

DEPARTMENT OF ENERGY CONTRACTING

Actions Needed to Strengthen Certain Acquisition Planning Processes

Report to Congressional Committees

November 2024
GAO-25-106207
United States Government Accountability Office

Accessible Version

GAO Highlights

View GAO-25-106207. For more information, contact Allison Bawden at (202) 512-3841 or bawdena@gao.gov. Highlights of GAO-25-106207, a report to congressional committees

November 2024

DEPARTMENT OF ENERGY CONTRACTING

Actions Needed to Strengthen Certain Acquisition Planning Processes

Why GAO Did This Study

DOE obligates tens of billions of dollars annually on contracts to support critical missions and the management and operation of its laboratories and production facilities. Aspects of DOE's acquisition process have been on GAO's High Risk List since 1990. Congressional committees and industry have raised questions about the prolonged nature of some DOE acquisitions and abrupt cancellations of multibillion-dollar contract awards.

Several congressional committee reports include provisions for GAO to review aspects of DOE's acquisition planning. GAO examined the extent to which DOE (1) implemented selected acquisition planning practices and (2) has readily available information about solicitation cancellations and contract award terminations and delays.

GAO reviewed federal procurement data as of January 2023, along with relevant contract files, for selected contracts awarded in fiscal years 2017 through 2022 (the most recent at the time of review). GAO identified contracts for review based on criteria such as potential total contract value and having a written acquisition plan. GAO also interviewed DOE officials and representatives from 10 selected industry entities.

What GAO Recommends

GAO is making 12 recommendations, including that DOE revise its acquisition lessons learned process, implement procedures to improve how certain data are collected, and assess the role of requirements setting in causing solicitations to be canceled or awards to be terminated. DOE and NNSA agreed with the 12 recommendations.

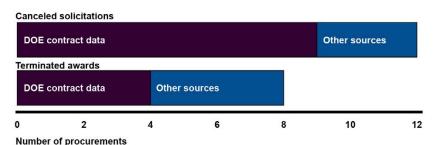
What GAO Found

Offices in the Department of Energy (DOE), including the National Nuclear Security Administration (NNSA), implemented eight of 10 selected acquisition planning practices for 20 contracts GAO reviewed. For example, DOE offices conducted market research and created written acquisition plans and milestones for all 20 contracts. However, independent government cost estimates, important for estimating potential contract costs, were not always developed, even though DOE guidance directs officials to perform them. Instead, DOE offices sometimes obtained waivers of office-specific direction to conduct such estimates or used a budget-based model that is typically based on current budget forecasts.

DOE offices also did not always include evidence indicating that contracting officers reviewed lessons learned from prior acquisitions or followed a lessons learned process for acquisitions that employs all leading practices. Consistently reviewing and leveraging knowledge gained from prior acquisitions, as well as using a process that follows all lessons learned leading practices, can help ensure that past mistakes are not repeated and opportunities to improve acquisition planning are not lost.

DOE does not have readily available procurement data on the number of canceled solicitations and terminated awards for fiscal years 2017 through 2022 in its contract database. Reviewing other data sources, GAO identified canceled solicitations and terminated awards that were not captured in DOE's contract data (see figure).

Number of Department of Energy (DOE) Canceled Solicitations and Terminated Awards, by Data Source, Fiscal Years 2017–2022



Source: DOE procurement data, Federal Procurement Data System, agency documents, and media reports. | GAO-25-106207

DOE and office requirements and guidance provided limited instruction about how to record and report cancellations and terminations. DOE officials reported that cancellations and terminations are infrequent, but GAO found that such actions can have considerable negative effects on industry and DOE, including financial losses. By providing clearer guidance to contracting officials on how to properly record and report data on these actions, DOE could improve the reliability of information to better understand the frequency with which they occur, and any underlying causes and necessary corrective actions. Changes to requirements contributed to the majority of canceled solicitations and terminated contracts, but DOE officials told GAO they had not assessed this issue. Doing so would better position DOE to determine any root causes or potential improvements to requirements setting.

Contents

GAO Highlights	ii
Why GAO Did This Study	ii
What GAO Recommends	ii
What GAO Found	ii
Letter	1
Background	4
DOE Generally Implemented All but Two Selected Acquisition Planning Practices for Contracts We Reviewed	8
DOE Does Not Have Readily Available Data on Extent of Canceled Solicitations, Contract Award Terminations, and Award Delays	17
Conclusions	26
Recommendations for Executive Action	27
Agency Comments and Our Evaluation	28
Appendix I Objectives, Scope, and Methodology	31
Appendix II Comments from the Department of Energy	36
Accessible Text for Appendix II Comments from the Department of Energy	41
Appendix III GAO Contact and Staff Acknowledgments	45
GAO Contact	45
Staff Acknowledgments	45
Tables	
Table 1: DOE Offices' Implementation of Seven Selected Acquisition Planning Practices Applicable to A Reviewed Contracts	All 20 8
Table 2: DOE Offices Implemented Three Selected Acquisition Planning Practices Applicable Only to Certain Contracts We Reviewed	10
Table 3: Canceled Solicitations by Department of Energy (DOE) Office, Fiscal Years 2017–2022	20
Table 4: Terminated Awards by Department of Energy (DOE) Office, Fiscal Years 2017–2022 (value of least \$5.5 million and terminated shortly after award)	at 21
Table 5: Department of Energy (DOE) Procurements with Cancellations or Terminations Related to Requirements, Fiscal Years 2017–2022 (value of at least \$5.5 million)	22
Table 6: Late Contract Awards by Department of Energy (DOE) Office, Fiscal Year 2022 (value of at lea \$5.5 million)	ast 25

Figures Number of Department of Energy (DOE) Canceled Solicitations and Terminated Awards, by Data Source, Fiscal Years 2017–2022 Figure 1: Typical Four Phases of DOE's Acquisition Process Figure 2: Leading Practices for a Lessons Learned Process Figure 3: Five Phases of the EM Pre-Award Lessons Learned Program 17 Figure 4: Number of Canceled Solicitations and Terminated Awards Identified in the Department of Energy (DOE) Procurement System and Other Sources, Fiscal Years 2017–2022 18

Abbreviations

DEAR Department of Energy Acquisition Regulation

DOE Department of Energy

EM Office of Environmental Management

ESCM End State Contracting ModelFAR Federal Acquisition Regulation

FPDS Federal Procurement Data System
 IDIQ indefinite delivery/indefinite quantity
 IGCE independent government cost estimate

M&O management and operating

NNSA National Nuclear Security Administration
 PALT procurement administrative lead time

RFP request for proposals

SAM System for Award Management

SEB source evaluation board

STRIPES Strategic Integrated Procurement Enterprise System

WAPA Western Area Power Administration

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

November 21, 2024

Congressional Committees

In fiscal year 2023, the Department of Energy (DOE) obligated \$46.3 billion for contracts to support critical missions such as modernizing the nation's nuclear weapons stockpile and cleaning up radioactive and hazardous waste. Approximately 79 percent (about \$36.7 billion) of these obligations were for management and operating (M&O) contracts, including multibillion-dollar contracts supporting the department's scientific laboratories and engineering and production facilities.¹

DOE has also awarded thousands of smaller contracts supporting its diverse missions. Aspects of DOE's acquisition processes have been on our High-Risk List since 1990, with DOE's record of inadequate contract management and contractor oversight leaving the department vulnerable to fraud, waste, and abuse.² Congressional committees and industry have highlighted ongoing challenges with DOE acquisitions, raising questions about the prolonged nature of the process and abrupt cancellations of multibillion-dollar contracts.

Our prior work on issues related to acquisition planning across parts of the federal government has found that inadequate acquisition planning can increase the risk that the government may receive services that cost more than anticipated, are delivered late, and are of unacceptable quality.³ Inadequate acquisition planning may result from poorly defined requirements and not incorporating prior lessons learned. Moreover, in June 2006, we reported on aspects of DOE's acquisition process. We found that delays in awarding contracts occurred in most of the contracts we reviewed and noted that such delays can increase costs to the companies competing for DOE contracts and may affect their willingness to compete for such contracts in the future. In 2006, we recommended that DOE better address delays in awarding contracts by tracking and monitoring the timeliness of the department's contract award process from planning to contract award.⁴ At the time, DOE stated that, to implement the recommendation, the department planned to review certain performance measures and consider benchmarking them against other federal agencies. Based on this information, we closed the recommendation, as discussed later in the report.

¹DOE and its National Nuclear Security Administration (NNSA) rely extensively on M&O contracts, which are agreements under which the government contracts for the operation, maintenance, or support, on its behalf, of a government-owned or -controlled research, development, special production, or testing establishment wholly or principally devoted to one or more of the major programs of the contracting federal agency. 48 C.F.R. § 17.601.

²In January 2009, to recognize progress made at DOE's Office of Science, we narrowed the focus of the department's high-risk designation to NNSA and the Office of Environmental Management (EM). In February 2013, to acknowledge progress made in managing smaller-value efforts, we further narrowed the focus of DOE's high-risk designation to major projects and contracts (i.e., those with values of at least \$750 million) within NNSA and EM. 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).

³GAO, National Science Foundation: Steps Taken to Improve Contracting Practices, but Opportunities Exist to Do More, GAO-13-292 (Washington, D.C.: Mar. 28, 2013); Federal Contracting: OMB's Acquisition Savings Initiative Had Results, but Improvements Needed, GAO-12-57 (Washington, D.C.: Nov. 15, 2011); and Acquisition Planning: Opportunities to Build Strong Foundations for Better Services Contracts, GAO-11-672 (Washington, D.C.: Aug. 9, 2011).

⁴GAO, *DOE Contracting: Better Performance Measures and Management Needed to Address Delays in Awarding Contracts*, GAO-06-722 (Washington, D.C.: June 30, 2006).

Several congressional committee reports and joint explanatory statement language include provisions for GAO to review various aspects of, or related to, DOE's acquisition planning, including for M&O contracts.⁵ This report examines the extent to which DOE (1) implemented selected acquisition planning practices for contracts we reviewed and (2) has readily available information about the number and value of solicitation cancellations and contract award terminations and delays.

To address our objectives, we developed four groups of DOE solicitations and contracts. To do so, we used contract award data reported as of January 2023 from the Federal Procurement Data System (FPDS), which is the system of record for federal procurement data.⁶ We also obtained data on canceled solicitations and terminated contracts reported as of March 2023 from DOE's Strategic Integrated Procurement Enterprise System (STRIPES), which is DOE's primary repository for contract information. Specifically,

- For our first objective—whether DOE implemented selected acquisition planning practices for contracts—we reviewed a nongeneralizable sample of 20 DOE contracts awarded from fiscal years 2017 through 2022. Each contract had a potential value of at least \$100 million at the time of award, which ensured that we included M&O contracts. We also selected these contracts to ensure that we included a range of dollar values, different contracting offices, and a variety of the types of goods and services being acquired.
- For our second objective—whether DOE has readily available information about the number and value of solicitation cancellations and contract award terminations and delays—we reviewed three groups of contracts and solicitations, all valued at least at \$5.5 million. These groups included (1) a nongeneralizable sample of 12 canceled solicitations from fiscal years 2017 through 2022, (2) all contract awards terminated for convenience from fiscal years 2017 through 2022 for which termination was not related to contractor performance, and (3) all fiscal year 2022 contracts awarded later than planned.⁹
- We assessed the reliability of DOE's FPDS and STRIPES data by (1) performing electronic testing, (2) reviewing existing information about the data and systems that produced them, and (3) interviewing agency officials knowledgeable about the data. We determined the data, despite some limitations that we describe in our report, were sufficiently reliable for identifying contracts awarded from fiscal years 2017 through 2022 and reporting on issues related to canceled solicitations, terminated contracts, and delayed contract awards.

For our first objective, we compared DOE's implementation of its acquisition planning process for the 20 selected contracts to 10 selected practices. We selected these 10 practices because either they are requirements from the Federal Acquisition Regulation (FAR); they are emphasized in DOE policies and

⁵S. Rep. No. 117-39, at 358-59 (2021); S. Rep. No. 117-130, at 366 (2022); Staff of the H.R. Comm. on Armed Services, 117th Cong., Legislative Text and Joint Explanatory Statement to Accompany H.R. 7776 2158 (Comm. Print 2023) 2158 (2023); and H. Rep. No. 118-125, at 411-12 (2023).

⁶The January 2023 FPDS data included the most current available data when we started our review.

⁷We chose our time frame for review because it included the most current available data when we started our review. Further, while the sample of contract awards reviewed did not allow us to generalize to all of DOE's contract awards, they represent more than 80 percent of the department's total contracting dollars for awards of \$100 million or greater during fiscal years 2017 through 2022.

⁸When developing our sample, we focused on contracts with a potential total contract value of \$100 million or greater at time of award because, according to a September 2018 DOE memorandum, the department considers its most complex acquisitions to be generally those valued in excess of \$100 million. Dan Brouillette, *Memorandum for Heads of Departmental Elements: Improving Acquisition Management* (Washington, D.C.: Deputy Secretary of Energy, Sept. 12, 2018).

⁹On December 26, 2023, DOE updated its *Acquisition Guide* to increase the threshold for when an acquisition requires a written acquisition plan from \$5.5 million or more to \$10 million or more. The contracts we reviewed were all awarded before this December 2023 update; thus, we used the \$5.5 million or more threshold for our review. Department of Energy, *Acquisition Guide*, *Fiscal Year 2024*, version 4 (Washington, D.C.: Dec. 26, 2023).

guidance, including DOE's *Acquisition Guide*; or our prior work identified them as important to successful acquisition outcomes. ¹⁰ We assessed the contract files for the presence of evidence that the selected practices had been followed. We did not assess the quality of the identified documentation because the FAR provides acquisition professionals with the flexibility to take actions to ensure their decisions are in the best interest of the government.

For objective two, we reviewed requirements in the FAR related to canceled solicitations and terminated awards.¹¹ We also reviewed department-wide policies and guidance and office-specific supplementary documentation. We also compared DOE's management and use of available data on canceled solicitations and terminated and delayed awards with related principles in the *Standards for Internal Control in the Federal Government and the Framework for Assessing the Acquisition Function at Federal Agencies*.¹² We examined available documentation for the solicitations and awards, such as in the acquisition plan; milestone schedule; and, if applicable, the solicitation cancellation determinations. In some cases, we also reviewed GAO bid protest decisions and related media reports.

For fiscal year 2022 contract award delays, we compared the planned award date specified in the contract files for awarding the contract, typically found in the acquisition plan, with the date the contract was actually awarded. Because the planned award date is developed early in the acquisition process and before the issuance of a solicitation, we did not examine procurement administrative lead time (PALT) data, which is the amount of time from solicitation to contract award.¹³

We also obtained written responses and interviewed officials from across DOE about acquisition planning and the practices we selected for review and data and issues related to canceled solicitations, terminated contracts, and delayed contract awards. These offices included the Office of Environmental Management (EM) Consolidated Business Center, Office of Science, Office of the Chief Information Officer, Office of Nuclear Energy, Western Area Power Administration (WAPA), and the National Energy Technology Laboratory, as well as DOE's Office of Acquisition Management and the National Nuclear Security Administration's (NNSA) Office of Partnership and Acquisition Services.

