



August 2016

NUCLEAR SUPPLY CHAIN

DOE Should Assess Circumstances for Using Enhanced Procurement Authority to Manage Risk

Accessible Version

Why GAO Did This Study

DOE, through NNSA, is responsible for ensuring the safety and reliability of the nation's nuclear weapons stockpile, among other nuclear weapons-related activities. According to NNSA, the trend toward a non-domestic supply chain for components of nuclear weapons and related systems may pose risks to these weapons and systems. The National Defense Authorization Act for Fiscal Year 2014 provides the Secretary of Energy with an enhanced procurement authority, which may be used to exclude a supplier that poses a supply chain risk from a contract or subcontract, and limit disclosing the reason for the exclusion to the supplier.

The act includes a provision for GAO to report annually on DOE's use of the enhanced procurement authority. This report assesses the extent to which DOE has (1) used and developed processes for using the authority, and (2) examined whether adequate resources are in place for using the authority. GAO reviewed DOE and NNSA documents, interviewed DOE and NNSA officials, and interviewed M&O contractor representatives for seven NNSA sites—selected based on their NNSA management and activities.

What GAO Recommends

GAO recommends that DOE assess the circumstances that might warrant using the enhanced procurement authority and take additional actions based on the results, such as developing processes to use the authority, if needed, and examining whether resources for doing so are adequate. DOE concurred with the recommendation.

View [GAO-16-710](#). For more information, contact John Neumann at (202) 512-3841 or neumannj@gao.gov.

August 2016

NUCLEAR SUPPLY CHAIN

DOE Should Assess Circumstances for Using Enhanced Procurement Authority to Manage Risk

What GAO Found

As of May 2016, the Secretary of Energy had not used the enhanced procurement authority, and the Department of Energy (DOE) had not developed processes for using the authority, as it had not fully assessed the circumstances under which the authority might be useful. To use the authority, the Secretary must be made aware of a supply chain risk by officials from DOE or its semiautonomous National Nuclear Security Administration (NNSA). Once aware of a risk, the Secretary must make a written determination that using the authority is necessary to protect national security and that less restrictive measures are not reasonably available to reduce the supply chain risk, among other things. However, DOE has not developed specific processes to collect information to provide to the Secretary for making the determination. DOE officials said that they expect instances under which the authority would be useful to be infrequent, but DOE has not conducted an assessment to confirm that view. NNSA officials said that it is unlikely that management and operating (M&O) contractors who operate NNSA's sites and are generally responsible for procuring parts for nuclear weapons and related systems, would need to request that the Secretary use the authority. NNSA officials and M&O contractor representatives told GAO that, as nonfederal entities, M&O contractors are generally not required to disclose security-related reasons to explain why a particular supplier was not selected. Additionally, DOE officials stated that mechanisms exist within the Federal Acquisition Regulation for federal entities to reject suppliers that pose a supply chain risk. Some DOE officials identified circumstances under which the authority could be useful, but DOE has not fully assessed these or other circumstances under which using the authority would help it manage supply chain risk. Under federal standards for internal control, management should periodically review policies, procedures, and related control activities for relevance and effectiveness. Without assessing the circumstances under which the authority could be useful, DOE will have difficulty determining its relevance and, if necessary, developing processes for using it. As a result, DOE may miss opportunities to use the authority to manage supply chain risks.

DOE has not examined whether adequate resources are in place for using the enhanced procurement authority. DOE officials stated that there were some resources in place, such as information and trained personnel, that could be important in using the authority. However, DOE has not examined whether these resources were adequate, consistent with federal standards for internal control. DOE officials and M&O contractors expressed a range of opinions about whether the resources in place were adequate to support using the authority if needed. For example, while officials in DOE's Office of the Chief Information Officer said that they did not anticipate a need for more resources, some M&O contractor representatives said they might need more trained personnel. However, M&O contractor representatives stated that they could not assess the need without a requirement to do so in their M&O contracts and that DOE had not established such requirements. Examining whether adequate resources are in place, consistent with internal control standards, can help provide assurance that resources are available to support using the authority in accordance with any processes that DOE develops.

