup>27</sup>In addition to the Compensation Increase Plan, M&O contractors are required to submit studies analyzing the value and costs of employee benefits, which NNSA uses to oversee the costs M&O contractors are incurring for benefits. These studies are generally referred to as the Benefits Value and Benefits Cost studies.

officials said they need to consider the extent to which similar benefits could be requested at other sites when making decisions about such requests. Other examples of requests that NNSA reviews include changes in the amount of leave employees earn—which could help recruit new employees to the site or retain existing employees—and requests for scheduling flexibility, allowing M&O contractor employees to earn extra pay for working extended hours, which primarily assists in retaining current employees.

**Figure 4: NNSA Review Process for M&O Contractors’ Human Resources Requests**



Sources: GAO analysis of NNSA documents and interviews; GAO (icons). | GAO-24-106861

**Accessible Text for Figure 4: NNSA Review Process for M&O Contractors’ Human Resources Requests**

**Official request from M&O contractors**

NNSA requires that the M&O contractors send requests to NNSA for approvals, review, or notification when making changes to some areas of compensation, benefits, or the workforce, among others. NNSA currently has over 40 human resources M&O actions that are required to be submitted or reviewed by NNSA. M&O contractors may choose to share a draft request with NNSA to receive feedback before submitting the official request.

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## Request routed through NNSA

Once the request comes in to NNSA, it is routed to the appropriate parties based on the request type. NNSA procedure outlines 10 possible levels of review from different offices within the agency, from Contractor Human Resources up to the NNSA Administrator.

### NNSA review

According to NNSA officials, they try to review official requests and provide a response to the M&O contractor within a 60-day time frame. However, according to NNSA officials, there could be some back and forth on the response with the M&O contractor, potentially prolonging that time frame.

In some cases, additional communication between M&O contractor and NNSA may occur.

### Decision communicated to M&O contractor

M&O (management and operating)

NNSA (National Nuclear Security Administration)

Sources: GAO analysis of NNSA documents and interviews; GAO (icons). | GAO-24-106861

Three of the six contractors noted that the amount of time it can take for NNSA to approve requests can put the M&O contractors at a disadvantage when competing for talent with the private sector, which has greater flexibility to offer enhanced compensation and benefits to its workforce. For example, one contractor representative said it could take 3 to 6 months before receiving a decision from NNSA on its requests to adjust its compensation and benefits packages for its broader workforce from what was previously approved. Representatives from each of the M&O contractors indicated that timely NNSA reviews were important, noting that enhancing salaries and benefits allows them to better recruit and retain staff.

The actual time it takes for NNSA to conduct reviews of M&O contractor human resource requests is unknown because NNSA does not formally track this information or have a system to determine whether or why there are delays in the process. NNSA officials said they try to review these requests and make decisions within 60 days of receiving an official request. NNSA officials said there is sometimes significant discussion that occurs with the M&O contractors on a request before the contractor officially submits the request. For example, NNSA officials said the M&O



contractors sometimes submit draft requests for NNSA input before submitting an official request. This could also contribute to perceived delays in the process as the 60-day review time frame does not begin until the official request has been submitted, according to NNSA officials. In addition, according to NNSA officials, the Contractor Human Resources Branch is not fully staffed, contributing to delays in the review and approvals process for requests.

*Standards for Internal Control in the Federal Government* states that management should process data into quality information, use the quality information to make informed decisions, and evaluate the entity's performance in achieving key objectives and addressing risks.<sup>28</sup> By tracking its review time for M&O contractors' human resource requests, NNSA would have the quality information to determine if it is meeting its 60-day time frame or if changes to the review process or time frame need to be made. For example, by tracking this information, NNSA may identify specific steps within the review process that may be causing delays in NNSA's reviews, or it may determine that the 60-day review time frame is being met but there is a misunderstanding with M&O contractors about when the 60 days begin.

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## M&O Contractors Are Addressing Ongoing Challenges by Implementing Several Solutions

While M&O contractors have reported facing the above challenges, M&O contractors have continued to achieve planned staffing levels by implementing various efforts:

**Adjusting benefits and incentives.** The M&O contractors at all six sites have adjusted their benefits packages and offered additional incentives over the past few years. These adjustments include increased leave time, additional health insurance benefits, or increased remote work options, where possible, as recruitment and retention incentives. In addition, M&O contractors also offered alternative work schedules, such as allowing flexible hours. For example, according to NNSA's *Fiscal Year 2024 Stockpile Stewardship and Management Plan*, Sandia National Laboratories implemented a hybrid work model and had nearly 4,000 of about 14,000 employees under a telecommuting agreement or a remote

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<sup>28</sup>[GAO-14-704G](#).

work agreement.<sup>29</sup> One M&O contractor representatives said they have offered different schedules, such as a 4-day workweek composed of 10-hour workdays to allow employees more flexibility.