To obtain industry perspectives for our second objective, we also interviewed representatives from 10 industry entities, which can include individual companies, organizations, or universities that are, or have expressed

¹⁰Relevant portions of the FAR, which appears in title 48 of the Code of Federal Regulations, include parts 7, 8, 10, 11, 16, and 17. For examples of DOE policies and guidance, see Department of Energy, *Acquisition Guide*, *Fiscal Year 2022*, version 2 (Washington, D.C.: Apr. 22, 2022); *An Acquisition Guide for Executives* (Washington, D.C.: January 2021); Office of Environmental Management, *Environmental Management Acquisition General Operating Guidelines, Directive No. 1 for the Environmental Management Acquisition Center (EMAC)* (Washington, D.C.: May 30, 2017); and National Nuclear Security Administration, *Acquisition Coordination and Approval Processes*, Business Operating Procedure 540.6, Administrative Change 1 (Washington, D.C.: May 11, 2017). From the FAR and these DOE policies and guidance, the 10 acquisition planning practices we selected for our review include (1) requirements documentation, (2) market research, (3) written acquisition plan, (4) acquisition milestones, (5) independent government cost estimate, (6) contract type selection, (7) lessons learned, (8) authorization for the use of an M&O contract, (9) authorization for using the End State Contracting Model approach, and (10) approval for using a single-award indefinite delivery/indefinite quantity contract. The first seven typically apply to all DOE acquisitions requiring a written acquisition plan, whereas the final three apply only to certain types of contracts or contract approaches.

¹¹48 C.F.R. §§ 4.805, 5.207(f), and pt. 49.

¹²GAO, Standards for Internal Control in the Federal Government, GAO-14-704G (Washington, D.C.: September 2014); and Framework for Assessing the Acquisition Function at Federal Agencies, GAO-05-218G (Washington, D.C.: September 2005).

¹³We recently issued a report examining the use of PALT data in the management of Department of Defense award lead times. GAO,

Defense Contracts: Better Monitoring Could Improve DOD's Management of Award Lead Times, GAO-24-106528 (Washington, D.C.: Mar. 14, 2024).

interest in, contracting with DOE. The views of the industry representatives interviewed cannot be generalized to all industry entities, but they provided valuable insights to our work. Appendix I presents a more detailed description of our objectives, scope, and methodology.

We conducted this performance audit from September 2022 to November 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 the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Acquisition Roles and Responsibilities at DOE

Acquisition authority at DOE flows from the Secretary of Energy to two Senior Procurement Executives responsible for management direction of the acquisition systems of the department, including implementing the department's acquisition policies, regulations, and standards.¹⁴ Specifically,

- DOE's Senior Procurement Executive also serves as the Director of the Office of Acquisition
 Management. This office 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. The office also 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.
- NNSA's Senior Procurement Executive also serves as the Deputy Associate Administrator for the Office
 of Partnership and Acquisition Services. This office is responsible for ensuring that NNSA implements
 DOE's acquisition policies and regulations as well as NNSA's own supplemental directives and procedures.
 NNSA, which possesses authority to deviate from DOE policies and procedures,¹⁵ generally follows all
 DOE acquisition management policy, according to DOE documentation.

Because of the decentralized nature of the department, there are also many offices within DOE and NNSA that are critical to the acquisition planning process. These offices include DOE program offices, such as EM and the Office of Science; functional offices, like the Office of Management, that provide management and other support functions to the program offices and the department as a whole; and field and site offices, which provide federal oversight of the day-to-day activities of contractors. Key staff involved in the acquisition process include contracting officers who enter into, administer, modify, or terminate contracts on behalf of the government; contracting officers' representatives who perform specific technical or administrative functions as designated by a contracting officer; and program and project managers who help develop accurate

¹⁴48 C.F.R. § 2.101.

¹⁵Specifically, the NNSA Administrator may establish administration-specific policies, unless disapproved by the Secretary of Energy. 50 U.S.C. § 2402(d).

requirements, define performance standards, and manage contractor activities to ensure intended outcomes are achieved.¹⁶

DOE's Acquisition Process for Contracts

DOE's acquisition process is governed by the FAR, which is the primary regulation used by all executive agencies in their acquisition of supplies and services with appropriated funds.¹⁷ DOE supplements the FAR with the Department of Energy Acquisition Regulation (DEAR)¹⁸ and other internal policies and procedures, such as the department's *Acquisition Guide* and acquisition letters issued by the Senior Procurement Executive. Generally, program and contracting officials share responsibility for the majority of acquisition planning activities. Although there can be variation, the acquisition process at DOE typically occurs in four phases: presolicitation, solicitation, award, and post-award (see fig. 1).

Figure 1: Typical Four Phases of DOE's Acquisition Process



Sources: GAO analysis of the Federal Acquisition Regulation, Department of Energy (DOE) guidance, Federal Acquisition Institute's *Project Manager's Guidebook* (2022), and prior GAO reports; GAO (icons). | GAO-25-106207

1. **Acquisition planning begins at presolicitation.** During this phase, a need for products or services is identified and requirements for meeting that need are defined. Once requirements are determined, the contracting officer is responsible for reviewing knowledge gained from prior acquisitions, or lessons learned, to further refine requirements and inform acquisition strategies. Officials from both the program and contracting offices are to conduct market research to gain an understanding of current market conditions and available solutions. DOE's *Acquisition Guide* also directs procurement officials to produce an independent government cost estimate (IGCE) for every acquisition with an estimated value that exceeds the simplified acquisition threshold.¹⁹ IGCEs help project the costs a contractor may incur

¹⁶For additional information about these staff responsibilities, see GAO, *Department of Energy: Improvements Needed to Strengthen Strategic Planning for the Acquisition Workforce*, GAO-22-103854 (Washington, D.C.: Nov. 16, 2021).

¹⁷According to the FAR, the term acquisition means the acquiring by contract with appropriated funds of supplies or services (including construction) by and for the use of the federal government through purchase or lease, whether the supplies or services are already in existence or must be created, developed, demonstrated, and evaluated. 48 C.F.R. § 2.101.

¹⁸48 C.F.R. ch. 9.

¹⁹At the time of our review, the typical simplified acquisition threshold was generally \$250,000, although simplified acquisition procedures can be used for procurements up to \$15 million in certain cases such as when the contract is for contingency operations or defense against or recovery from cyber, nuclear, biological, chemical, or radiological attacks. 48 C.F.R. §§ 2.101, 13.500(c)(1).

in the performance of a contract and can be used by contracting officers to compare offerors' proposed prices and determine whether proposed contract prices are reasonable.

In addition, DOE typically requires a written acquisition plan for acquisitions that will use certain contract types. According to the FAR, the specific content of acquisition plans will vary, in part depending on the nature and circumstances of the acquisition, though some information is required. For example, milestones for completing the acquisition must be identified. These milestones can also serve as a consistent measure of contract award timeliness and indicator of whether the acquisition process was managed well. The acquisition plans also provide the rationale for selecting a contract type. There are two broad categories of contracts: cost reimbursement and fixed price. In some instances, the use of certain types of contracts, such as M&O contracts, requires additional approval by senior officials.

- 2. The proposed acquisition is publicized through the issuance of a solicitation. The contracting officer, in consultation with the agency's legal team and other stakeholders, is responsible for finalizing and issuing a solicitation. The solicitation identifies what DOE wants to acquire, provides instructions to prospective contractors on how to submit offers, and specifies the evaluation factors that will be used to evaluate submitted offers. One type of solicitation is a request for proposals (RFP).²⁴ Acquisition planning ends once a solicitation is issued.
- 3. **The evaluation of proposals results in a contract award.** For contracts like most of those in our scope, technical experts are responsible for evaluating submitted proposals based on the evaluation factors specified in the solicitation.²⁵ This includes evaluating proposals, then reaching consensus on and documenting each proposal's strengths, weaknesses, and deficiencies, as well as assessing the reasonableness of the price or cost proposals. Based on the input from the technical experts, the source selection authority, normally a senior program official at Headquarters or a field office, makes a final selection and the contracting officer awards the contract.²⁶

²⁰48 C.F.R. § 7.105.

²¹Agencies can also use another measure, PALT, to evaluate the time needed to award a contract. However, as we reported in March 2024, PALT does not include the amount of time needed to complete the acquisition planning activities that precede the issuance of a solicitation. GAO-24-106528.

²²Other vehicles can be used that are not contracts, such as a blanket purchase agreement, which is an "agreement" between the government and a contractor. The government is not obligated to place orders against an established blanket purchase agreement because it is not a contract. However, for the purposes of this report, we refer to these other vehicles as contracts.

²³Under cost-reimbursement contracts, the government pays for allowable incurred costs. The government also generally assumes the risk of a cost overrun. In contrast, under fixed-price contracts, the government generally pays a set or contractually adjustable price, and the contractor generally assumes the risk of a cost overrun.

²⁴A solicitation means any request to submit offers or quotations to the government. Solicitations under negotiated procedures are called "requests for proposals." Solicitations under sealed bid procedures are called "invitations for bids." Solicitations under simplified acquisition procedures may require submission of either a quotation or an offer. 48 C.F.R. § 2.101.

²⁵The technical experts are appointed specifically for that acquisition by the source selection official. These experts play a key role in the award process and generally include the contracting officer, legal counsel, and experts in applicable areas, such as security, health and safety, human resources, accounting, or information technology.

²⁶The contracting officer has broad discretion in establishing suitable evaluation procedures for blanket purchase agreements. Technical experts can be employed but are not mandatory. For sealed bids, awards are made to that responsible bidder whose bid, conforming to the invitation for bids, will be most advantageous to the government, considering only price and the price-related factors included in the invitation.

4. The post-award period, which includes contract administration, begins following the signing of a contract. The successful offeror begins the day-to-day execution of the contract's requirements, sometimes following a period of transition from an incumbent contractor. Agency staff are responsible for monitoring the contractor's performance and compliance with the terms of the contract to ensure that the government gets what it paid for in terms of cost, quality, and timeliness. If necessary, the contracting officer may seek to modify the contract, such as by making changes to the scope of work or period of performance.²⁷

Canceled Solicitations, Terminated Contracts, and Delayed Contract Awards

In most cases, a planned acquisition will proceed through all four phases of the acquisition process and result in an award and administration of a contract. However, in certain circumstances, the contracting officer may cancel, terminate, or delay a solicitation or award.

- Cancellation: A solicitation may be canceled when there are substantial changes in requirements and funding, there is no longer a requirement for the supply or service, or it is in the best interest of the government.²⁸ Agencies, however, are not permitted to cancel a solicitation as a pretext for improper motives or reasons, such as to avoid awarding a contract on a competitive basis or to avoid resolving a bid protest.²⁹ If a solicitation is canceled, the contracting officer may also publish a notice of solicitation cancellation in the System for Award Management (SAM), a data system that allows government agencies and contractors to search for companies based on ability, size, location, experience, ownership, and more.³⁰
- **Termination:** A contract may be terminated for convenience, such as in the event that a program's requirements have changed, rendering continued performance unnecessary. A contract can also be terminated, either completely or partially, for default as a result of the contractor's actual or anticipated failure to perform its contractual obligations.³¹ Agencies typically have wide latitude in terminating contracts for convenience. However, the contracting officer is permitted to do so only when the termination is determined to be in the best interest of the government. Once the decision is made to terminate the contract, the contracting officer must send a written termination notice to the contractor. In a complete termination for convenience, the contract ends on the date specified in the notice of termination.³²

²⁷According to DOE's *Acquisition Guide*, a contract modification is any written change to the terms and conditions of a contract issued by the contracting officer acting within the limits of their authority. A contract modification can be accomplished by either a unilateral or bilateral action. Unilateral modifications are changes to the contract signed only by the contracting officer. Bilateral modifications, which are changes to the contract signed by the contracting officer and the contractor, require the same elements required to form a contract. ²⁸48 C.F.R. §§ 14.209(a), 15.206(e), 15.305(b). The FAR does not specifically provide for the cancellation of requests for quotations under its simplified acquisition procedures, but if the government issues an order resulting from a quotation, the government may cancel its offer. 48 C.F.R. § 13.302-4.

²⁹A bid protest is a challenge to the award or proposed award of a contract for the procurement of goods and services or a challenge to the terms of a solicitation for such a contract. Interested parties, including potential and actual offerors for a contract may file a bid protest with the agency, GAO, or the Court of Federal Claims. Protests filed with GAO are handled solely by GAO's Procurement Law Division, not by its audit teams.

³⁰48 C.F.R. §§ 2.101, 5.207(f). Information from SAM is also imported into DOE's STRIPES, according to DOE officials.

³¹48 C.F.R. §§ 2.101, 49.101. Our report is focused on issues related to acquisition planning, so we excluded terminations for default as these typically pertain to contractor performance issues.

³²The FAR also gives the government the right to partially terminate a contract for convenience, meaning the government can choose to terminate only a portion of the contract. For more information on contract terminations for convenience, see GAO, *Defense Acquisitions: Termination Costs Are Generally Not a Compelling Reason to Continue Programs or Contracts That Otherwise Warrant Ending*, GAO-08-379 (Washington, D.C.: Mar. 14, 2008).

Delay: There can be delays throughout the contract award process for various reasons. For example, a bid
protest of a solicitation may lead an agency to take corrective actions, which could result in revising and
reissuing the solicitation. In addition, a delay may occur if an agency decides to enter into discussions with
industry after the receipt of proposals, even though no time for this activity was allotted in the acquisition
schedule for carrying out the contract award.

In some cases, a planned acquisition may experience all three of these actions. For example, an award can be made, but after certain events result in a substantial delay to the finalization of the award, the requirements of the original solicitation may change substantially. In such a scenario, the agency may elect to terminate the contract and cancel the solicitation in favor of a new solicitation.

DOE Generally Implemented All but Two Selected Acquisition Planning Practices for Contracts We Reviewed

DOE offices generally implemented eight of the 10 selected acquisition planning practices for the 20 contracts we reviewed. The two practices DOE did not always implement were developing an IGCE and implementing lessons learned requirements.

DOE Offices Generally Implemented Eight of the 10 Selected Practices

From our analysis of contract files, including acquisition plans, we determined that DOE offices implemented eight of 10 selected acquisition planning practices. Seven of the 10 practices are applicable to all 20 contracts we reviewed, and the two practices DOE did not always implement—developing an IGCE and implementing lessons learned requirements—were among these seven. The remaining three practices we selected are applicable to some of the 20 contracts we reviewed, depending on the type of contract. Table 1 lists the seven acquisition practices and the extent that DOE offices implemented them for the 20 contracts we reviewed.