Contents

Letter	1
Background	3
DOE Has Not Used or Developed Processes for Using the Enhanced Procurement Authority to Manage Supply Chain Risk	8
DOE Has Not Examined Whether Adequate Resources Are in Place for Using the Enhanced Procurement Authority	11
Conclusions	12
Recommendation for Executive Action	13
Agency Comments	13

Appendix I: Comments from the Department of Energy	17
Appendix II: GAO Contact and Staff Acknowledgments	18
GAO Contact	18
Staff Acknowledgments	18

Appendix III: Accessible Data	19
Agency Comment Letter	19
Accessible Text	20

Figure	
Figure 1: Selected Activities of Seven National Nuclear Security Administration Sites in Our Review	5

Abbreviations

DOE	Department of Energy
FAR	Federal Acquisition Regulation
M&O	management and operating
OCIO	Office of the Chief Information Officer
NNSA	National Nuclear Security Administration
STRIPES	Strategic Integrated Procurement Enterprise System

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.



August 11, 2016

Congressional Committees

The Department of Energy (DOE), through the National Nuclear Security Administration (NNSA)—a semiautonomous agency within DOE—is responsible for ensuring the safety and reliability of the nation’s nuclear weapons stockpile. NNSA, among other things, is responsible for strategic management, safeguards, and security at government facilities where nuclear stockpile management and nonproliferation activities are carried out.¹ According to an NNSA document, threats have changed significantly over the past decade, and the U.S. government is concerned about the trend toward a non-domestic supply chain for nuclear weapons components, and the increasing sophistication of adversaries. Risks to the supply chain include the possibility that (1) a counterfeit or sabotaged component could cause a nuclear weapon to malfunction, (2) an adversary could gain access to DOE’s classified information, or (3) the costs of DOE programs could increase.

To help manage supply chain risks, the National Defense Authorization Act for Fiscal Year 2014 (the act) provides the Secretary of Energy an enhanced procurement authority.² This authority allows the Secretary, in the interest of national security, to exclude from certain procurements a supplier who may present a significant supply chain risk. The authority also allows the Secretary to withhold consent for a contractor to use a particular supplier or direct that the supplier be excluded. Under the act, this authority applies specifically to components of nuclear weapons, and certain other systems including nonproliferation and counterproliferation systems. The Secretary is not required to provide the supplier with reasons for withholding consent, and the decision is not subject to review

¹As part of its mission, NNSA develops and tests new technologies to help the United States ensure nonproliferation of nuclear weapons components and monitor compliance with arms control agreements.

²Pub. L. No. 113-66, Div C, Title XXXI, Subtitle B, § 3113, 127 Stat. 672, 1053 (2013) codified as amended at 50 U.S.C. § 2786.

in federal court.³ DOE's enhanced procurement authority is similar in some ways to authorities that the Department of Defense and the intelligence community already have.

The act also includes a provision for GAO to report annually for 5 years on DOE's use of the enhanced procurement authority. This report examines the extent to which DOE has (1) used and developed processes for using the enhanced procurement authority to manage supply chain risk and (2) examined whether adequate resources, such as trained personnel, are in place for using the enhanced procurement authority.

To determine the extent to which DOE has used and developed processes for using the enhanced procurement authority, we reviewed DOE and NNSA guidance and procedures on supply chain risk management. To determine the extent to which DOE has examined whether adequate resources, such as trained personnel, are in place for using the enhanced procurement authority, we reviewed DOE and NNSA reports, such as DOE's 2013 *Report to Congress on Information and Communications Technology Supply Chain Risk Management* and NNSA's fiscal year 2016 *Stockpile Stewardship and Management Plan*.

For both objectives, we interviewed officials from DOE, NNSA headquarters, and NNSA site offices, and representatives from six management and operating (M&O) contractors for seven of NNSA's eight nuclear security enterprise sites.⁴ Through these interviews, we collected information from DOE and NNSA officials, and M&O contractor representatives at each site, pertaining to our objectives. For example, we

³Under the act, the Secretary of Energy may "limit, in whole or in part, the disclosure of information relating to the basis" for exercising this authority. Further, the Secretary is to notify appropriate parties of the exclusion or withholding of consent and the basis for such action only to the extent necessary to effectuate the action. 50 U.S.C. § 2786 (a)(2) & (c)(2).