M&O contractors also offered student loan repayment programs as a recruitment and retention incentive. Representatives from one M&O contractor noted that these initiatives helped them hire about 1,300 employees in fiscal year 2022. Sign-on and retention bonuses are another mechanism two sites have used or are considering to recruit and retain employees.

**Utilizing partnerships with universities and student programs.** Three of the six M&O contractors have partnered with local and regional educational institutions to recruit from or develop curricula relevant to their work, helping build the talent pool and create a pipeline of candidates from which the sites could recruit in the future. All M&O contractors also utilize internship or fellowship programs to create pipelines of qualified candidates for future positions. A representative from one M&O contractor said the number of interns who are converted to permanent employees increased from under 10 to over 30 per year since 2017. NNSA highlighted the M&O contractors' use of these partnerships in its *Fiscal Year 2024 Stockpile Stewardship and Management Plan*.<sup>30</sup>

**Building recruiting staff capacity.** Four of the six M&O contractors have also enhanced "talent sourcing" and recruiter teams, increasing their capacity to identify workforce needs and develop strategies for filling mission critical occupations. According to contractor representatives, recruiters work directly with their M&O contractor's human resources or program offices to better identify staffing needs and potential candidates. Representatives from one M&O contractor said they have built a team of about 20 recruiters to carry out this work. Another M&O contractor created a talent acquisition team to allow the recruiter to take a more active role during the hiring process. Representatives told us that this would help enhance recruiters' understanding of the positions for which they are hiring and ultimately help provide a clearer picture of the ideal candidates.

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<sup>29</sup>National Nuclear Security Administration, *Fiscal Year 2024 Stockpile Stewardship and Management Plan*, (Washington, D.C.: Nov. 2023). According to NNSA officials, about 7,800 M&O contractor employees had telework agreements as of April 2024. These agreements grant employees the ability to telework, but not all employees telework that are approved.

<sup>30</sup>National Nuclear Security Administration, *Fiscal Year 2024 Stockpile Stewardship and Management Plan*, (Washington, D.C.: Nov. 2023).

**Offering training and knowledge transfer opportunities.** All six M&O contractors said that they have enhanced the training opportunities available to existing employees to help address retention challenges. These opportunities include paying for additional courses at local colleges or universities to further develop employees' technical skills and allowing employees to work for a limited time at another site to better understand the work across the enterprise. Additionally, one M&O contractor has placed additional emphasis on knowledge transfer opportunities so that more experienced employees can share their knowledge and skills with newer employees.

M&O contractors monitor effectiveness of these initiatives in several ways, including employee surveys, exit surveys for those employees separating from the site, and data analysis for some of the initiatives. For example, M&O contractors track how many interns return as full-time employees, or how many people were reached at recruitment events. M&O contractor representatives told us they review this information internally and make changes to strategies, where needed.

NNSA sponsored a review of the workforce and workplace of the future, called the Strategic Outlook Initiative, in 2022. This effort looked across the nuclear security enterprise, with involvement from each of NNSA's laboratories, plants, and sites, to identify crosscutting issues and enterprise workforce needs over the next 20 years. The study recommends ways individual laboratories, plants, and sites can strengthen their workforces and collaborate, as well as actions NNSA can take to support the workforce of the future. As of January 2024, NNSA officials said they were in the planning phases to review the recommendations and determine how to implement them.

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## **NNSA Collects Certain Information to Oversee M&O Contractors' Recruitment and Retention Efforts, but Has Not Fully Assessed Information Needs**

To support its oversight of contractors' recruitment and retention efforts, NNSA collects and reviews information from M&O contractors on compensation and benefits. This includes contractually required information, such as the Compensation Increase Plan, studies evaluating the value and costs of employee benefits, and required workforce plans. While NNSA has collected other information from M&O contractors

through additional data requests in recent years, opportunities exist for NNSA to enhance its oversight of contractor performance and compliance by fully assessing and identifying its information needs for such purposes.