Table 1: DOE Offices' Implementation of Seven Selected Acquisition Planning Practices Applicable to All	20 Reviewed
Contracts	

Practice Description		Extent implemented (numbe of contracts)	
Requirements documentation	Program offices develop documentation, such as a statement of work, statement of objectives, or performance work statement, to define requirements clearly and concisely, identifying specific work to be accomplished, the responsibilities of the government, and the objective measures that will be used to monitor the work performed.	20 of 20	
	Among other things, FAR Part 11 prescribes policies and procedures for describing agency needs. This includes stating requirements with respect to an acquisition of supplies or services in terms of functions to be performed, performance required, or essential physical characteristics.		
Market research	Market research, which is typically started by the program office once a need is identified, is the process used to collect and analyze information about capabilities in the market to satisfy agency needs.	20 of 20	
	Under FAR Part 10, agencies are required to conduct market research to arrive at the most suitable approach to acquiring, distributing, and supporting supplies and services.		

Practice Description		Extent implemented (number of contracts)	
Written acquisition plan	The acquisition plan communicates the program office's approach to senior management and provides the overall strategy for accomplishing and managing an acquisition by documenting the approach to fill the need, optimize resources, and satisfy policy requirements for a proposed acquisition. Close coordination with the contracting officer is important when developing the contracting strategy and business approach.	20 of 20	
	Under FAR Part 7, a written plan shall be prepared for cost reimbursement and other high-risk contracts other than firm-fixed-price contracts (written plans may be required for firm-fixed-price contracts, as appropriate).		
Acquisition milestones	Acquisition milestones are the points during the acquisition process at which decisions should be made to facilitate attainment of the acquisition objectives. DOE's <i>Acquisition Guide</i> explains that milestones must be identified as early as possible.	20 of 20	
	Under FAR Part 7, acquisition milestones must be identified in acquisition plans.		
Contract type selection The process of choosing a contract type entails selecting the most appropriate type of contract based on a variety of factors that meets the needs of the acquisition, protects the government's interest, and properly allocates risk between the government and contractor.		20 of 20	
	FAR Part 16 describes types of contracts that may be used in acquisitions. Moreover, it prescribes policies and procedures and provides guidance for selecting a contract type appropriate to the circumstances of the acquisition.		
Independent government cost estimate (IGCE) An IGCE is an important tool for both program and contracting officials and represents the government's estimate of the resources and the projected costs of the resources a contractor will incur in the performance of a contract. These costs include direct costs, such as labor, material, supplies, equipment, or transportation; indirect costs, such as overhead, general, and administrative expenses, and fringe benefits; and profit or fee.		9 of 20	
	Although the FAR does not require IGCEs in most cases, DOE's Acquisition Guide states that an IGCE is required for every procurement action in excess of the simplified acquisition threshold and is usually developed by the program office during acquisition planning. ^a		
Lessons learned	A lesson learned can be defined as knowledge or understanding gained by experience, either positive or negative, that results in a measurable change in behavior (e.g., leads to improvement). There are two components to this practice: (1) identifying and incorporating lessons learned from prior acquisitions, and (2) identifying and documenting potential lessons learned during or after planning.	12 ^b of 20 14 ^c of 20	
	FAR Part 7 describes two elements for which agency heads shall prescribe procedures: (1) assuring that the contracting officer, prior to contracting, reviews the acquisition history of the supplies and services, and (2) ensuring that knowledge gained from prior acquisitions is used to further refine requirements and acquisition strategies.		

Source: GAO analysis of a nongeneralizable sample of acquisition planning practices selected from Federal Acquisition Regulation (FAR) requirements; Department of Energy (DOE) policy and guidance, including the Acquisition Guide; prior GAO reports; and documentation from the General Services Administration and Center for Army Lessons Learned. | GAO-25-106207

^aAt the time of our review, the typical simplified acquisition threshold was generally \$250,000, although simplified acquisition procedures can be used for procurements up to \$15 million in certain cases, such as when the contract is for contingency operations or defense against or recovery from cyber, nuclear, biological, chemical, or radiological attacks. 48 C.F.R. §§ 2.101, 13.500(c)(1).

^bWe found evidence in the contract files for 12 of the 20 selected contracts that indicated that prior lessons learned were reviewed and, as appropriate, incorporated during the acquisition planning process for the current acquisition.

^CWe found evidence in the contract files for 14 of the 20 selected contracts that indicated that potential lessons learned identified during acquisition planning were documented for the current acquisition.

We identified some variation in the implementation of the five practices that were generally implemented by DOE offices for all 20 contracts we reviewed. For example, when developing requirements documentation, we found that the DOE offices developed either a performance work statement (13 contracts) or a statement of work (seven contracts). The contract files also included varying lists of acquisition milestones, but for each contract we reviewed, we at least identified planned dates for issuing the solicitation and awarding the contract. Such variation is allowed by the FAR and can be dependent upon the scope and complexity of the acquisition.

Table 2 lists the remaining three acquisition planning practices that applied to certain types of contracts in our scope, all of which DOE offices implemented when required.

Table 2: DOE Offices Implemented Three Selected Acquisition Planning Practices Applicable Only to Certain Contracts We Reviewed

Practice	Description	Extent implemented (number of contracts) 6 of 6	
Authorization to use a management and operating (M&O) contract	Under FAR Part 17, heads of agencies, with requisite statutory authority, may determine in writing to authorize contracting officers to enter into or renew any M&O contract in accordance with the agency's statutory authority, or 41 U.S.C. chapter 33, and the agency's regulations governing such contracts.		
Authorization to use the End State Contracting Model (ESCM) approach ^a	According to the Office of Environmental Management's (EM) End State Contracting Model Program Plan, the ESCM is generally appropriate for cleanup and closure requirements at EM sites, and conversely may not be appropriate for operational and mission support requirements. The plan states that a determination to use this approach should be made through the acquisition planning process for each individual requirement.	5 of 5	
Approval to use a single-award ndefinite delivery/indefinite quantity IDIQ) contract ^b FAR Part 16 prohibits single-award contracts for task or delivery order contracts in an amount estimated to exceed a certain threshold—\$112 million (including all options) for the contracts we reviewed—to be awarded to a single source unless the head of the agency makes a determination in writing allowing a single award.		6 of 6	

Source: GAO analysis of a nongeneralizable sample of acquisition planning practices selected from Federal Acquisition Regulation (FAR) requirements and Department of Energy (DOE) policy and guidance, including the Acquisition Guide. | GAO-25-106207

^aAccording to EM documentation, the ESCM is not a contract type, but an approach to creating meaningful and visible progress through defined end-states, even at sites with completion dates far into the future. The approach relies on single-award IDIQ contracts with associated task orders issued for defined scopes of work; such contract types are typically used when the exact quantities and timing for products or services are not known at the time of contract award.

^bIDIQ contracts can be awarded to one or more contractors for the same or similar products or services and are used when the exact quantities and timing for products or services are not known at the time of award.

^cOn October 1, 2020, the dollar threshold for single-award IDIQ contracts changed from \$112 million to \$100 million. Federal Acquisition Regulation: Inflation Adjustment of Acquisition-Related Thresholds, 85 Fed. Reg. 62485, 62488 (Oct. 2, 2020).

Eleven of the 20 Contracts We Reviewed Did Not Have an IGCE Due to Waivers or Use of Other Methods

For 11 of the 20 contracts we reviewed, DOE offices either did not develop an IGCE or developed an IGCE that addressed some, but not all, potential contract costs. DOE's *Acquisition Guide* directs procurement officials to conduct an IGCE for procurements with potential contract values above the simplified acquisition threshold, but an IGCE is not generally required by the FAR. Seven contracts we reviewed did not have IGCEs for the following reasons:

Officials obtained a waiver of the IGCE direction for three contracts. EM obtained approval to waive
the IGCE direction for two contracts using the End State Contracting Model (ESCM) approach and one
M&O contract. According to an EM directive from August 2023, the IGCE direction may be waived under
certain circumstances, such as when a cost realism and reasonableness evaluation can be made using
alternative cost and pricing evaluation techniques.³³

We found that each approved waiver stated that the direction to complete an IGCE could be waived because the solicitations required prospective contractors to propose certain costs, such as estimated costs for the contract transition period and key personnel for the first full year of the contract base period. In addition, the acquisition plans for the two contracts using the ESCM approach state that the total estimated cost of the contract was based on the federal lifecycle baseline for the relevant scope of work to be completed under the contract over 15 years at each respective site.³⁴ Moreover, EM documentation states that post-award contract activities for ESCM contracts include completing IGCEs for task orders placed under the contracts to ensure that prices are reasonable.³⁵

• Officials used a budget-based model for four M&O contracts. Four NNSA M&O contracts in our scope did not develop IGCEs because NNSA used a budget-based model to estimate the contracts' potential total cost in lieu of an IGCE. Under this budget-based model, NNSA uses planned funding profiles, which are typically based on current budget forecasts and may include historical data, to estimate the contracts' potential total value for the planned period of performance, inclusive of all options. As a result, an overall estimated total contract value is not determined, with the cost information included in the solicitations serving only as an estimate to be used by prospective contractors in the development of their proposed fees.

For the remaining four of 11 contracts, we found that DOE offices used, or planned to use, other means to estimate costs and price reasonableness. Specifically, we found that:

³³The other circumstances under which an IGCE waiver may be used include when (i) a proposed work scope, or a portion of the scope, has been completed and the contracting officer can evaluate the reasonableness of the offered prices using proposal analysis techniques addressed in FAR 15.404-1; and (ii) an IGCE waiver is obtained and the contracting officer requests that an independent cost review to support the reasonableness evaluation be performed. Office of Environmental Management, Head of Contracting Activity, *EM Head of Contracting Activity Directive: Independent Government Cost Estimate*, rev. 1 (Washington, D.C.: Aug. 21, 2023). ³⁴According to EM's November 2020 *Program Management Protocol*, the federal site lifecycle estimate developed by each of the sites is the scope, cost, and schedule profiles for the work activities required to complete the EM mission at a site, including sunk costs. Moreover, the federal site lifecycle estimate includes prior year actual costs, the federal integrated site baseline that reflects a period of 5 to 10 years of work scope, and the site out-year estimate, which is comprised of an estimate for all known EM scope, including metrics and key milestones, that is planned to be completed beyond the period covered by the federal integrated site baseline through to EM mission completion at the site.

³⁵In particular, EM's *Program Management Protocol* states that costs for proposed task orders are to be supported by a credible, well-documented, accurate, and comprehensive independent cost estimate.

- Three of the four contracts used EM's ESCM approach. Similar to the two ESCM contracts previously discussed, under this approach, IGCEs will be completed for specific task orders during the post-award period. Nonetheless, in two cases, DOE developed IGCEs that estimated the costs of the contract transition period and two initial task orders, while in the third case, the IGCE estimated costs only for the contract transition period. Additionally, all three acquisition plans referenced the use of federal site lifecycle baselines to estimate the total cost of each contract.
- For the fourth contract, an EM M&O contract, we found that an IGCE was developed to estimate the costs
 of the contract transition period. Like the other M&O contracts in our scope, the contract's potential total
 cost was budget-based and used historical and forecasted budget data to estimate an annual funding
 amount for a 10-year period of performance.

DOE Offices Did Not Always Implement Lessons Learned Requirements or Follow a Process That Employs Leading Practices for the Contracts We Reviewed

Our analysis found that DOE offices did not always implement lessons learned requirements that are important to acquisition planning. In particular, we found that DOE offices did not always implement two components of lessons learned leading practices—reviewing prior lessons learned at the start of acquisition planning and documenting potential lessons learned during the planning process.

Requirement to Review and Incorporate Prior Lessons Learned When Planning an Acquisition Was Not Always Implemented

Eight of the 20 contracts we reviewed did not include evidence in the contract files indicating that prior lessons learned were reviewed and, as appropriate, incorporated during the planning phase for these acquisitions. The FAR states that agency heads shall prescribe procedures for ensuring that (1) the contracting officer, prior to contracting, reviews the acquisition history of the supplies and services; and (2) knowledge gained from prior acquisitions is used to further refine requirements and acquisition strategies.³⁶ The FAR and DOE's *Acquisition Guide* direct those preparing an acquisition plan to summarize the technical and contractual history of the acquisition. In addition, for FAR Part 15 acquisitions, which made up most of the contracts in our scope, the guide identifies potential sources of prior lessons learned that could be leveraged during acquisition planning.³⁷ Specifically, the guide references how lessons learned are to be documented by source evaluation boards (SEB) following the completion of the source selection process and award of a contract for FAR Part 15 acquisitions.³⁸ The guide also notes that lessons learned for M&O contracts should be documented when

³⁶⁴⁸ C.F.R. § 7.103.

³⁷FAR Part 15 covers negotiated acquisitions. The procedures for negotiated acquisitions involve discussions with offerors, as opposed to sealed bidding procedures, which involve no such discussions. Our scope also included two FAR Part 8 acquisitions; specifically, it included two blanket purchase agreements. A blanket purchase agreement is a simplified acquisition method of filling anticipated repetitive needs for supplies or services by establishing "charge accounts" with qualified sources of supply. Blanket purchase agreements do not undergo the same selection process as FAR Part 15 acquisitions.

³⁸DOE's *Acquisition Guide* states that the SEB shall document lessons learned and submit them to the Office of Acquisition Management. The Office of Acquisition Management then maintains the SEB lessons learned in a database and will disseminate them within 30 days of the formal establishment of a new SEB.

acquisition practices that are substantively different from previous practices are used and could potentially be considered for future acquisitions.³⁹

DOE's *Acquisition Guide*, however, does not provide direction to contracting officials on how or where to document whether lessons learned gained from prior acquisitions affected the requirements or proposed acquisition strategy of the current acquisition, especially for non-M&O acquisitions.⁴⁰ In particular, we found that the portion of the guide applicable to all acquisitions, including the non-M&O acquisitions we reviewed, included language from the FAR about using knowledge gained from prior acquisitions when performing market research.⁴¹ However, the guide contains no direction for how or where in the contract files contracting officials should document which prior lessons learned were identified and leveraged when performing market research or other actions for the current acquisition. DOE revised the Acquisition Guide in December 2023, but it does not provide clear direction for what should be included to document which prior lessons learned are relevant and ensure that such institutional knowledge is not lost.⁴²

We have previously highlighted how other federal agencies have used acquisition plans as one means to document the review and use of prior lessons learned, even if not required.⁴³ In particular, our August 2011 report noted that acquisition plans can be used by contracting officials to document lessons learned from previous contracts that affect the current acquisition and ensure that institutional knowledge is not lost. For example, we described in our 2011 report how one agency revised its acquisition planning guidance to direct that acquisition plans document lessons learned from previous acquisitions that impact the current acquisition. Alternatively, the agency may provide a rationale in the acquisition plan for why historical information was not reviewed to obtain lessons learned. However, the practice of using an acquisition plan to document the review of prior lessons learned was not always performed, with half of the acquisition plans we reviewed containing such information. By ensuring that prior lessons learned are reviewed and, as appropriate, incorporated during acquisition planning, some DOE offices may be able to better plan and avoid pitfalls previously experienced throughout the acquisition planning process.