⁴One contractor operates both the Pantex Plant in Amarillo, Texas, and the Y-12 National Security Complex in Oak Ridge, Tennessee. In our review, we did not include the Savannah River Site, which is managed by the DOE Office of Environmental Management, as that site performs limited NNSA activities. M&O contractors generally carry out the mission and activities of the particular contract on a daily basis, while following federal laws and regulations, and applicable requirements from DOE policies, orders, and its guides and manuals, known as directives.

obtained officials' and representatives' views on the circumstances under which the enhanced procurement authority might be used and the processes that might be followed to submit information to support its use. In addition, to obtain more in-depth information on DOE's supply chain risk management efforts, we visited two sites: the Kansas City National Security Campus in Missouri and the Sandia National Laboratory in Albuquerque, New Mexico. We selected these two sites because NNSA officials told us that these sites were leading supply chain risk management efforts and because of their key role in current programs to extend the life of nuclear weapons through refurbishment or replacement of components. We evaluated DOE's efforts to manage the use of the enhanced procurement authority against practices described in *Standards for Internal Control in the Federal Government*.⁵

We conducted this performance audit from July 2015 to August 2016, 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

Within DOE, NNSA conducts its mission activities across several research and development laboratories, production plants, and other sites, known collectively as the nuclear security enterprise. Seven of the eight sites in the nuclear security enterprise, as shown in figure 1, include facilities, equipment, and components owned by NNSA and operated by M&O contractors on behalf of NNSA.⁶ Five M&O contractors each operate one site, and one contractor operates both the Pantex and Y-12 sites. M&O contractor activities include, among other things, producing parts or procuring parts from suppliers. For example, the Kansas City

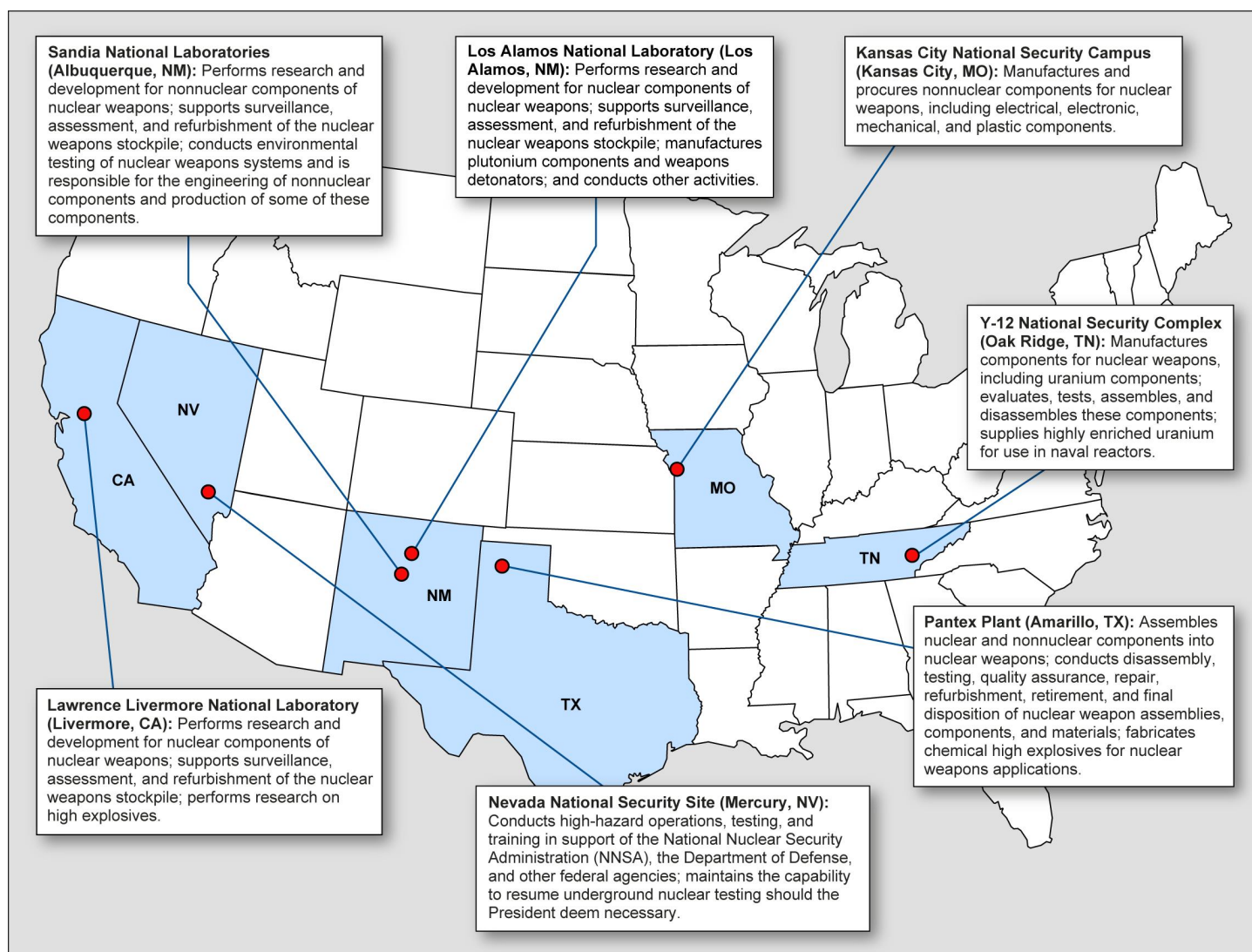
⁵GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