The M&O contracts require contractors to provide certain human resources information to NNSA, particularly related to compensation, benefits, and workforce planning. The M&O contractor labor and employee benefit costs made up between around one-quarter and one-third of the fiscal year 2022 annual costs of each M&O contractor, totaling nearly \$4 billion across the six contractors, according to NNSA data. NNSA's Contractor Human Resources Branch and the relevant contracting officers in the field offices collect this information from M&O contractors, which allows NNSA to oversee whether the contractors effectively manage human resources and provide the critical skills and capabilities to accomplish NNSA's mission needs, as required by their contracts. Each M&O contractor is to establish a market-based pay and benefits program for its workforce. The M&O contracts identify several required deliverables related to compensation, benefits, and workforce plans that NNSA reviews on a recurring basis, including the following:

- **Compensation.** NNSA annually distributes guidance to the M&O contractors for the Compensation Increase Plan, which describes allowable salary and promotion increases based on an industry salary budget survey. If an M&O contractor's proposed salary and promotion increases exceed the industry survey, the M&O contractor must submit a full Compensation Increase Plan, which must include additional analysis and information supporting its proposal to NNSA, such as discussion of attrition or critical skill positions that are hard to fill to support the M&O contractor's compensation proposal. If the proposed increases are at or below the industry survey data, the M&O contractor can provide a streamlined Compensation Increase Plan and provide NNSA notification of salary and promotion increases.

In response to the September 2022 Enhanced Mission Delivery Initiative's recommendations, NNSA implemented changes to some of the required compensation approvals.<sup>31</sup> For example, in conjunction with M&O contractors, NNSA completed a review of the industry surveys used in the Compensation Increase Plan and NNSA officials said they modified the calendar year 2024 Compensation Increase Plan guidance accordingly.

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<sup>31</sup>National Nuclear Security Administration, *Evolving the Nuclear Security Enterprise: A Report of the Enhanced Mission Delivery Initiative* (Washington, D.C.: Sept. 2022).

- **Benefits.** Each M&O contractor must submit to NNSA studies analyzing the value and costs of employee benefits, which NNSA uses to oversee the costs M&O contractors are incurring for benefits. These studies are generally referred to as the Employee Benefits Value Study and the Employee Benefits Cost Study Comparison. The Employee Benefits Value Study or similar evaluations are tools used to measure the competitiveness of benefit offerings by the M&O contractors compared with at least 15 peer companies selected by the M&O contractors and approved by NNSA, according to NNSA officials. Generally, according to NNSA, this study is completed prior to the M&O contractors' negotiation of salaries and benefits with the contractors' bargaining unit employees, and every 2 years for non-bargaining unit employees.<sup>32</sup> For the Employee Benefits Cost Study Comparison, each M&O contractor uses an approved NNSA measure to analyze the cost of benefits for employees in comparison with identified peer companies, according to NNSA officials.

In response to the September 2022 Enhanced Mission Delivery Initiative, NNSA officials said they eliminated certain requirements related to the employee benefits value and cost studies, providing the M&O contractors with additional flexibility to set policy for their own benefits programs.<sup>33</sup>

- **Workforce Plans.** NNSA requires M&O contractors to periodically develop workforce plans that generally describe how the contractor will ensure its workforce is sufficiently sized and possesses the appropriate skills to perform the mission.<sup>34</sup> According to NNSA officials, in an effort to collect more consistent information, NNSA issued guidance in 2023 to M&O contractor human resource managers suggesting what to include in their fiscal year 2024 workforce plans.<sup>35</sup> The guidance suggests including a summary of the future state of each site, including staffing changes, drivers of those changes, and anticipated challenges and mitigation plans. The

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<sup>32</sup>Bargaining unit employees are in positions that are represented by a labor union, which negotiates various conditions of employment on behalf of the employees. Non-bargaining unit employees are in positions that are not represented by a labor union.

<sup>33</sup>National Nuclear Security Administration, *Evolving the Nuclear Security Enterprise: A Report of the Enhanced Mission Delivery Initiative* (Washington, D.C.: Sept. 2022).

<sup>34</sup>Contract provisions vary on whether the contractors are required to provide the plans to NNSA annually or upon request.

<sup>35</sup>This workforce plan guidance is only a suggestion and does not guarantee that the M&O contractors will provide this information.

guidance also suggests that M&O contractors provide information on attrition rates, hiring targets, and a list of critical skills and hard-to-fill positions.