³⁹According to DOE's *Acquisition Guide*, heads of contracting activity are also to ensure that a lessons learned analysis is conducted, documented in writing, and submitted to the Office of Acquisition Management through the office's assigned business clearance analyst following any acquisition that utilized alternatives to the single M&O contract approach. These analyses should be conducted and submitted not later than 3 years after contract award. Further, the guide states that for NNSA, these analyses should be submitted through the relevant head of contracting activity.

⁴⁰Of the 18 Part 15 acquisitions in our scope, six were M&O contracts and the other 12 were not. The chapter in DOE's *Acquisition Guide* for M&O acquisition planning, dated July 2017, includes specific direction about considering prior M&O lessons learned to inform acquisition planning for future M&O contracts, particularly when developing the acquisition alternatives package for any site that is operated through an M&O contract.

⁴¹The chapter in DOE's *Acquisition Guide* for general acquisition planning, dated February 2015, is applicable to all 20 contracts we reviewed.

⁴²As part of the December 2023 revisions, DOE incorporated the language from the FAR about using knowledge gained from prior acquisitions into the guidance for completing the "applicable conditions" section of the acquisition plan template. DOE updated the chapter on acquisition planning in the *Acquisition Guide* again in June 2024. The FAR language discussing the use of knowledge gained from prior acquisitions to inform requirements and strategies was not affected. Department of Energy, *Acquisition Guide*, *Fiscal Year 2024*, version 5 (Washington, D.C.: June 12, 2024).

⁴³GAO-11-672.

Potential Lessons Learned Identified during Acquisition Planning Were Not Always Documented

The contract files for six of the 20 contracts we reviewed did not include evidence of the documentation of potential lessons learned identified during acquisition planning.⁴⁴ Of these six contracts, NNSA awarded three, and the National Energy Technology Laboratory, Office of the Chief Information Officer, and EM each awarded one.

As previously discussed, DOE's Acquisition Guide outlines a process for collecting and disseminating lessons learned by the SEB after completing the source selection process.⁴⁵ In particular, the guide states that the SEB shall document lessons learned for acquisitions whose dollar value exceeds \$25 million using a standard template and submit them to DOE's Office of Acquisition Management.⁴⁶ However, we did not locate such documentation in the contract files for six contracts. We made additional requests for such documentation to NNSA and each DOE office and found the following:

- In four cases, officials from NNSA and the DOE offices either affirmed the absence of documentation related to lessons learned or did not provide additional documentation. In one case, DOE did not identify and document any potential lessons learned for an acquisition for work with the Office of the Chief Information Officer, though the award was subsequently terminated after a sustained bid protest. The bid protest decision found that DOE's award was improper because the agency's evaluation of the offers resulted in selecting a company that failed to meet the minimum requirements detailed in the solicitation. In another case, officials from the National Energy Technology Laboratory, which awarded one of the four contracts, acknowledged that opportunities exist to improve how lessons learned are being captured. They told us that steps are being taken to ensure the capturing of lessons learned for ongoing and future acquisitions but did not provide any examples.
- In the fifth case, NNSA officials pointed to material related to market research and information that was
 obtained from industry that we determined to pertain to a preceding acquisition. We did not receive any
 lessons learned documentation specific to the acquisition included in our scope.
- In the sixth case, EM officials acknowledged that they did not document any lessons learned. They
 explained that the solicitation for this acquisition was canceled, and the scope of work incorporated into a
 new acquisition. As a result, the EM officials said that relevant lessons learned identified as part of the
 canceled acquisition were leveraged in real time during acquisition planning. For example, they said that
 EM contracting officials made changes when drafting language for the new solicitation for the purposes of

⁴⁴For the purposes of our report, a potential lesson learned refers to instances where a lesson has been identified but steps have not yet been taken to analyze potential future consequences or impact, possible root causes, and in some cases, the effects of any remedial or corrective actions. For example, if a lesson identified during acquisition planning results in the recommendation to take a corrective action, that action will need to be implemented and then evaluated in the future to determine whether it resulted in the desired change. For the lesson to be "learned," the implemented solution should lead to improved performance or changed behavior.

⁴⁵DOE's *Acquisition Guide* includes a chapter that covers FAR Part 15 procurements. According to the guide, under FAR Part 15, DOE typically uses the SEB process for source selection. However, as the guide states, in some situations, a less-formal approach involving a technical evaluation committee may be appropriate. DOE's guide states that for the purposes of the chapter on source selection, references to SEB are understood to also cover the technical evaluation committee approach. Two of the 20 contracts we reviewed used the technical evaluation committee approach, so for the purposes of our review, we include these acquisitions when discussing DOE's SEB lessons learned process.

⁴⁶According to the template, the purposes of lessons learned is to capture the positives and negatives associated with an SEB so that others may learn from their experience and apply that knowledge on future SEBs. The template includes a section for discussing issues related to acquisition planning, such as the types of market research strategies used, the reasonableness of the schedule, and whether adequate time was allotted for the acquisition planning phase.

minimizing any potential conflicts of interest. The EM officials also noted that lessons learned from the canceled acquisition would be consolidated with lessons identified from the ongoing acquisition.

In cases such as these where potential lessons learned identified during acquisition planning were not documented, DOE and NNSA offices may have missed opportunities to improve acquisition planning based on previously acquired knowledge and experience.

<u>Process Used by Some DOE Offices When Documenting Potential Lessons Learned Identified during Acquisition Planning Does Not Follow Leading Practices</u>

From our review of the lessons learned documentation for the 14 contracts in our scope that implemented the lessons learned practice, we found that DOE's *Acquisition Guide* does not fully employ leading practices. Through our body of work, we have found that leading practices for lessons learned are a principal component of an organizational culture committed to continuous improvement.⁴⁷ The leading practices include collecting, analyzing, validating, storing and archiving, and disseminating and sharing knowledge gained on positive and negative experiences (see fig. 2). In circumstances where the lessons learned warrant taking a corrective action, the process can also include evaluating and verifying that the corrective action resulted in the desired change in behavior and the lesson was learned.

Collect Analyze **Triggering** Information through activities like project The information collected to determine root events critiques, interviews, incident reports, or causes and identify appropriate actions. direct observations (positive or negative). Store and archive Validate Lessons identified, such as in an That the right lessons had been identified and determine the breadth of their applicability (e.g. electronic database, for use by site or project specific or department wide). existing and future projects. Disseminate and share Develop and carry out corrective action(s) If corrective Lessons to pass on knowledge gained, such · Track status as through briefings, bulletins, reports, action(s) needed... • Evaluate corrective action(s) taken emails, database entries, or training. · Verify change led to desired effect

Figure 2: Leading Practices for a Lessons Learned Process

Source: Analysis of prior GAO reports and the Center for Army Lessons Learned report, Establishing a Lessons Learned Program: Observations, Insights, and Lessons. | GAO-25-106207

As previously discussed, the SEB lessons learned process outlined in DOE's *Acquisition Guide* focuses on collecting and disseminating lessons learned. The guide also states that DOE's Office of Acquisition Management maintains a database of submitted SEB lessons learned that is monitored for trends. According to the guide, SEB lessons learned and any trend analysis that exists are to be shared with newly established SEBs. However, the *Acquisition Guide*'s SEB lessons learned process does not include steps that would align with leading practices for how potential lessons learned identified during the acquisition process are analyzed or validated to ensure that root causes are understood and that the right lessons have been identified. The

⁴⁷For example, see GAO, *Army Modernization: Production Challenges for Stryker Upgrade Reinforce Need to Follow Acquisition Leading Practices in Future Efforts*, GAO-24-106590 (Washington, D.C.: Mar. 20, 2024); *DOD Utilities Privatization: Improved Data Collection and Lessons Learned Archive Could Help Reduce Time to Award Contracts*, GAO-20-104 (Washington, D.C.: Apr. 2, 2020); and *Project Management: DOE and NNSA Should Improve Their Lessons-Learned Process for Capital Asset Projects*, GAO-19-25 (Washington, D.C.: Dec. 21, 2018).

process also does not address how any corrective actions taken are to be evaluated to verify that the changes have resulted in the desired effects.

Among the 14 contracts we reviewed for which lessons learned were identified, three followed the process outlined in the *Acquisition Guide*, while 11 used other approaches. Among these other approaches was EM's, which we found better aligns with leading practices for lessons learned, more so than the process described by the *Acquisition Guide*. In particular, we found that:

- **DOE offices documented SEB lessons learned for three contracts.** For two EM contracts and one Office of Legacy Management contract in our scope, we found that the SEBs followed the *Acquisition Guide* and developed reports that identified and documented lessons learned from throughout the acquisition process. Some of the identified lessons included ensuring that adequate time is built into the acquisition schedule to allow for sufficient focus on acquisition plan development and adopting a schedule that allows for the tracking of performance against the original schedule.
- NNSA documented lessons learned for three M&O contracts in separate files. We found that NNSA consolidated lessons learned for two M&O acquisitions in a high-level summary document, not the SEB lessons learned template, that focused on presolicitation and solicitations activities. One identified lesson highlighted the need for a strategy improvement to allow for sufficient time to develop a realistic acquisition schedule. Potential lessons learned for a third M&O contract were also documented, but in a less formal manner than the SEB lessons learned template. Some of the lessons recommended simplifying aspects of the proposal and reducing the number of people involved, such as during the proposal evaluation process.

NNSA officials told us that the formality of documenting lessons learned varies depending on the type of procurement, with more formal lessons learned documentation for the larger and more complex procurements. They explained that NNSA does not have any separate guidance or policies from the processes outlined in DOE's *Acquisition Guide*, which they cited as the primary source of guidance for the procedures to follow, including the SEB process. Although the guide states that SEB lessons learned shall be documented using a standard template, ⁴⁸ NNSA officials indicated that lessons learned for M&O contracts are sometimes documented in different ways, including in emails.

• EM documented lessons learned for eight contracts using an office-specific process. We found that eight EM contracts, including one that also developed an SEB lessons learned report, documented lessons learned by following an EM-specific pre-award lessons learned retrospective program. EM's program, implemented in May 2020, includes five phases, and is intended to ensure that formal procedures are used to effectively capture lessons learned during the acquisition process and, when necessary, act on them to ensure continuous improvement (see fig. 3).⁴⁹

As part of this program, EM officials maintain a database that consolidates the identified lessons and, when applicable, describes the root causes, recommended and actual actions taken to resolve the issue, and whether the actions are completed. Some of the lessons included developing a realistic schedule; ensuring that the SEB chair and voting members have the appropriate technical expertise to evaluate proposals against scope requirements; and drafting the evaluation criteria included in a solicitation to ensure it is specific to what the government intends to evaluate. EM's evaluation of several of the documented lessons

⁴⁸The standard template is required for use for acquisitions exceeding \$25 million and recommended for those below that threshold.

⁴⁹Office of Environmental Management, *EM Pre-Award Lessons Learned Retrospective Program* (Washington, D.C.: May 2020).

resulted in corrective actions, including the implementation of a standard acquisition schedule template that can be more readily assessed to determine whether the schedule is realistic and credible.

Figure 3: Five Phases of the EM Pre-Award Lessons Learned Program

Discovery Initial information gathering occurs to identify key observations that may be candidates for further

action and future

source evaluation

board application.

Validation

Observations are assessed, including through the identification of root causes, to determine if there are potential lessons learned (issues or best practices) that have potential to improve future performance.

Resolution

Actions and strategies are developed to resolve issues or implement best practices, which are then reviewed and applied to ensure they are institutionalized, such as through training and updates to guidance and policies.

Evaluation

Resolved issue solutions and best practices are monitored and evaluated, with those deemed effective to be documented in the lessons learned database for dissemination. Lessons learned not deemed to be effective return to the resolution phase for further analysis and action.

Dissemination

Lessons learned are directed to the widest possible audience, particularly for new source evaluation boards and during initial source evaluation board training. Proper dissemination and sharing of lessons learned information, at the appropriate level, is essential to the program's overall success.

Source: GAO analysis of the Department of Energy, Office of Environmental Management's (EM) Pre-Award Lessons Learned Retrospective Program (May 2020). | GAO-25-106207

EM documentation states that its pre-award lessons learned program builds upon the manner in which EM historically captured lessons learned through the SEB lessons learned process. Based on our prior work examining leading practices for a lessons learned process and compared to the process outlined in DOE's *Acquisition Guide*, we found that EM's program more closely reflects the activities typically performed as part of a lessons learned process employing leading practices, as described in figure 2 above.

EM officials with whom we spoke said that their office coordinated with DOE's Office of Acquisition Management to highlight their lessons learned program at a brown bag attended by officials from across the department. Although the presentation was attended by officials from across the department, as of January 2024, no other offices in the department had reached out to EM to learn more about the program. While DOE's effort to ensure that SEBs document lessons learned is positive, our review of 20 DOE and NNSA contracts shows that the *Acquisition Guide*'s existing process does not address or incorporate all the types of leading practices of a lessons learned process, though EM's program does.

Further, we found that the existing process is not always completed or followed consistently. For example, in one case, DOE did not document any potential lessons learned that could have reinforced how to evaluate requirements as outlined in the solicitation. Yet, in another case, after a similar issue was identified, steps were taken to document the issue, its root cause, and a recommended corrective action. These additional actions resulted in the development of additional training that is provided prior to evaluating offers from prospective contractors. Developing a process that incorporates leading practices and then using it consistently across DOE and NNSA would help ensure that potential lessons learned identified during acquisition planning, as well as other phases of the acquisition process, will be documented. This will also help ensure that, in certain cases, corrective actions will be taken to improve acquisition planning and other processes.

DOE Does Not Have Readily Available Data on Extent of Canceled Solicitations, Contract Award Terminations, and Award Delays

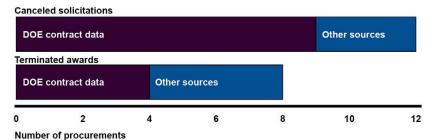
DOE does not have readily available data on the number and value of canceled solicitations and terminated contract awards for fiscal years 2017 through 2022 in its contract database (i.e., STRIPES). For the canceled solicitations and terminated awards that we identified, changes to requirements were the most common reason

reported for the cancellation or termination. Further, DOE does not track data on contract award delays, although it reported having implemented our 2006 recommendation to do so.⁵⁰ Given cancellations, terminations, and delays can be costly to DOE and its industrial base, it is important to have reliable information on cancellations, terminations, and award delays as a key step to understand the extent of these situations, assess root causes, and take any necessary corrective actions. This is particularly important given the potential negative consequences to DOE and its industrial base.