⁶NNSA is responsible for overseeing activities undertaken by M&O contractors at each site. M&O contracts, as recognized in the Federal Acquisition Regulation (FAR), are characterized by, among other things, the close relationship between the government and the contractor for conducting work of a long-term and continuing nature and requiring high levels of expertise and continuity of operations and personnel. See FAR Subpart 17.6.

National Security Campus produces or procures more than 100,000 parts annually—ranging from nuts and bolts to more complex radar components—including about 85 percent of the components that go into a typical nuclear weapon. We previously reported that the site had increased the percentage of nonnuclear components purchased from external suppliers from about 54 to 70 percent.⁷

⁷GAO, *Nuclear Weapons: National Nuclear Security Administration Needs to Better Manage Risks Associated with Modernization of Its Kansas City Plant*, [GAO-10-115](#) (Washington, D.C.: Oct. 23, 2009). According to an NNSA contracting official we interviewed, the percentage of nonnuclear components the Kansas City National Security Campus purchases from external suppliers remained at about 70 percent as of May 2016.

Figure 1: Selected Activities of Seven National Nuclear Security Administration Sites in Our Review



Sources: NNSA; Map Resources (map). | GAO-16-710

Note: Sandia National Laboratories also operate at several other locations.

DOE's efforts to manage supply chain risk include the following:

- M&O contractors may develop lists of approved suppliers of nuclear weapons components and certain information technology systems. M&O contractor representatives we interviewed said that suppliers are added to the list after an evaluation that examines their ownership or

management based on publicly available data and a review of their capability to meet technical and quality assurance requirements.

- DOE's Office of Intelligence and Counterintelligence supports the department by conducting intelligence and counterintelligence activities. For example, the office's field staff can provide information to M&O contractors when there are potential issues of concern related to a "foreign nexus" of a supplier or potential supplier.⁸ If a foreign nexus is identified, the Office of Intelligence and Counterintelligence can perform an in-depth evaluation to determine whether the supplier poses a risk to the supply chain.
- DOE's Office of the Chief Information Officer (OCIO) is responsible for providing, among other things, department-wide guidance, policy, and oversight to ensure secure, efficient, and cost-effective use of information technology resources. DOE program offices can request that OCIO review the risk that an information technology supplier poses to the supply chain. Upon receiving such a request, OCIO assesses the risk using information from open source databases, and works with the DOE Office of Intelligence and Counterintelligence when additional analysis is needed.

In addition, NNSA has taken several steps in recent years to increase its focus on supply chain risk management. For example, in 2011 NNSA initiated a multi-disciplinary effort with the Sandia National Laboratories and the Kansas City National Security Campus, which focused on identifying, analyzing, and mitigating risks that may arise through malicious exploitation of NNSA supply chain and cyber-security vulnerabilities. Also, in 2013 NNSA issued a weapon quality policy, which it updated in 2015, that stated, in part, that information about unique problems, such as the insertion of malicious hardware and software into the supply chain, shall be shared and investigated throughout the nuclear security enterprise. In addition, NNSA officials said the agency was in the process of establishing a Nuclear Enterprise Assurance Steering Group

⁸According to DOE regulations, a foreign nexus means "specific indications that a covered person is or may be engaged in clandestine or unreported relationships with foreign powers, organizations or persons, or international terrorists; contacts with foreign intelligence services; or other hostile activities directed against DOE facilities, property, personnel, programs or contractors by or on behalf of foreign powers, organizations or persons, or international terrorists," 10 C.F.R. § 709.2. See also DOE Order DOE O 475.1, Order establishing Counterintelligence Program requirements and responsibilities for the Department of Energy, including the National Nuclear Security Administration.

composed of senior NNSA and DOE headquarters officials to provide oversight and management of NNSA nuclear enterprise assurance activities. Such activities include supply chain risk management practices to protect against malicious components that could interfere with the functionality of a weapons system.