In addition to collecting required information about the M&O contractor workforce, NNSA has collected additional information through data requests. Specifically, in 2020, NNSA began collecting and tracking workforce information through regular data requests for hiring metrics and information on critical skills needed to fill positions, according to NNSA officials. NNSA officials said that, historically, they have performed somewhat limited oversight of the M&O contractors' recruitment and retention efforts because the M&O contractors had not had issues recruiting and retaining staff. However, in recent years, NNSA officials said they wanted to have information across the nuclear security enterprise to provide to NNSA leadership, Congress, and the public. In addition, this information helps NNSA better understand and analyze challenges across the M&O sites and informs decision-making on solutions to challenges the M&Os are encountering, according to NNSA officials.

While NNSA has collected various additional data in recent years, we found that opportunities exist for it to enhance its oversight of contractor recruitment and retention by fully assessing and identifying its information needs. Specifically, we found NNSA may be making redundant requests for information from the M&O contractors. For example, according to NNSA officials, NNSA requests information on attrition rates, staffing targets, progress in meeting staffing targets, and lists of critical and hard-to-fill positions through periodic data requests, although it also collects some of these data through one or more of its contractually required compensation or workforce plans. In addition, NNSA suggested that M&O contractors include information on critical skills or hard-to-fill positions in their workforce plans, but also requests this information through a data request and the M&O Compensation Increase Plan.<sup>36</sup>

In addition, NNSA may be missing opportunities to identify and collect information that would allow it to understand why the M&O contractors are requesting approval of cost-increasing changes to compensation, benefits, or other recruitment or retention initiatives. Information on why M&O contractor employees are leaving, such as summary information from exit surveys, could provide further context to the M&O attrition data that NNSA collects. However, NNSA does not request this information

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<sup>36</sup>NNSA started requesting that M&O contractors provide information on critical skills or hard-to-fill positions through workforce plans in fiscal year 2024.

from the M&O contractors. In addition, NNSA officials said they would like to collect information on the amount of time it takes the M&O contractors to hire for certain positions, as they have heard anecdotally that this is a problem at the sites. This information could help NNSA determine whether it should approve M&O contractors' human resources requests or implement widespread actions to help address challenges related to the speed of hiring new employees. Furthermore, additional information on the extent to which recruitment and retention incentives are helping address hiring and retention challenges could help NNSA determine whether such incentives might be beneficial at other sites and could shorten the approval time for such requests.

*Standards for Internal Control in the Federal Government* states that management should design a process that uses the entity's objectives and related risks to identify the information requirements needed to achieve the objectives and address the risks. Additionally, the standards state that as change in the entity and its objectives and risks occurs, management changes information requirements as needed to meet these modified objectives and address these modified risks.<sup>37</sup> In NNSA's case, such changes in its objectives and risks include the need to inform its decisions on solutions to address more recent workforce challenges, as officials described above.

Furthermore, according to contractual requirements, the M&O contractors are to assure effective human resource management and the availability of critical skills and capabilities to perform NNSA's mission. According to DOE policy, NNSA is required to evaluate contractor performance and compliance with contract requirements.<sup>38</sup> NNSA is also required to ensure that the M&O contractors are effectively managing human resources and have the correct skill mix of employees to perform NNSA's mission.<sup>39</sup>

By assessing its information needs for oversight purposes, NNSA could identify additional potentially useful sources of information and will be better positioned to determine how and when to collect and use it to ensure M&O contractors are effectively delivering human resource operations. In addition, NNSA will be better positioned to make informed

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<sup>37</sup>[GAO-14-704G](#).

<sup>38</sup>Department of Energy, *Implementation of Department of Energy Oversight Policy*, DOE O 226.1B Chg 1 (Admin Chg) (Washington, D.C.: May 3, 2022).

<sup>39</sup>Department of Energy, *Contractor Human Resource Management Programs*, DOE O 350.1 Chg 7 (LtdChg) (Washington, D.C.: Feb. 19, 2020).

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decisions regarding M&O contractor requests for additional recruitment and retention incentives.

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## Conclusions

NNSA's continued focus on recruitment and retention challenges is critical to its mission because of the size and cost of the M&O workforce—about 55,000 contractor employees—and its importance to implementing the mission. While M&O contractors have generally met their planned staffing levels, they report continued challenges such as a limited pool of skilled candidates and not being able to provide competitive compensation for certain jobs. M&O contractors also have reported facing delays working with NNSA to approve human resource actions, which they could use to offer changes in benefits to retain employees, such as flexible working hours or paid parental leave for the workforce. The actual time frames for NNSA reviews of human resource requests are unknown because NNSA does not currently formally track review time frames or the reasons for any delays in the process. Tracking this information would allow NNSA to determine whether it is meeting its 60-day timeline for reviewing such requests or whether changes are needed.