STRIPES Has Incomplete, Inconsistent Data on Canceled Solicitations and Terminated Awards

Reviewing multiple data sources, we identified incomplete and inconsistent DOE data for fiscal years 2017 through 2022 on canceled solicitations and terminated awards. Specifically, we identified canceled solicitations and terminated awards from other sources that were not captured in DOE's STRIPES contract data (see fig. 4). The canceled solicitations we identified from other sources had an estimated total value of \$40.7 billion, and the terminated awards had a total value of \$169 million. In contrast, DOE's STRIPES contract data accounted for \$211 million in cancellations and \$23.07 billion in terminations for the same period.

Figure 4: Number of Canceled Solicitations and Terminated Awards Identified in the Department of Energy (DOE) Procurement System and Other Sources, Fiscal Years 2017–2022



Source: DOE procurement data, Federal Procurement Data System, agency documents, and media reports. | GAO-25-106207

DOE Officials Do Not Consistently Maintain Data on Canceled Solicitations

DOE's procurement data did not identify all canceled solicitations that occurred between fiscal years 2017 through 2022, as the data were missing important information and procurements. DOE captures information on solicitations in its STRIPES database, the main procurement data system for the agency that also links to public websites such as SAM and FPDS. However, our review found key information related to procurement value was missing, and the data also did not include records for some canceled solicitations, which we identified through other sources.

There is no designated process or data field in STRIPES that indicates if a solicitation is canceled. To provide us with records on canceled solicitations, DOE officials used a word search of selected fields in STRIPES to identify potential records in the scope of our review. This produced 142 records for further review. However, of the 142 records provided by DOE, we found that 126 were missing information on the estimated value of the

⁵⁰GAO-06-722.

contract. DOE officials told us that this information is not always entered in STRIPES, but would be included in other contract documents, necessitating manual review of documents.

Due to the missing contract value information and the need to manually review additional documents to identify relevant cancellations, we selected several offices with a total of 66 canceled solicitation records in STRIPES potentially in the scope of our review.⁵¹ Out of the 66 canceled solicitations for which we reviewed contract documents, we identified nine canceled solicitations that were valued at \$5.5 million or more and fall within the scope of our review; the total combined value of these procurements was about \$211 million.

In addition to the nine procurements in the STRIPES data, we identified three cases of canceled solicitations that were not included in the data. DOE officials told us that they expect contracting officers to record canceled solicitations, but there can be cases where information is not reported in STRIPES. We identified these canceled solicitations in other DOE documents and media reports because they were large dollar and high-profile procurements, including

- Pantex Plant and Y-12 National Security Site Combined M&O contract. NNSA issued a solicitation for
 the combined M&O contract for the Pantex and Y-12 sites in November 2020, and an award was made in
 November 2021. Subsequently, the award was protested in December 2021, and NNSA announced it
 would take corrective action to address the protest. As a result, NNSA terminated the award and canceled
 the solicitation in May 2022 and then announced a decision to award separate M&O contracts for the sites
 due to the changing scope of work and other factors.
- Savannah River Site Liquid Waste Services contract. EM planned to award this contract for liquid waste stabilization and disposition activities by March 2017 given that the incumbent contract was ending in June 2017. EM awarded the contract in October 2017, but a subsequent bid protest was sustained. EM decided to cancel the solicitation in February 2019 related to decisions to substantively change the scope of work under the contract. EM later moved this scope of work into a new procurement, the Integrated Mission Completion Contract, which was awarded in October 2021.
- Hanford Tank Closure contract. EM issued an RFP in February 2019 for this procurement, related to
 tank waste management and retrieval operations, and awarded the contract in May 2020. Subsequently, a
 bid protest was filed by an offeror, and DOE announced a corrective action to address the protest and
 suspended the award in August 2020. In December 2020, DOE then canceled the solicitation due to
 decisions to change the scope.

Officials confirmed that these procurements were not included in the data and told us that solicitations are not amended once an award is made, even if the solicitation is subsequently canceled. However, we also identified a solicitation for a WAPA procurement in which an award was made, subsequently terminated, and then the solicitation was canceled, all of which was recorded in STRIPES. These differences in recording information in STRIPES highlight the inconsistency in how officials recorded canceled solicitations. Furthermore, as the official procurement system, the STRIPES system did not capture complete and accurate information on all canceled solicitations.

⁵¹We selected four offices for additional review: EM, the Headquarters procurement office, NNSA, and WAPA. EM and NNSA were selected because of the relatively large dollar value of their procurement activity in general, and Headquarters and WAPA were selected because they had many records in the data.

Overall, through our review of data sources, we identified at least 12 canceled solicitations in the scope of our review with a total estimated value of about \$40.9 billion. Table 3 includes information on the canceled solicitations by office or program.

Office	Number of canceled solicitations	Dollar value of procurements	Data source(s)
National Nuclear Security Administration	6	\$23 billion	DOE data, media reports
Office of Environmental Management	2	\$17.7 billion	Media reports
Western Area Power Administration	2	\$86.9 million	DOE data
DOE Headquarters	2	\$25.6 million	DOE data
Total	12	\$40.9 billion	

Source: GAO analysis of DOE data. | GAO-25-106207

We also found that officials did not maintain certain contract documents for canceled solicitations. For example, EM did not have any documentation, including estimated contract value, for two of the five solicitations listed in the STRIPES data associated with the office. Similarly, for one NNSA procurement, officials had no estimated value, as that documentation was missing from the contract file and the contracting officer was no longer with NNSA. In another NNSA example, a solicitation did not have documentation of the reason for the cancellation because the contracting officer had left the agency, according to NNSA officials. According to the FAR, agencies should establish and maintain contract files for canceled solicitations, to include information to support decisions made and actions taken related to the procurement.⁵² It is important to have reliable information on cancellations to better track their extent and take any necessary actions that might prevent their occurrence.

Information on Terminated Awards Was Inconsistent across Procurement Systems

We found that data on award terminations are not consistently recorded, though there are designated data fields to capture this information in STRIPES and FPDS, the system of record for federal procurement data. We reviewed several data sources for information on terminated awards that occurred from fiscal years 2017 through 2022, and we obtained different results for terminated awards from FPDS versus from our request from DOE for terminations from STRIPES. Similar to the canceled solicitations data, DOE officials pulled data from STRIPES using a word search of selected fields, and this produced different results between the datasets. We identified five terminated awards using the designated data field in FPDS data, and one of these awards also appeared in the STRIPES data; the other four did not. However, the STRIPES data included an additional three terminated awards that did not appear in the FPDS data because the reason for modification field did not indicate a termination. Instead, the STRIPES records were coded as a funding action (two records), or an administrative action (one record). When asked about the inconsistencies in the use of the modification field to indicate a termination, DOE officials told us the contracting officer may have used their professional judgment to select the most appropriate reason in cases where a modification included multiple

⁵²48 C.F.R. § 4.801.

actions. However, indicating a termination in a field other than the modification field would generally limit the accessibility of termination information in FPDS.

The combined results of our review of these data sources identified eight contract award terminations in the scope of our review with a total value of about \$23.2 billion. The combined Pantex and Y-12 M&O contract made up about 99 percent of this value. Table 4 includes information on the terminations by office, including the source of the information.

Table 4: Terminated Awards by Department of Energy (DOE) Office, Fiscal Years 2017–2022 (value of at least \$5.5 million and terminated shortly after award)

Office	Number of terminated awards	Dollar value of terminated awards	Data source(s)	
National Nuclear Security Administration	2	\$23 billion	DOE and FPDS data	
DOE Headquarters	3	\$124.4 million	FPDS data	
Western Area Power Administration	1	\$80 million	DOE and FPDS data	
Office of Nuclear Energy	2	\$55.9 million	DOE data	
Total	8	\$23.2 billion		

Source: GAO analysis of data from DOE and the Federal Procurement Data System. | GAO-25-106207

In addition to the awards identified above, there were two EM procurements, the Savannah River Site Liquid Waste Services and Hanford Tank Closure contracts, that had canceled solicitations after awards were made, but EM officials did not provide evidence that the contracts were terminated for convenience as defined by the FAR. For the Savannah River Site Liquid Waste Services contract, EM officials told us that they did not execute a termination for convenience and used alternate methods to close out the awarded contract. They also said that ending an award through a close out rather than termination may help avoid certain costs associated with a termination, such as settlement costs. For the Hanford Tank Closure contract, officials told us in June and July 2024 that the contract was not terminated but instead closed out using other methods, similar to the Liquid Waste Service contract. However, in its technical comments on a draft of this report, provided to us in October 2024, DOE stated that the contract was terminated for convenience, but did not provide evidence to support this reversal. Further, we reviewed FPDS data and found that in June 2024, EM ended the Hanford Tank Closure contract through a "close out" modification while also terminating the contract's first task order for convenience.

As with canceled solicitations, DOE officials told us they rely on contracting officers to properly record a termination. These officials acknowledged, however, that there may be cases where the information is not properly recorded, despite agency requirements to report contract information in designated procurement data systems. For example, the combined Pantex and Y-12 M&O contract did not appear in the termination data we obtained through FPDS because the termination was not recorded using the "reason for modification" field. While the termination of this procurement was noted in text fields in STRIPES, this data would not be easily accessible in FPDS. Officials corrected this issue after we pointed it out by submitting a new modification in FPDS in April 2024, with termination listed in the reason for modification field.

Our review of DOE and office requirements and guidance found very little instruction about how to record and report contract terminations. When asked about this, officials pointed to the FAR and FPDS user manuals as guidance for contracting officers related to terminations. Regarding the quality of procurement data, our

Framework for Assessing the Acquisition Function at Federal Agencies discusses the importance of data stewardship to ensure that data captured and reported are accurate, accessible, timely, and usable for acquisition decision making and activity monitoring.⁵³ In addition, according to federal internal control standards, management should use quality information to achieve the entities' objectives.⁵⁴ However, we found that DOE does not have guidance related to recording terminations in STRIPES and does not consistently capture complete information on terminated awards in STRIPES.

The Primary Reason for Cancellations and Terminations Was Changes to Requirements, Affecting Both Government and Industry Interests

Changes to requirements were the most common reason reported for solicitation cancellations and award terminations for the procurements in the scope of our review. We identified a total of 18 procurements with a total estimated value of \$41.1 billion that involved a solicitation cancellation or award termination, or both, and changes to requirements or poorly defined requirements were involved in 14 of these procurements based on our review of contract documents.⁵⁵ These 14 procurements accounted for \$41 billion, which is 99.8 percent of the estimated value of all cancellations and terminations we identified, as shown in table 5.

Table 5: Department of Energy (DOE) Procurements with Cancellations or Terminations Related to Requirements, Fiscal Years 2017–2022 (value of at least \$5.5 million)

Office	Number of procurements	Estimated dollar value of procurements
National Nuclear Security Administration	5	\$23.0 billion
Office of Environmental Management	2	\$17.7 billion
DOE Headquarters	3	\$125.6 million
Western Area Power Administration	2	\$86.9 million
Office of Nuclear Energy	2	\$55.9 million
Total	14	\$41.0 billion

Source: GAO analysis of data from DOE and the Federal Procurement Data System. | GAO-25-106207

Some of the procurements with requirements changes in the various DOE offices include the following:

For an NNSA procurement for specialized vehicles in 2022, officials determined that they needed to
change requirements in the solicitation to increase competition, including changes to the structure of the
contract award and time frames. As a result, they canceled the existing solicitation after receiving one bid.
In another example, from May 2022, NNSA announced that it would cancel the contract solicitation for the
combined M&O contract for Pantex and Y-12 that was awarded in November 2021, stating that the agency
intended to hold new competitions for separate contracts at each site. NNSA reported that separating the

⁵³According to our *Framework for Assessing the Acquisition Function at Federal Agencies*, effective stewardship provides the structure, oversight, and assurance that data can be accurately translated into meaningful information about organizational activities. Taking the time to manage quality of the data ultimately helps support the agency's acquisition management needs. GAO-05-218G.

⁵⁴GAO-14-704G.

⁵⁵There were two procurements that involved both a canceled solicitation and termination for convenience—the combined Y-12 and Pantex M&O contract and a WAPA procurement for power circuit breakers. As a result, the total identified cancellations and terminations from the previous sections will not sum to 18 because these two procurements would be double counted.

contract would be in the best interest of the government due to increasing work at the sites and the challenging geopolitical environment.

- In 2022, DOE's Headquarters Procurement Services office awarded a contract for cybersecurity services, but this award was subsequently subject to a successful protest that found that DOE had not followed the requirements from its solicitation in evaluating and awarding the contract. As a result, DOE had improperly awarded the contract to a firm that failed to meet material solicitation requirements. This outcome suggests that requirements were not well defined since a firm was evaluated as capable of performing the work even though it did not meet solicitation requirements. For another procurement related to information technology support services, Headquarters Procurement Services officials canceled the solicitation in July 2017 after significant program requirement changes necessitated changes to the acquisition strategy.
- After awarding the Savannah River Site Liquid Waste Services contract in 2017, EM subsequently
 canceled the solicitation after a successful bid protest. Officials determined it was in the best interest to
 cancel the procurement and pursue a new solicitation with a materially different requirement, including
 expansion of scope and pivoting to a contract structured according to the ESCM approach. Similarly, the
 Hanford Tank Closure contract was awarded in 2020 by EM but was subsequently protested. DOE filed a
 notice of corrective action to address the protest. Agency officials then canceled the solicitation based on
 the decision to make changes to the scope and switch to an updated ESCM approach for the contract.
- In 2018, WAPA officials canceled a solicitation after agency officials received bids with wide variances.
 Officials reviewed the procurement and determined there were likely flaws in the requirements documents
 and IGCE that necessitated a re-evaluation of requirements. For another WAPA contract, a need to change
 the technical requirements in the original solicitation was identified when responding to a bid protest.
 Because offerors could not meet the requirements in the original solicitation, the award was terminated,
 and the solicitation was amended.

When we asked DOE procurement officials if they had assessed or evaluated the issue of requirements definitions in procurements, given the prevalence of requirements changes in cancellations and terminations, DOE officials were not aware of any such study. DOE procurement officials added that there is a shortage of contracting staff overall that would make it difficult to use scarce resources for that type of review. Officials also pointed out that the program side owns the requirements and has primary responsibility for setting the requirements of the procurement. Additionally, officials told us that circumstances may change while waiting for an award to be finalized because of the length of time to make awards, which can result in changes to requirements. They said this may occur particularly when a solicitation or an award is protested, which occurred in seven of the 18 procurements we identified that involved a canceled solicitation or terminated award. Yet, a study of the contribution of requirements changes to cancellations and terminations may reveal whether these outcomes could be reduced through improved requirements planning.