The enhanced procurement authority provided by the act applies specifically to supply chain risk for covered systems as follows:

- Supply chain risk is the risk that an adversary may sabotage, maliciously introduce unwanted function, or otherwise subvert the design, integrity, manufacturing, production, distribution, installation, operation, or maintenance of a covered system or covered item to surveil, deny, disrupt, or otherwise degrade the function, use, or operation of the covered system or item.
- Covered systems are primarily nuclear weapons and components and items associated with design, production, and maintenance of such weapons or of nonproliferation and counterproliferation programs and certain information technology systems.

The enhanced procurement authority may provide a tool to help DOE manage supply chain risk in certain circumstances where, under the Federal Acquisition Regulation, DOE might otherwise need to disclose the reason for its determination not to award a procurement contract or subcontract to a particular supplier or DOE's decision might be subject to appeal. Specifically, the authority permits the exclusion of contractors or subcontractors that pose a supply chain risk and allows DOE to not disclose the reasons for its determination to use the authority and, unlike most other procurement actions, the use of the authority, including the decision to not disclose, is not subject to review in any federal court. In circumstances where DOE uses the enhanced procurement authority, the Secretary is to notify other federal agencies responsible for a procurement that may be subject to the same or similar supply chain risk in a manner and to the extent consistent with the requirements of national security. Under the act, DOE's enhanced procurement authority will terminate in June 2018, 4 years from the effective date of the act.

DOE Has Not Used or Developed Processes for Using the Enhanced Procurement Authority to Manage Supply Chain Risk

As of May 2016, the Secretary of Energy had not used the enhanced procurement authority, and DOE had not developed processes for using the authority, as it had not fully assessed the circumstances under which the authority might be useful. To use the enhanced procurement authority, the Secretary must be made aware of a supply chain risk. DOE or NNSA officials would have to notify the Secretary that a supplier or potential supplier could pose a significant risk to a covered system. Once the Secretary was made aware of a significant supply chain risk, to use the enhanced procurement authority he or she must make a determination in writing that use of the authority was necessary to protect national security, and that less restrictive measures were not reasonably available to reduce the supply chain risk, among other things.⁹ The act requires the Secretary to obtain a risk assessment that demonstrates that there is a significant risk to the supply chain. Although the act does not define the elements of a risk assessment, DOE officials stated that a risk assessment may include a system characterization, threat identification, vulnerability identification, impact analysis, and risk determination, among other things. They stated that the risk assessment would be similar to a risk analysis and mitigation report which the department used to document supply chain issues, such as suspect counterfeit parts. However, DOE had not developed specific processes to collect such information for a risk assessment report and provide it to the Secretary so that he or she could make a determination about whether to use the authority.

DOE officials said that they expect that instances under which the authority would be useful to be infrequent, but that DOE had not conducted an assessment to confirm that view. Some DOE and NNSA officials and M&O contractor representatives expressed uncertainty about whether the authority was needed. According to DOE officials, M&O contractors generally procure the parts for covered systems, and NNSA officials said that it is unlikely that an M&O contractor would need to request that the Secretary use the authority. NNSA and M&O contractor

⁹Under the act, the Secretary must make a determination in writing that (1) the use of the authority under subsection (a) is necessary to protect national security by reducing supply chain risk; (2) less restrictive measures are not reasonably available to reduce the supply chain risk; and (3) in a case in which the Secretary plans to limit disclosure of information under subsection (a)(2), the risk to national security of the disclosure of the information outweighs the risk of not disclosing the information. 50 U.S.C. § 2786 (b)(2).

representatives told us, that since M&O contractors are not federal entities, they are not subject to the same procurement restrictions as such entities and already possess the capability to exclude a supplier that poses a supply chain risk. When procuring a part from a supplier, an M&O contractor is generally not required to disclose security-related reasons to a potential supplier to explain why that supplier was not selected. In addition, when an M&O contractor establishes a subcontract with a supplier, the M&O contractor can terminate the subcontract at any time for convenience without providing a reason.¹⁰ Some DOE officials also told us that there are mechanisms within the Federal Acquisition Regulation for federal entities to mitigate supply chain risks for covered system procurements. For example, the Federal Acquisition Regulation states that a federal entity can contract only with a “responsible” supplier.¹¹ According to DOE officials, a supplier that presents a supply chain risk may not be considered a responsible supplier and may be excluded from a federal contract for a covered system.