To support its oversight of the M&O contractors' workforces, NNSA collects and reviews information on compensation, benefits, workforce plans, and additional human resources metrics related to attrition and hiring. However, NNSA has not fully assessed its information needs for oversight purposes, which could help it identify additional information to collect and determine whether it is collecting similar information in multiple ways. By doing such an assessment, NNSA may identify opportunities to collect other useful information—such as information from M&O contractor exit surveys on why employees are leaving—that would allow it to better understand why the M&O contractors are requesting additional recruitment and retention incentives. Further, the assessment would better position NNSA to ensure M&O contractors are effectively delivering human resource operations and to help the M&O contractors address recruitment and retention challenges, as appropriate.

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## Recommendations for Executive Action

We are making the following two recommendations to NNSA:



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The Associate Administrator for NNSA's Office of Partnership and Acquisition Services should track the time it takes to review official human resources requests and use that information to determine if changes in its process are needed. (Recommendation 1)

The Associate Administrator for NNSA's Office of Partnership and Acquisition Services should fully assess and identify the information it needs to oversee M&O contractors' recruitment and retention efforts, including whether collecting additional information could inform its oversight efforts. (Recommendation 2)

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## Agency Comments

We provided a draft of this report to NNSA for review and comment. In its comments, reproduced in appendix II, NNSA concurred with our two recommendations, stating that it will take actions to address both recommendations. NNSA 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 other interested parties. In addition, this report is available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff 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 III.



Allison Bawden  
Director, Natural Resources and Environment

# Appendix I: Additional Information on the Department of Energy's Management and Operating Contracts

**Table 1: National Nuclear Security Administration Management and Operating Contracts**

Contract name	Mission type	Mission or work performed	Contractor (composition of contractor)	Award year	Current end year (potential end year with all options/award terms)	Number of employees in fiscal year 2022
Lawrence Livermore National Laboratory	Research and development	Conducts research in national defense, nuclear weapons stockpile stewardship, weapons of mass destruction, and nuclear nonproliferation.	Lawrence Livermore National Security, LLC (Bechtel National Inc., University of California, Babcock & Wilcox Company, Amentum)	2007	2026	7,771
Y-12 National Security Complex and Pantex Plant <sup>a</sup>	Production	Produces nuclear and nonnuclear components for weapons and evaluates, repairs, and dismantles nuclear weapons.	Consolidated Nuclear Security LLC (Bechtel National Inc., Leidos Innovations Corporation Inc., ATK Launch Systems Inc., SOC LLC)	2014	2025 (2027)	11,697
Kansas City National Security Campus	Production	Produces and procures nonnuclear components for nuclear weapons.	Honeywell Federal Manufacturing & Technologies LLC (Honeywell International Inc.)	2015	2025	6,353

**Appendix I: Additional Information on the  
Department of Energy's Management and  
Operating Contracts**

<b>Contract name</b>	<b>Mission type</b>	<b>Mission or work performed</b>	<b>Contractor (composition of contractor)</b>	<b>Award year</b>	<b>Current end year (potential end year with all options/award terms)</b>	<b>Number of employees in fiscal year 2022</b>
Sandia National Laboratories	Research and development; production	Conducts research in national defense, weapons of mass destruction, transportation, energy, telecommunications and financial networks, and environmental stewardship. Engineers and produces nonnuclear components for weapons.	National Technology and Engineering Solutions of Sandia, LLC (Honeywell International Inc.)	2017	2027	14,163
Nevada National Security Site	Research and development	Conducts high-hazard operations, experiments, and training in support of NNSA, the Department of Defense, and other agencies.	Mission Support and Test Services, LLC (Honeywell International Inc., Jacobs Engineering Group Inc., and HII Nuclear, Inc.	2017	2027	2,943
Los Alamos National Laboratory	Research and development; production	Conducts research in national defense, nuclear weapons stockpile stewardship, weapons of mass destruction, and nuclear nonproliferation. Produces certain fuel and detonators.	Triad National Security, LLC (Battelle Memorial Institute, University of California, Texas A&M University System)	2018	2028	11,275

Source: GAO analysis of National Nuclear Security Administration information. | GAO-24-106861

<sup>a</sup>According to officials, NNSA is pursuing two competitions for separate contracts to manage the Y-12 National Security Complex and Pantex Plant.