We reviewed lessons learned documentation for four of the 14 procurements with cancellations or terminations related to requirements and for which we had contract documents. Similar to our findings above, we found that the lessons learned process described in DOE's *Acquisition Guide* was not used consistently for these four procurements. In particular, we did not identify any documented lessons learned in the contract files for two of the four contracts. The other two contracts did not have lessons learned related to requirements definitions. As we noted previously, potential lessons learned should be documented as part of a lessons learned process that follows all leading practices to ensure that opportunities to improve the acquisition process are not lost. This would seem particularly relevant in cases where a procurement faced problems that ultimately led to a canceled solicitation or terminated award and involved a foundational issue such as requirements stability.

Defining requirements is a key acquisition planning element to help ensure the success of an acquisition. We have reported in the past that requirements instability or poorly defined requirements can result in increased costs and schedule delays for programs.⁵⁶ Although DOE implemented acquisition planning practices related to requirements documentation, as discussed in the previous objective, the prevalence of cancellations and terminations that occurred due to requirements changes point to potentially fundamental problems in DOE's acquisition planning. These problems can negatively impact a procurement, as well as the agency and industry involved in that procurement.

DOE officials told us that canceled solicitations and terminated awards are the exception and not common, but there are times when the agency determines that they are necessary. DOE commits resources to successfully awarding contracts but may also determine that it is in the best interest of the government to cancel a solicitation, according to officials. Yet, officials also told us that delays in the procurement process, such as from cancellation of a solicitation, may impact achieving mission requirements.

We spoke to representatives from 10 selected industry entities, including contractors and organizations that represent DOE contractors, about their experiences with canceled solicitations and terminated awards and how cancellations and terminations affect their companies. According to representatives from nine of the 10 industry entities we interviewed, cancellations and terminations may result in financial losses and lost productivity for key personnel and may ultimately impact their interest in future contracts. For example:

- Costs to prepare a bid proposal can be millions of dollars, and the cancellation of a solicitation means this
 money was in effect wasted. Two industry representatives also pointed out that there are government
 resources wasted in these cases as well.
- Key personnel are a very important factor for procurements, as the quality of key personnel is often an important evaluation criteria for the award. Almost all industry representatives (eight of 10) told us that companies start to line up their key personnel very early, well before an RFP is issued by DOE. The key personnel included in the bid must be reserved for that contract and are effectively "on the bench" until an award decision is made. As a result, canceled solicitations can have a significant impact on the availability of key personnel, such as their ability to work on other important projects. Representatives also reported that it is expensive to keep the personnel waiting for the actual contract to begin, as they are carried as overhead. Additionally, it can be frustrating for the careers of key personnel, and employees may leave if they are kept off substantive projects for too long such as in cases of procurements that are beset with delays, cancellations, and terminations.

While canceled solicitations and terminated awards may not happen frequently according to DOE officials, they have considerable negative impacts on industry and the agency, pointing to the importance of information on cancellations and terminations so the agency can understand the conditions that may lead to them and underlying root causes. It is impossible to fully gain this understanding when data are unavailable or inconsistent. In addition, given cancellations and terminations are rare according to officials, it is important for DOE to have clear guidance for contracting officials on how to properly record and report information on these cases. DOE's *Acquisition Guide* requires officials to report contract information in STRIPES, which directly links to official federal procurement systems such as SAM and FPDS, and also stresses the importance of the

⁵⁶GAO-11-672; and GAO, Department of Homeland Security: Better Planning and Assessment Needed to Improve Outcomes for Complex Service Acquisitions, GAO-08-263 (Washington, D.C.: Apr. 22, 2008).

quality of this data.⁵⁷ However, there is no designated process or data field for indicating if a solicitation is canceled in these data systems, and contracting officials do not consistently use the data field to identify terminations. NNSA officials also pointed out a lack of guidance related to recording canceled solicitations and terminated awards, and our review of available guidance found little instruction on how to record these in STRIPES. Further, while changes to requirements were identified as contributing to the majority of canceled or terminated contracts that we reviewed, DOE has not assessed this issue to determine if this outcome could be improved.

DOE Offices Do Not Maintain or Track Comprehensive Data on Contract Award Timeliness, and Most Contract Awards We Reviewed Were Delayed

DOE does not maintain or track data on contract award timeliness and delays, despite persistent problems with the timeliness of awards. In 2006, we reviewed DOE contract award timeliness because of concerns about awards that took longer than anticipated and found that most contracts reviewed were awarded later than planned.⁵⁸ In our prior work, we reported on the importance of DOE efforts to address award timeliness as part of its overall efforts to improve the contract award process, given that delays in awarding contracts could increase costs to both DOE and industry. Such delays could also affect whether companies are willing to compete for DOE contracts in the future. We recommended that DOE better track award timeliness, and the agency agreed to this recommendation and reported implementing it. However, subsequent to DOE's implementation of the recommendation, the department stopped tracking this information, and current agency officials were unable to provide any information about previous award tracking activities or changes to award tracking.

Because there is no centralized data on award milestones, we manually reviewed all new contract awards in fiscal year 2022 to determine award timeliness.⁵⁹ Of the 40 new contracts awarded in fiscal year 2022, we were unable to assess timeliness for eight contracts because they lacked either an acquisition plan or milestones to determine a planned award date. For the remaining 32 contracts, 16 were awarded later than planned by 1 month or more. We also identified four contracts that were awarded later than planned by 6 months or more (see table 6).

Table 6: Late Contract Awards by Department of Energy (DOE) Office, Fiscal Year 2022 (value of at least \$5.5 million)

Count of awards made later than planned

Office	1–2 months	More than 2 months- less than 6 months	6 months-1 year	More than 1 year
Office of Environmental Management	1	1	0	1
DOE Headquarters	2	1	1	0
Office of Nuclear Energy	1	1	0	0
National Nuclear Security Administration	2	0	2	0

⁵⁷DOE's *Acquisition Guide* states that STRIPES is DOE's repository for all acquisition actions and that DOE procurement offices are responsible for the completeness, accuracy, and timeliness of all data submitted to STRIPES and other government procurement systems. DOE, *Acquisition Guide*, *Fiscal Year 2024*, version 4.

⁵⁸GAO-06-722.

⁵⁹We reviewed contracts valued at \$5.5 million or more.

Office	1–2 months	More than 2 months— less than 6 months	6 months-1 year	More than 1 year
Western Area Power Administration	1	2	0	0
Total	7	5	3	1

Source: GAO analysis of data from DOE documents and the Federal Procurement Data System. | GAO-25-106207

Officials cited several reasons for delays in the contract awards. The cited reasons included receiving more bids than expected necessitating longer review time; SEB turnover; delays setting specifications and obtaining an IGCE; and delays related to external coordination with a state agency. For the contract that had the longest delay in award—the Oak Ridge Reservation Cleanup contract, which was awarded over 1 year later than planned—officials reported the delay was due to a pivot to using the ESCM approach. Another contract awarded later than expected included a cybersecurity support services contract that was awarded almost 1 year later than planned. Moreover, this award was subject to a successful protest that found that DOE improperly awarded the contract to a firm that failed to meet material solicitation requirements. As a result of the delays in planning and awarding the new cybersecurity contract, the contract to the incumbent was noncompetitively extended for over 4 years. We also found that the M&O contract for the Pantex and Y-12 sites was awarded by NNSA over 6 months later than planned. The award was also subject to bid protests. Subsequently, the solicitation was canceled, and the award terminated.

DOE does not have full knowledge of the extent and nature of delayed contract awards at the department, including which offices or programs have more delays and any underlying root causes. In addition, contract award delays can have negative effects on industry like those reported for canceled solicitations and terminated awards. For example, delays in award may have financial effects such as invalidating bid pricing because of inflation or other factors (e.g., subcontractor prices). Delays could also impact contractors' abilities to deliver goods or services at the quoted rate and may also affect expected cash flow from the contract for the awardee. Regarding impacts on contractor staff, industry representatives pointed out that there is a relatively small community of highly experienced staff in the nuclear and cleanup field, so staff that are being held for a contract award that is delayed or in limbo are not available for other DOE sites or programs. Industry representatives gave examples of key personnel who left when a solicitation was canceled or there were significant delays in an award. Delays in contract awards may also affect DOE staff workload and the timeliness of other procurements. As such, improved DOE insight into award timeliness could be important for workload management and forecasting of workloads for future procurements.

Conclusions

It is imperative that DOE successfully plan the acquisitions for the vast array of goods and services for which the department obligates billions of dollars annually to ensure that departmental needs are met in the most effective, economical, and timely manner possible. We found that DOE is implementing most of the required acquisition planning practices we selected to review. However, some DOE offices and NNSA did not always demonstrate that they leveraged prior lessons learned when planning certain acquisitions, and it is unclear from DOE's acquisition guidance how and where such information should be documented. By taking steps to ensure that prior lessons learned are leveraged when planning an acquisition, these DOE offices and NNSA may be able to better plan in the future and take advantage of experiences, both positive and negative, from past acquisition efforts. Moreover, while DOE's acquisition guidance outlines a process for documenting potential lessons learned subsequent to making a source selection, it does not incorporate all leading

practices. The implementation of a lessons learned process that follows all leading practices would help DOE and NNSA ensure that potential lessons learned identified during acquisition planning are documented and that, when necessary, corrective actions are taken to improve departmental acquisition planning efforts.

We also found that DOE does not have readily available data on the number and value of canceled solicitations and terminated contracts for the fiscal years 2017 through 2022 period we reviewed. Moreover, we identified limited information in DOE and office-specific requirements and guidance about how to record these actions in procurement systems. By providing clearer guidance to contracting officials on how to properly record and report information on cancellations and terminations, DOE can better understand the frequency with which these actions occur and the manner in which they may affect industry or DOE's ability to achieve mission requirements. Further, we found that, while the primary reason for cancellations and terminations was changes to requirements, DOE has not studied the issue, such as identifying and evaluating lessons learned, to determine whether these outcomes could be reduced through improved requirements planning. Similarly, we found that DOE does not maintain or track data on award timeliness, despite taking steps to do so in response to a recommendation we made in 2006. More accurately maintaining and tracking data on award timeliness would help DOE and NNSA ensure that there is better understanding of the extent and nature of delayed contract awards at the department, including which offices or programs may have more issues with delays and any underlying root causes.

Recommendations for Executive Action

We are making a total of 12 recommendations, including nine to DOE and three to NNSA:

The Director for DOE's Office of Acquisition Management should ensure that for non-M&O acquisitions, the *Acquisition Guide* clearly specifies what information should be included in the contract file to support how acquisition officials considered prior lessons learned during acquisition planning. (Recommendation 1)

The Director for DOE's Office of Acquisition Management should develop a policy to ensure that DOE acquisition offices consistently document potential lessons learned identified during acquisition planning. (Recommendation 2)

The Associate Administrator for NNSA's Office of Partnership and Acquisition Services should develop a policy to ensure that NNSA acquisition offices consistently document potential lessons learned identified during acquisition planning. (Recommendation 3)

The Director for DOE's Office of Acquisition Management should revise the source evaluation board lessons learned process described in the *Acquisition Guide* to ensure that it incorporates all leading practices. (Recommendation 4)

The Director of DOE's Office of Acquisition Management should develop guidance to ensure the accurate tracking of information on canceled solicitations in agency procurement systems. (Recommendation 5)

The Senior Advisor for the Office of Environmental Management should implement procedures to consistently record information on canceled solicitations so that the information is reliable and comprehensive. (Recommendation 6)

The Associate Administrator for NNSA's Office of Partnership and Acquisition Services should implement procedures to consistently record information on canceled solicitations so that the information is reliable and comprehensive. (Recommendation 7)

The Senior Advisor for the Office of Environmental Management should implement procedures to ensure it maintains required contract documents on canceled solicitations. (Recommendation 8)

The Associate Administrator for NNSA's Office of Partnership and Acquisition Services should implement procedures to ensure it maintains required contract documents on canceled NNSA solicitations. (Recommendation 9)

The Director of DOE's Office of Acquisition Management should implement procedures for DOE acquisition offices to consistently record information on terminated awards in agency procurement systems so the information is reliable and comprehensive. (Recommendation 10)

The Director for DOE's Office of Acquisition Management should review, through lessons learned or other review processes, the role of requirements setting in causing canceled solicitations and terminated awards, including the identification of root causes and solutions. (Recommendation 11)

The Director of DOE's Office of Acquisition Management should implement procedures to ensure the accurate tracking of information on contract award timeliness at the agency. (Recommendation 12)

Agency Comments and Our Evaluation

We provided a draft of this report to DOE and NNSA for review and comment. DOE provided written comments on its and NNSA's behalf. In DOE's written comments, which are reproduced in appendix II, DOE and NNSA concurred with all 12 of our recommendations. We look forward to DOE and NNSA implementing our recommendations and believe that action beyond that described by DOE in its written comments may be required to implement some of the recommendations.

Specifically, in response to our second recommendation, DOE stated that the *Acquisition Guide* already addresses the capturing of lessons learned during the SEB process. In our report, we acknowledge that the *Acquisition Guide* references how lessons learned are to be documented by SEBs following the completion of the source selection process and award of a contract. However, the award of a contract following the source selection process pertains to FAR Part 15 acquisitions and therefore does not apply to all types of DOE acquisitions. We have revised the draft to clarify this further. Moreover, we found that DOE and NNSA did not consistently follow the SEB lessons learned process for all the acquisitions included in our scope. Under DOE's Departmental Directives Program, guides, such as the Acquisition Guide, do not impose requirements and instead provide acceptable, but not mandatory, means for complying with requirements included in a directive or rule. In contrast, a DOE policy establishes high-level expectations in the conduct of the department's mission and provides the Secretary's direction for orders, guides, and technical standards. The development of policy, therefore, may better ensure that DOE offices consistently document potential lessons learned identified during acquisition planning.

Additionally, in response to our 12th recommendation that DOE implement procedures to ensure the accurate tracking of information on contract award timeliness, DOE stated that the department has procedures in place

through STRIPES. We disagree. During the course of our review, we did not identify any procedures. Moreover, when discussing contract award timeliness issues with DOE officials, they could not identify any procedures nor provide us with relevant data used for tracking contract award timeliness. Therefore, we believe DOE needs to take further action to ensure accurate information is collected on contract award timeliness.

DOE and 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, the report is available at no charge on the GAO website at https://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. 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

List of Committees

The Honorable Jack Reed
Chairman
The Honorable Roger Wicker
Ranking Member
Committee on Armed Services
United States Senate

The Honorable Patty Murray
Chair
The Honorable John Kennedy
Ranking Member
Subcommittee on Energy and Water Development
Committee on Appropriations
United States Senate

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

The Honorable Chuck Fleischmann
Chairman
The Honorable Marcy Kaptur
Ranking Member
Subcommittee on Energy and Water Development, and Related Agencies
Committee on Appropriations
House of Representatives

Appendix I: Objectives, Scope, and Methodology

Several congressional committee reports and joint explanatory statement language include provisions for GAO to review various aspects of, or related to, the Department of Energy's (DOE) acquisition planning, including for management and operating (M&O) contracts. This report examines the extent to which DOE (1) implemented selected acquisition planning practices for contracts we reviewed and (2) has readily available information about the number and value of solicitation cancellations and contract award terminations and delays.