Some DOE officials provided us their views about circumstances under which the enhanced procurement authority could be useful; however, as of May 2016, DOE had not fully assessed these or other circumstances under which using the authority would help the department manage supply chain risk. For example, some DOE officials mentioned particular circumstances under which the authority might be useful, such as if DOE learned about an adversary’s connection to a potential or existing supplier

¹⁰A buyer, such as an M&O contractor, may terminate a subcontract with a supplier for convenience if the buyer determines that termination is in the buyer’s best interest, through no fault of the supplier. The exercise of this right generally entails some compensation for the supplier. In some cases, such action requires NNSA’s consent. Besides terminating for convenience, an M&O contractor may terminate a subcontract with a supplier for cause in the event of a default by the supplier, if the supplier fails to comply with any subcontract terms and conditions, or if the supplier fails to provide the M&O contractor with adequate assurances of future performance. In a case of termination for cause, unlike termination for convenience, the supplier can obtain information about the reason for the termination.

¹¹The FAR provides that “[n]o purchase or award shall be made unless the contracting officer makes an affirmative determination of responsibility.” See 48 C.F.R. §9.103(b). Additionally, under the Competition in Contracting Act, federal agencies may award procurement contracts only to “responsible bidders” or “responsible sources.” 10 U.S.C. §2305(b)(3) and 41 U.S.C. §3702(b) (“responsible bidders” in sealed bidding); 10 U.S.C. §2305(b)(4)(C) and 41 U.S.C. §3703(c) (“responsible sources” in negotiated procurements).

and an M&O contractor was not aware of the connection. However, the DOE officials also said that, if such a situation arose, the enhanced procurement authority would not be the only option because DOE's Office of Intelligence and Counterintelligence could contact the M&O contractor, which could then decide whether to terminate the supplier for convenience, or in the case of a potential supplier, choose another supplier without providing an explanation. Alternatively, some DOE officials said that the enhanced procurement authority could be useful in a case where DOE or NNSA directly contracted with a supplier. However, DOE and NNSA officials said they had not identified the extent to which their direct procurements were for components of covered systems to which the enhanced procurement authority could apply.

Under federal standards for internal control,¹² legislators and others may change either an entity's objectives or how an entity is to achieve an objective, and management should periodically review policies, procedures, and related control activities for continued relevance and effectiveness in achieving the entity's objectives or addressing related risk. Congress provided the Secretary with the enhanced procurement authority as an additional means to manage supply chain risk, but DOE has not fully assessed how the authority might help the department achieve its objectives. DOE officials said the Nuclear Enterprise Assurance Steering Group, which was still being formed, would be the appropriate group to develop processes for using the enhanced procurement authority. However, without assessing the circumstances under which the authority could be useful, DOE will have difficulty determining the authority's relevance and, if the authority is considered to be relevant, developing processes for using it. As a result, if the authority is needed, DOE may miss opportunities to use the authority to better manage supply chain risk. Additionally, under federal standards for internal control, management should communicate information externally so that external parties can help the entity achieve its objectives and address related risks. Without assessing the circumstances under which the authority could be useful, DOE will not have information about the relevance of the authority to support congressional decision-making about whether to extend the authority beyond June 2018, when it is currently scheduled to terminate.

¹²[GAO-14-704G](#).