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# Appendix II: Comments from the Department of Energy

Appendix II: Comments from the Department of Energy



Department of Energy  
Under Secretary for Nuclear Security  
Administrator, National Nuclear Security Administration  
Washington, DC 20585



April 12, 2024

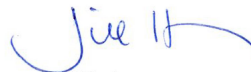
Ms. Allison B. Bawden  
Director, Natural Resources  
and Environment  
U.S. Government Accountability Office  
Washington, DC 20548

Dear Ms. Bawden:

Thank you for the opportunity to review the Government Accountability Office (GAO) draft report "National Nuclear Security Administration: Improvements Needed for Overseeing Contractor Workforce Recruitment and Retention Efforts" (GAO-24-106861). The Department of Energy's National Nuclear Security Administration (NNSA) works closely with its management and operating (M&O) contractors and is keenly aware of the challenges they face in recruiting and retaining a highly skilled workforce to accomplish NNSA's important missions. NNSA continues to be proactive and has made great strides in providing flexibilities to our M&O contractors to improve their recruitment and retention efforts while balancing our oversight requirements. The report notes, for example, NNSA's approval of a mid-year compensation adjustment in 2022 that positively affected retention rates at our M&O sites.

NNSA appreciates GAO's observations on our efforts to support M&O contractor recruitment and retention and our related oversight efforts, and we agree with the recommendations to further enhance our existing practices. The enclosed Management Decision outlines the specific actions planned to address each recommendation. Our subject matter experts have also provided technical and general comments under separate cover for your consideration to enhance the clarity and accuracy of the report. If you have any questions about this response, please contact Dean Childs, Director, Audits and Internal Affairs, at (202) 836-3327.

Sincerely,



Jill Hruby

Enclosure

Enclosure

**NATIONAL NUCLEAR SECURITY ADMINISTRATION**  
**Management Decision**

**"National Nuclear Security Administration: Improvements Needed for Overseeing  
Contractor Workforce Recruitment and Retention Efforts" (GAO-24-106861)**

The Government Accountability Office recommends the Department of Energy's National Nuclear Security Administration (NNSA):

**Recommendation 1:** Track the time it takes to review official human resources requests from management and operating contractors (M&O) and use that information to determine if changes in its processes are needed.

**Management Response:** Concur. NNSA's Office of Partnership and Acquisition Services (NA-PAS) will develop a listing of official M&O human resources requests to be tracked, including target processing timelines. This listing will focus on contractually required requests and other formal requests that may increase costs to NNSA. Once developed, NA-PAS will work with the M&O contractors to come to a mutual understanding of when NNSA's review officially begins and the factors that impact timing and key decisions. NNSA will evaluate this recommendation for closure in March 2025 to allow sufficient time to obtain and evaluate representative tracking data and document decisions on the need for process changes.

**Recommendation 2:** Fully assess and identify the information it needs to oversee M&O recruitment and retention efforts, including whether collecting additional information could inform its oversight efforts.

**Management Response:** Concur. NA-PAS will review recruitment and retention related information that M&O contractors are contractually required to provide, along with information collected through separate data requests, to identify the current set of data used for oversight. As part of this review, NA-PAS will work with the M&O contractors to identify opportunities where other existing information can be leveraged to further enhance oversight efforts. The estimated date for completing this review is December 31, 2024.

# Accessible Text for Appendix II: Comments from the Department of Energy

April 12, 2024

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

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Sincerely,

Jill Hruby

Enclosure

**NATIONAL NUCLEAR SECURITY ADMINISTRATION**  
**Management Decision**

**"National Nuclear Security Administration: Improvements Needed for  
Overseeing Contractor Workforce Recruitment and Retention Efforts" (GAO-  
24-106861)**

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**Management Response:** Concur. NNSA's Office of Personnel and Acquisition Services (NA-PAS) will develop a listing of official M&O human resources requests to be tracked, including target processing timelines. This listing will focus on contractually required requests and other formal requests that may increase costs to NNSA. Once developed, NA-PAS will work with the M&O contractors to come to a mutual understanding of when NNSA's review officially begins and the factors that impact timing and key decisions. NNSA will evaluate this recommendation for closure in March 2025 to allow sufficient time to obtain and evaluate representative tracking data and document decisions on the need for process changes.

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## Appendix III: GAO Contact and Staff Acknowledgments

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### GAO Contact

Allison 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), Caroline Prado (Analyst in Charge), and Joseph Shir made key contributions to this report. Other staff who made key contributions to this report were Jeff Carr, Denise Cook, Anthony Fernandez, Cindy Gilbert, Wesley Johnson, Ying Long, Dan Royer, Caitlin Scoville, Linda Tsang, and Tatiana Winger.



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