To address our objectives, we developed four groups of DOE solicitations and contracts, including those awarded by the National Nuclear Security Administration (NNSA), a separately organized agency within DOE. To do so, we used contract award data reported as of January 2023 from the Federal Procurement Data System (FPDS), which is the system of record for federal procurement data. We also obtained data on canceled solicitations and terminated contracts reported as of March 2023 from DOE's Strategic Integrated Procurement Enterprise System (STRIPES), which is DOE's primary repository for contract information.

For our first objective, we selected a nongeneralizable sample of 20 DOE contracts awarded from fiscal years 2017 through 2022.² With one exception, DOE awarded all of the contracts in the scope of our first objective on the basis of full and open competition.³ In addition, each contract had a potential total value of \$100 million or greater at time of award. Because of their size, complexity, and potential total contract values, we included six of the seven M&O contracts and five of the seven Office of Environmental Management (EM) contracts using the End State Contracting Model (ESCM) approach that were awarded during this period.⁴

Collectively, these 20 contracts had a potential total value of nearly \$152 billion, or 82 percent of the approximately \$185 billion in potential total value of the 53 contracts valued at \$100 million or greater that DOE awarded during this period.⁵ These contracts were awarded in all 6 years of our scope and by five DOE components: EM (11 contracts); NNSA (six contracts); the National Energy Technology Laboratory (one contract); and the Offices of Legacy Management (one contract) and the Chief Information Officer (one contract). EM and NNSA made up the majority of our sample because they represented the overall majority of the population of 53 contracts with total contract values in excess of \$100 million. Specifically, of these 53 contracts DOE awarded in fiscal years 2017 through 2022, EM awarded 25 (about 47 percent) and NNSA

¹The January 2023 FPDS data included the most current available data when we started our review.

²We chose our time frame for review because it included the most current available data when we started our review.

³One contract in our sample was awarded on a sole-source basis under 48 C.F.R. § 6.302-1. Two of the contracts were small business set-asides, and so were competed on a full and open basis after the exclusion of some sources. Federal statutes and acquisition regulations generally require that agencies award contracts on the basis of full and open competition through the use of competitive procedures. Under competitive procedures, all prospective contractors (i.e., non-federal industry entities) that meet certain criteria are permitted to submit offers in response to solicitations. See also GAO, *Department of Energy Contracting: Additional Actions Could Further Strengthen Competition*, GAO-23-105209 (Washington, D.C.: Jan. 24, 2023).

⁴EM began using the ESCM approach in 2019 to support its mission of cleaning up vast quantities of radioactive and hazardous materials remaining from decades of nuclear weapons production and energy research. We reported on EM's new approach in September 2022. GAO, *Nuclear Waste Cleanup: Actions Needed to Determine Whether DOE's New Contracting Approach is Achieving Desired Results*, GAO-22-105417 (Washington, D.C.: Sept. 28, 2022).

⁵The 53 contract awards that we identified in the FPDS data for fiscal years 2017 through 2022 excluded orders or calls placed under a task- or delivery-order contract or blanket purchase agreement. We also consolidated instances of multiple awards made under one solicitation. In addition, we excluded awards for DOE energy savings performance procurements because that contract is also used by agencies across the federal government. We also excluded contract awards for the Federal Energy Regulation Commission because it is an independent agency with an acquisition process that is separate from DOE.

awarded 10 (about 19 percent). EM and NNSA, along with the Office of Science, also make up the three largest appropriations within the department.⁶

To address our second objective, we obtained and reviewed data for DOE procurements with an estimated value of at least \$5.5 million that involved canceled solicitations, terminated awards, and delayed awards. To identify canceled solicitations, terminated awards, and delayed contract awards in the scope of our review, we analyzed data from several sources as discussed below.

• Canceled solicitations. To determine the extent to which solicitations were canceled from fiscal years 2017 through 2022, we obtained STRIPES data from DOE. The data provided by DOE included 142 records for review, which DOE identified by searching for certain key words related to canceled solicitations. We analyzed the 142 records and identified 68 records that we excluded from further review because they did not fall in the scope of our review. Reasons for excluding the records included the following: the record was not a cancellation (17), procurement value was under \$5.5 million (9), procurement was for another agency (5), cancellation was related to bids received (6), solicitation was posted in error (8), solicitation was notice of sole source award (4), solicitation was likely never posted publicly (18), solicitation was for a request for information (1), and cancellation was related to an issue with an agreement or waiver (2).

We also identified eight duplicate records in the data provided. In total, we identified 66 records potentially in the scope of our review. However, the data were missing procurement value for most records, preventing us from identifying procurements with a value of at least \$5.5 million. Given the large number of records, we selected several programs or offices for a follow-up request of any documentation for procurement value. The selected programs or offices included EM (five records), DOE Headquarters (14 records), NNSA (14 records), and Western Area Power Administration (WAPA) (33 records). EM and NNSA were selected because of the relatively large dollar value of their procurement activity in general, while Headquarters and WAPA were selected because they had a relatively large number of records in the data.

In total, we requested documentation for 66 canceled solicitation records to further identify cancellations in the scope of our review. Of the 66 records we reviewed, we found that 52 had values under \$5.5 million and were excluded from additional review. Of the remaining 14 records, three did not have contract documents to determine procurement value, and nine were determined to be cancellations valued at least \$5.5 million and therefore within our scope. In addition to the data from STRIPES, we reviewed DOE documents and media reports for canceled solicitations that occurred from fiscal years 2017 through 2022. We identified three additional canceled solicitations through this review that were not in the STRIPES data provided by DOE. For the 12 canceled solicitations that we identified, we obtained and analyzed documents on the reason for the cancellations.

⁶The 53 contracts included one Office of Science contract. We excluded it from our first objective's sample because it was a unique type of contract written by the Tennessee Valley Authority for the purposes of providing electricity to parts of the Oak Ridge National Laboratory and Y-12 National Security Campus. Moreover, while the Office of Science has 10 M&O contracts, none of them were awarded in fiscal years 2017 through 2022. Instead, the Office of Science non-competitively extended five of these M&O contracts during this time frame, including for the management and operation of the Pacific Northwest National Laboratory, which has never been competed following initial award in 1965, and the SLAC National Accelerator Laboratory, which has never been competed following initial award in 1962.

⁷Two records were excluded for multiple reasons, so the count of reasons for exclusions will sum to greater than 68 records.

• Terminated awards. Our review of terminated awards started with a review of awards with a value of at least \$5.5 million that were terminated for convenience from fiscal years 2017 through 2022. Where information was available for comparison in applicable databases, we included terminations for convenience that occurred within 1 year of award to avoid terminations that were due to contractor performance, and thus focus on those terminations that may have been due to issues related to acquisition planning. Where such information was not available, we excluded any terminations that were related to contractor performance based on discussions with agency officials. To determine the extent of terminations, we reviewed data from several sources, including STRIPES and FPDS. We received STRIPES data from DOE with 125 records for additional review that DOE identified by searching for certain key words related to terminations, similar to the canceled solicitation data. We reviewed the data and excluded records related to procurements with values under \$5.5 million and records that were not an award termination. For example, the word search resulted in the inclusion of records that were modification terminations and where the word "termination" happened to be in a description but was not related to terminating an award.

Upon additional follow up with DOE to confirm our review, we identified four procurements that were terminated for convenience and were within the scope of our review. We also obtained FPDS data that identified 120 termination actions potentially within the scope of our review. We reviewed the data for procurement value and length of time from award to termination to exclude procurements that were not in the scope of our review. Upon additional follow up with DOE to confirm our data, we identified five procurements that were terminated for convenience and were within the scope of our review. One of these procurements also appeared in the STRIPES data. In total, we identified eight terminated awards in the scope of our review. In addition to the data from STRIPES and FPDS, we reviewed DOE documents and media reports for terminations that occurred from fiscal years 2017 through 2022, but we did not identify any additional terminations in the scope of our review. For these eight procurements, we obtained and analyzed contract documents on the reason for the terminations.

Delayed awards. To determine if an award was made later than planned, we reviewed the milestone dates
in approved acquisition plans and other available documents and compared the planned award date to the
actual award date. Initial discussions with DOE officials led us to determine that data on contract award
milestones and delays are not readily available for the agency. As a result, we obtained information from
individual contract files for a sample of contracts. Specifically, we reviewed planned and actual award dates
for all new awards made by DOE in fiscal year 2022 with a contract value of \$5.5 million or more at the
time of award.

Additionally, we excluded awards for task orders or blanket purchase agreement calls, as the main acquisition planning for these types of awards occurs with the award of the base contract (delivery order contract or blanket purchase agreement). We also excluded awards made through the Federal Energy Regulatory Commission, as it is an independent agency with a specialized regulatory focus. Finally, we controlled for cases where multiple awards were made for the same procurement associated with the same acquisition plan. In total, we identified 40 awards made in fiscal year 2022 that were included in our review. For these procurements, we obtained available contract documents to determine planned and actual award dates, where the actual award date was determined based on the signed contract. An award was considered later than planned if it was awarded after the date in the approved milestone schedule. For procurements that appeared to be later than planned by 1 month or more, we obtained documentation on the reason for the delay.

We assessed the reliability of DOE's FPDS and STRIPES data. We reviewed existing documentation about FPDS and STRIPES, including the data dictionary and user's manual for FPDS and DOE's mandatory use policy and relevant guidance in DOE's Acquisition Guide for STRIPES. We also examined DOE documentation on the accuracy and completeness of its data reported to FPDS, including the department's annual data quality reports, and conducted electronic testing of the data. In addition, we reviewed data obtained from FPDS and STRIPES for validity and obvious errors and compared data to DOE documents where appropriate. Lastly, we interviewed relevant officials about the reliability of FPDS and STRIPES data, particularly related to terminated awards and canceled solicitations. During the course of our analysis, we identified certain limitations related to the consistency of data on canceled solicitations and terminated awards in STRIPES and FPDS, and we describe these limitations as part of our findings in the report. We determined the data, despite these limitations, were sufficiently reliable for identifying contracts awarded from fiscal years 2017 through 2022 and reporting on issues related to canceled solicitations, terminated contracts, and delayed contract awards.

In addition, as part of our first objective, we compared DOE's implementation of its acquisition planning process to 10 selected acquisition planning practices. We selected these 10 practices because either they are requirements from the Federal Acquisition Regulation (FAR); they are emphasized in DOE policies and guidance, including DOE's Acquisition Guide; or our prior work identified them as important to successful acquisition outcomes. Of the 10 practices, seven applied to all 20 contracts we reviewed: (1) requirements documentation, (2) market research, (3) written acquisition plan, (4) acquisition milestones, (5) contract type selection, (6) independent government cost estimate, and (7) lessons learned. The remaining three practices we selected applied to some of the 20 contracts we reviewed, depending on whether the contracts were an M&O contract, an EM contract using the ESCM approach, or a single-award indefinite delivery/indefinite quantity contract. Each of these three practices pertained to ensuring that the appropriate level of approval was obtained and documented for the type of contract being used.

We then developed a data collection instrument and examined the extent to which DOE implemented the selected practices for the 20 contracts in our scope. To do so, we reviewed available contract file documentation, such as acquisition plans, small business set-aside decisions and related market research, solicitations, justifications for contract type, source selection evaluations and decisions, and signed contracts. We pretested our data collection instrument to ensure consistent and complete data collection. Two analysts reviewed the contract files to identify evidence pertaining to the implementation of each selected practice. The analysts then came to agreement on the assessment of the extent to which each practice was implemented. In cases where the two analysts could not come to agreement, a third reviewer adjudicated the analysts' responses to reach a consensus assessment. We did not assess the quality of the identified documentation because the FAR provides acquisition professionals with the flexibility to take actions to ensure their decisions are in the best interest of the government.

To address the second objective, we also reviewed requirements related to canceled solicitations and terminated awards in the FAR, as well as departmental policies and guidance, including DOE's *Acquisition Guide* and program office-specific supplementary documentation. We examined numerous contract documents for the procurements in our scope, such as the acquisition plan, milestone schedule, cost estimate, and, if

⁸According to the FAR, a contract file should generally consist of files that document the basis for the acquisition and the award. Examples of records normally contained, if applicable, in contract files include acquisition planning information and other presolicitation documents, synopsis of the proposed acquisition, justification for contract type, government estimate of contract price, source selection documentation, signed contract or award, and documentation regarding termination actions for which the contracting officer is responsible. 48 C.F.R. §§ 4.801-4.803.

applicable, termination files and solicitation cancellation determinations. In some cases, we also reviewed publicly available GAO bid protest decisions and related media reports.

To determine whether any of the fiscal year 2022 contract awards had been delayed, we compared the planned award date specified in the contract files for awarding the contract, typically found in the acquisition plan or milestone schedule document, with the date the contract was actually awarded. Adherence to milestones developed during acquisition planning, such as those found in written acquisition plans, can be a consistent measure of contract award timeliness and indicator of whether the acquisition process was managed well. Therefore, we considered contracts to be delayed if the actual award date was later than the planned award date. Moreover, because the planned award date is developed early in the acquisition process and prior to the issuance of a solicitation, we did not examine procurement administrative lead time data, which is the amount of time from solicitation to contract award.⁹

We also compared DOE's management and use of available data on canceled solicitations and terminated and delayed awards to related principles in the *Standards for Internal Control in the Federal Government and the Framework for Assessing the Acquisition Function at Federal Agencies.* The information and communication component of internal control—how management uses quality information to support the internal control system—was significant to the second objective, along with the related principle that management should use quality information to achieve the entity's objectives. We assessed DOE's data on canceled solicitations and terminated awards, as well as related departmental policies and guidance, in line with these principles.

We also interviewed officials and obtained written responses from DOE offices included in our contract groups about acquisition planning and the practices we selected for review and data and issues related to canceled solicitations, terminated contracts, and delayed contract awards. These offices included the EM Consolidated Business Center, Office of Science, Office of the Chief Information Officer, Office of Nuclear Energy, WAPA, and the National Energy Technology Laboratory, as well as DOE's Office of Acquisition Management and NNSA's Office of Partnership and Acquisition Services. To obtain industry perspectives for our second objective, we also interviewed representatives from 10 industry entities, which can include individual companies, organizations, or universities that are, or have expressed interest in, contracting with DOE. The views of the industry representatives interviewed cannot be generalized to all industry entities, but they provided valuable insights to our work.