DOE Has Not Examined Whether Adequate Resources Are in Place for Using the Enhanced Procurement Authority

DOE has identified resources for potentially using the enhanced procurement authority but has not examined whether these resources are adequate. DOE officials described two types of resources that were in place and that could be important in using the authority: (1) information on DOE, NNSA, or M&O contractor procurements and potential suppliers for those procurements that are gathered from open or classified sources or solicited from potential suppliers, and (2) trained personnel who can evaluate supply chain risks based on that information. For example, DOE's Office of Intelligence and Counterintelligence and OCIO officials said that they were involved in DOE's supply chain risk management efforts and that they could collect information on counterintelligence risks posed by potential suppliers to support the use of the enhanced procurement authority. Additionally, DOE has access to other data that could help support the use of the authority. A DOE official told us that, for DOE-led procurements related to covered systems, the department's Strategic Integrated Procurement Enterprise System (STRIPES)¹³ could be queried to identify whether a particular supplier of concern either had a contract or was bidding on a contract. However, DOE officials said since the database does not contain information about M&O contractors' suppliers, DOE would need to request such information from the M&O contractors.

Although DOE has not fully examined whether adequate resources are in place to support using the enhanced procurement authority, DOE and M&O contractor representatives expressed a range of opinions about whether adequate resources are available. For example, some DOE OCIO officials said that they did not anticipate a need for more resources because of the enhanced procurement authority. Some M&O contractor representatives told us that they might need more trained personnel if they had to follow additional procedures for examining whether potential suppliers had foreign ownership or connections. However, M&O contractor representatives said that they could not assess what resources might be needed to support the use of the authority without a requirement

¹³STRIPES is a web-based information management system for awarding and managing all unclassified DOE procurements and contracts. More specifically, STRIPES is used to manage activities throughout the procurement process including pre-solicitation documentation, solicitation development, evaluation, and award documentation. STRIPES can share data with other government-wide systems such as the Central Contractor Registration database.

to do so in their M&O contracts and that DOE has not established any such requirements. Establishing a requirement for the M&O contractors to assess available resources could be a component of any process DOE develops for using the authority however, as noted above, DOE has not developed processes for using the authority.

Under federal standards for internal control, personnel need to possess and maintain a level of competence that allows them to accomplish their assigned responsibilities, as established by management to achieve objectives. Management evaluates competence of personnel across the entity in relation to established policies. These standards also state that management should design a process that uses the entity's objectives and related risks to identify the information requirements needed to achieve the objectives and address the risks. If DOE determines that some circumstances warrant using the enhanced procurement authority, examining whether its resources are adequate could help ensure that the department can support using the authority in accordance with any processes that it develops.

Conclusions

DOE has taken several steps in recent years to increase its focus on managing supply chain risk. However, 2 years after Congress provided the Secretary with enhanced procurement authority to help manage supply chain risk DOE has not used and has not developed processes for using the authority. While DOE officials expect that instances under which the authority would be useful would be infrequent, given other options DOE and its M&O contractors have to manage risks, DOE has not fully assessed the circumstances where the authority could be useful, consistent with federal standards that call for management to periodically review control activities for relevance and effectiveness. Without assessing the circumstances under which the enhanced procurement authority could be useful, DOE will not know how, if at all, the authority could help it achieve its objective of managing supply chain risk and will not be able to provide information about the relevance of the authority to support congressional decision-making about whether to extend the authority beyond its current termination date. Further, because DOE has not developed processes for using the authority, DOE also has not assessed whether adequate resources—trained personnel and information—are in place to support such processes. Examining whether adequate resources are in place, consistent with internal control standards, could help provide assurance that the resources are available to support using the authority in accordance with any processes that DOE develops.

Recommendation for Executive Action

To ensure that DOE's control activities continue to be relevant and effective for managing supply chain risk, the Secretary should direct the Under Secretary for Nuclear Security, as the Administrator of the NNSA, to work with the Office of Intelligence and Counterintelligence and other DOE organizations, as appropriate, to assess the circumstances that might warrant using the enhanced procurement authority, and

- If this assessment identifies circumstances that might warrant using the authority, the Secretary should direct the Under Secretary for Nuclear Security to work with other DOE organizations, as appropriate, to establish processes for using it and examine whether adequate resources are in place to support those processes.
- Communicate the results of this assessment to the relevant congressional committees for their use in determining whether to extend the authority past its current termination date.

Agency Comments

We provided a draft of this report for review and comment to DOE. In written comments, reproduced in appendix I, DOE agreed with our recommendation. Specifically, NNSA said it will work with other DOE organizations, as appropriate, in an assessment of the situations that might warrant the use of the enhanced procurement authority. Should specific circumstances be identified to use the authority, NNSA will develop a process for its use, including an assessment of resources supporting the process. NNSA estimated these activities would be completed by December 31, 2016, and the results will be shared with relevant congressional committees. NNSA also provided technical comments that we incorporated as appropriate.