We conducted this performance audit from September 2022 to November 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 the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

⁹GAO, Defense Contracts: Better Monitoring Could Improve DOD's Management of Award Lead Times, GAO-24-106528 (Washington, D.C.: Mar. 14, 2024).

¹⁰GAO, Standards for Internal Control in the Federal Government, GAO-14-704G (Washington, D.C.: September 2014); and Framework for Assessing the Acquisition Function at Federal Agencies, GAO-05-218G (Washington, D.C.: September 2005).

Appendix II: Comments from the Department of Energy



Department of Energy

Washington, DC 20585

November 7, 2024

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

Dear Ms. Bawden:

The Department of Energy (DOE) appreciates the opportunity to comment on the Government Accountability Office's (GAO) draft report titled, "The Department of Energy Contracting: Actions Needed to Strengthen Certain Acquisition Planning Process (GAO-25-106207)."

The draft report contains a total of 12 recommendations, nine for DOE and three for the National Nuclear Security Administration (NNSA). Both DOE and NNSA concur with all the recommendations. Enclosed is the Department's Management Response, which includes a description of the actions DOE will take and the estimated completion dates for each recommendation.

If there are any questions, please contact Patrick Mckeown at Patrick.Mckeown@doe.hq.gov or (240) 654-2465.

Sincerely,

Ingrid A.C. Digitally signed by Ingrid A.C. Kolb Date: 2024.11.07 13:53:18-05:00'

Ingrid Kolb Director Office of Management

Enclosure

Management Response GAO Draft Report: The Department of Energy Contracting: Actions Needed to Strengthen Certain Acquisition Planning Process (GAO-25-106207)

Recommendation 1: The Director for Department of Energy's (DOE) Office of Acquisition Management should ensure that for non-management and operating acquisitions, the Acquisition Guide clearly specifies what information should be included in the contract file to support how acquisition officials considered prior lessons learned during acquisition planning.

DOE Response: Concur

The Office of Acquisition Management will revise Acquisition Guide Chapters 7.1 and 15.3 to strengthen language regarding contract file documentation and how acquisition officials considered prior lessons learned during acquisition planning as appropriate.

Estimated Completion Date: June 30, 2025

Recommendation 2: The Director for DOE's Office of Acquisition Management should develop a policy to ensure that DOE acquisition offices consistently document potential lessons learned identified during acquisition planning.

DOE Response: Concur

DOE's Office of Acquisition Management's position is that the DOE Acquisition Guide Chapter 15.3 already addresses the capturing of lessons learned during the SEB process. The Office of Acquisition Management will revise Acquisition Guide Chapter 7.1 to include guidance on reviewing lessons learned during the acquisition planning process.

Estimated Completion Date: June 30, 2025

Recommendation 3: The Associate Administrator for the National Nuclear Security Administration's (NNSA) Office of Partnership and Acquisition Services should develop a policy to ensure that NNSA acquisition offices consistently document potential lessons learned identified during acquisition planning.

DOE Response: Concur

NNSA's Office of Partnership and Acquisition Services will coordinate with the Department in its development of actions to address related Recommendation 2 and will update its internal guidance as appropriate.

Estimated Completion Date: September 30, 2025

1

Management Response GAO Draft Report: The Department of Energy Contracting: Actions Needed to Strengthen Certain Acquisition Planning Process (GAO-25-106207)

Recommendation 4: The Director for DOE's Office of Acquisition Management should revise the source evaluation board lessons learned process described in the Acquisition Guide to ensure that it incorporates all leading practices.

DOE Response: Concur

The Office of Acquisition Management will revise Acquisition Guide Chapter 15.3 to incorporate leading lessons learned practices as appropriate.

Estimated Completion Date: June 30, 2025

Recommendation 5: The Director of DOE's Office of Acquisition Management should develop guidance to ensure the accurate tracking of information on canceled solicitations in agency procurement systems.

DOE Response: Concur

The Office of Acquisition Management is implementing a reporting mechanism to track information on canceled solicitations.

Estimated Completion Date: June 30, 2025

Recommendation 6: The Senior Advisor for the Office of Environmental Management (EM) should implement procedures to consistently record information on canceled solicitations so that the information is reliable and comprehensive.

DOE Response: Concur

EM will follow the Office of Acquisition Management's guidance when issued per Recommendation 5.

Estimated Completion Date: September 30, 2025

Recommendation 7: The Associate Administrator for NNSA's Office of Partnership and Acquisition Services should implement procedures to consistently record information on canceled solicitations so that the information is reliable and comprehensive.

DOE Response: Concur

2

Management Response GAO Draft Report: The Department of Energy Contracting: Actions Needed to Strengthen Certain Acquisition Planning Process (GAO-25-106207)

NNSA's Office of Partnership and Acquisition Services will coordinate with the Department in its development of actions to address related Recommendation 5 and will update its internal guidance as appropriate.

Estimated Completion Date: September 30, 2025

Recommendation 8: The Senior Advisor for EM should implement procedures to ensure it maintains the required contract documents on canceled solicitations.

DOE Response: Concur

DOE has an established system, which serves as the primary document repository for contract writing, award, and administration known as STRIPES. DOE AL 2021-05 establishes the STRIPES Mandatory Use Policy. EM will develop a supplement to AL 2021-05 which addresses specific documentation to be maintained in the event of a canceled solicitation if needed to complement any future DOE-wide guidance developed in response to Recommendation 10.

Estimated Completion Date: September 30, 2025

Recommendation 9: The Associate Administrator for NNSA's Office of Partnership and Acquisition Services should implement procedures to ensure it maintains required contract documents on canceled NNSA solicitations.

DOE Response: Concur

NNSA's Office of Partnership and Acquisition Services will coordinate with the Department in its development of actions to address related Recommendation 10 and will update its internal guidance as appropriate.

Estimated Completion Date: September 30, 2025

Recommendation 10: The Director of DOE's Office of Acquisition Management should develop implementation procedures for DOE acquisition offices to consistently record information on canceled and terminated awards in agency procurement systems so the information is reliable and comprehensive.

DOE Response: Concur

Management Response GAO Draft Report: The Department of Energy Contracting: Actions Needed to Strengthen Certain Acquisition Planning Process (GAO-25-106207)

The Department will issue additional guidance to supplement the Federal Procurement Data System procedures so that acquisition office's consistently record information on canceled and terminated awards in agency procurement systems.

Estimated Completion Date: June 30, 2025

Recommendation 11: The Director for DOE's Office of Acquisition Management should review, through lessons learned or other review processes, the role of requirements setting in causing canceled solicitations and terminated awards, including the identification of root causes and solutions.

DOE Response: Concur

The Office of Acquisition Management will revise Acquisition Guide Chapter 15.3 to include language regarding documenting lessons learned on canceled solicitations and terminated awards.

Estimated Completion Date: June 30, 2025

Recommendation 12: The Director of DOE's Office of Acquisition Management should implement procedures to ensure the accurate tracking of information on contract award timeliness at the agency.

DOE Response: Concur

The Department has procedures in place through STRIPES. Site office leadership can utilize the tracking of information to ensure timeliness on contract awards. Site office management and leadership ensures documentation exists and is approved regarding award schedules. The Department will assess the current procedures and issue additional guidance as appropriate.

Estimated Completion Date: June 30, 2025

4

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

Department of Energy Washington, DC 20585

November 7, 2024

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

Dear Ms. Bawden:

The Department of Energy (DOE) appreciates the opportunity to comment on the Government Accountability Office's (GAO) draft report titled, "The Department of Energy Contracting: Actions Needed to Strengthen Certain Acquisition Planning Process (GAO-25-106207)."

The draft report contains a total of 12 recommendations, nine for DOE and three for the National Nuclear Security Administration (NNSA). Both DOE and NNSA concur with all the recommendations. Enclosed is the Department's Management Response, which includes a description of the actions DOE will take and the estimated completion dates for each recommendation.

If there are any questions, please contact Patrick Mckeown at Patrick.Mckeown@doe.hq.gov or (240) 654-2465.

Sincerely,

Ingrid A.C. Kolb

Digitally signed by Ingrid A.C. Kolb Date: 2024.11.07 13:53:18 -05'00'

Ingrid Kolb
Director
Office of Management

Enclosure

Recommendation 1: The Director for Department of Energy's (DOE) Office of Acquisition Management should ensure that for non-management and operating acquisitions, the Acquisition Guide clearly specifies what information should be included in the contract file to support how acquisition officials considered prior lessons learned during acquisition planning.

DOE Response: Concur

The Office of Acquisition Management will revise Acquisition Guide Chapters 7.1 and 15.3 to strengthen language regarding contract file documentation and how acquisition officials considered prior lessons learned during acquisition planning as appropriate.

Estimated Completion Date: June 30, 2025

Recommendation 2: The Director for DOE's Office of Acquisition Management should develop a policy to ensure that DOE acquisition offices consistently document potential lessons learned identified during acquisition planning.

DOE Response: Concur

DOE's Office of Acquisition Management's position is that the DOE Acquisition Guide Chapter 15.3 already addresses the capturing of lessons learned during the SEB process. The Office of Acquisition Management will revise Acquisition Guide Chapter 7.1 to include guidance on reviewing lessons learned during the acquisition planning process.

Estimated Completion Date: June 30, 2025

Recommendation 3: The Associate Administrator for the National Nuclear Security Administration's (NNSA) Office of Partnership and Acquisition Services should develop a policy to ensure that NNSA acquisition offices consistently document potential lessons learned identified during acquisition planning.

DOE Response: Concur

NNSA's Office of Partnership and Acquisition Services will coordinate with the Department in its development of actions to address related Recommendation 2 and will update its internal guidance as appropriate.

Estimated Completion Date: September 30, 2025

Recommendation 4: The Director for DOE's Office of Acquisition Management should revise the source evaluation board lessons learned process described in the Acquisition Guide to ensure that it incorporates all leading practices.

DOE Response: Concur

The Office of Acquisition Management will revise Acquisition Guide Chapter 15.3 to incorporate leading lessons learned practices as appropriate.

Estimated Completion Date: June 30, 2025

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

Recommendation 5: The Director of DOE's Office of Acquisition Management should develop guidance to ensure the accurate tracking of information on canceled solicitations in agency procurement systems.

DOE Response: Concur

The Office of Acquisition Management is implementing a reporting mechanism to track information on canceled solicitations.

Estimated Completion Date: June 30, 2025

Recommendation 6: The Senior Advisor for the Office of Environmental Management (EM) should implement procedures to consistently record information on canceled solicitations so that the information is reliable and comprehensive.

DOE Response: Concur

EM will follow the Office of Acquisition Management's guidance when issued per Recommendation 5.

Estimated Completion Date: September 30, 2025

Recommendation 7: The Associate Administrator for NNSA's Office of Partnership and Acquisition Services should implement procedures to consistently record information on canceled solicitations so that the information is reliable and comprehensive.

DOE Response: Concur

NNSA's Office of Partnership and Acquisition Services will coordinate with the Department in its development of actions to address related Recommendation 5 and will update its internal guidance as appropriate.

Estimated Completion Date: September 30, 2025

Recommendation 8: The Senior Advisor for EM should implement procedures to ensure it maintains the required contract documents on canceled solicitations.

DOE Response: Concur

DOE has an established system, which serves as the primary document repository for contract writing, award, and administration known as STRIPES. DOE AL 2021-05 establishes the STRIPES Mandatory Use Policy. EM will develop a supplement to AL 2021-05 which addresses specific documentation to be maintained in the event of a canceled solicitation if needed to complement any future DOE-wide guidance developed in response to Recommendation 10.

Estimated Completion Date: September 30, 2025

Recommendation 9: The Associate Administrator for NNSA's Office of Partnership and Acquisition Services should implement procedures to ensure it maintains required contract documents on canceled NNSA solicitations.

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

DOE Response: Concur

NNSA's Office of Partnership and Acquisition Services will coordinate with the Department in its development of actions to address related Recommendation 10 and will update its internal guidance as appropriate.

Estimated Completion Date: September 30, 2025

Recommendation 10: The Director of DOE's Office of Acquisition Management should develop implementation procedures for DOE acquisition offices to consistently record information on canceled and terminated awards in agency procurement systems so the information is reliable and comprehensive.

DOE Response: Concur

The Department will issue additional guidance to supplement the Federal Procurement Data System procedures so that acquisition office's consistently record information on canceled and terminated awards in agency procurement systems.

Estimated Completion Date: June 30, 2025

Recommendation 11: The Director for DOE's Office of Acquisition Management should review, through lessons learned or other review processes, the role of requirements setting in causing canceled solicitations and terminated awards, including the identification of root causes and solutions.

DOE Response: Concur

The Office of Acquisition Management will revise Acquisition Guide Chapter 15.3 to include language regarding documenting lessons learned on canceled solicitations and terminated awards.

Estimated Completion Date: June 30, 2025

Recommendation 12: The Director of DOE's Office of Acquisition Management should implement procedures to ensure the accurate tracking of information on contract award timeliness at the agency.

DOE Response: Concur

The Department has procedures in place through STRIPES. Site office leadership can utilize the tracking of information to ensure timeliness on contract awards. Site office management and leadership ensures documentation exists and is approved regarding award schedules. The Department will assess the current procedures and issue additional guidance as appropriate.

Estimated Completion Date: June 30, 2025

Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact

Allison Bawden, (202) 512-3841 or bawdena@gao.gov

Staff Acknowledgments

In addition to the contact named above, Hilary Benedict (Assistant Director), Wyatt R. Hundrup (Assistant Director), Kevin Remondini (Analyst in Charge), Celina Davidson, Alex Gammel-Perera, and Willy Pevec made key contributions to this report. Also contributing to this report were Adrian Apodaca, Antoinette Capaccio, Penney Harwell Caramia, Jeff Carr, Suellen Foth, Cindy Gilbert, Mae Jones, Sue Murphy, Jonathon Oldmixon, Meghan Perez, and Tatiana Winger.

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. You can also subscribe to GAO's email updates to receive notification of newly posted products.

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, https://www.gao.gov/ordering.htm.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on Facebook, Flickr, X, and YouTube. Subscribe to our RSS Feeds or Email Updates. Listen to our Podcasts. Visit GAO on the web at https://www.gao.gov.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact FraudNet:

Website: https://www.gao.gov/about/what-gao-does/fraudnet Automated answering system: (800) 424-5454 or (202) 512-7700

Congressional Relations

A. Nicole Clowers, Managing Director, ClowersA@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

Public Affairs

Sarah Kaczmarek, Managing Director, KaczmarekS@gao.gov, (202) 512-4800, U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548

Appendix III: GAO Contact and Staff Acknowledgments

Strategic Planning and External Liaison

Stephen J. Sanford, Managing Director, spel@gao.gov, (202) 512-4707 U.S. Government Accountability Office, 441 G Street NW, Room 7814, Washington, DC 20548