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

If you or your staff members have any questions about this report, please contact me at (202) 512-3841 or neumannj@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 the report are listed in appendix II.

A handwritten signature in black ink, appearing to read "John Neumann", with a long horizontal flourish extending to the right.

John Neumann
Director, Natural Resources and Environment

List of Committees

The Honorable John McCain
Chairman
The Honorable Jack Reed
Ranking Member
Committee on Armed Services
United States Senate

The Honorable Lisa Murkowski
Chairman
The Honorable Maria Cantwell
Ranking Member
Committee on Energy and Natural Resources
United States Senate

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

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

The Honorable Fred Upton
Chairman
The Honorable Frank Pallone, Jr.
Ranking Member
Committee on Energy and Commerce
House of Representatives

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

Appendix I: Comments from the Department of Energy



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



July 18, 2016

Mr. David C. Trimble
Director, National Resources
and Environment
U.S. Government Accountability Office
Washington, DC 20548

Dear Mr. Trimble:

Thank you for the opportunity to review the Government Accountability Office (GAO) draft report "NUCLEAR SUPPLY CHAIN: DOE Should Identify Circumstances for Using Enhanced Procurement Authority to Manage Risk" (GAO-16-710). We appreciate GAO's acknowledgment of the steps the National Nuclear Security Administration has taken in recent years to increase its focus on supply chain risk management. While the authority provides an additional option to help mitigate supply chain risk, we find that effective use of existing flexibilities should be sufficient to address most circumstances and, therefore, use of the enhanced procurement authority should be rare.

We agree with the auditor's recommendations to evaluate situations that might warrant the use of the enhanced procurement authority and, should specific circumstances be identified to require use of the authority, develop a process for its use, including an assessment of resources supporting the process. We will work with other Department of Energy organizations as appropriate in conducting the assessment. The estimated completion date for these activities is December 31, 2016. The results will be shared with relevant congressional committees as recommended.

Technical comments have been provided under separate cover to enhance the clarity and accuracy of the report. If you have any questions, regarding this response, please contact Dean Childs, Director, Audit Coordination and Internal Affairs, at (301) 903-1341.

Sincerely,

Frank G. Klotz



Appendix II: GAO Contact and Staff Acknowledgments

GAO Contact

John Neumann, (202) 512-3841 or neumannj@gao.gov

Staff Acknowledgments

In addition to the contact named above, Christopher Murray, Assistant Director; Pamela Davidson; Ellen Fried; Daniel Semick; Alexandra Stone; and Barbara Timmerman made key contributions to this report.

Appendix III: Accessible Data

Agency Comment Letter

Text of Appendix I: Comments from the Department of Energy

Page 1

Department of Energy

Under Secretary for Nuclear Security

Administrator, National Nuclear Security Administration

Washington, DC 20585

July 18, 2016

Mr. David C. Trimble

Director, National Resources and Environment

U.S. Government Accountability Office

Washington, DC 20548

Dear Mr. Trimble:

Thank you for the opportunity to review the Government Accountability Office (GAO) draft report "NUCLEAR SUPPLY CHAIN: DOE Should Identify Circumstances for Using Enhanced Procurement Authority to Manage Risk" (GAO-16-710). We appreciate GAO's acknowledgment of the steps the National Nuclear Security Administration has taken in recent years to increase its focus on supply chain risk management. While the authority provides an additional option to help mitigate supply chain risk, we find that effective use of existing flexibilities should be sufficient to address most circumstances and, therefore, use of the enhanced procurement authority should be rare.

We agree with the auditor's recommendations to evaluate situations that might warrant the use of the enhanced procurement authority and, should

specific circumstances be identified to require use of the authority, develop a process for its use, including an assessment of resources supporting the process. We will work with other Department of Energy organizations as appropriate in conducting the assessment. The estimated completion date for these activities is December 31, 2016. The results will be shared with relevant congressional committees as recommended.

Technical comments have been provided under separate cover to enhance the clarity and accuracy of the report. If you have any questions, regarding this response, please contact Dean Childs, Director, Audit Coordination and Internal Affairs, at (301) 903-1341.

Sincerely,

Frank G. Klotz

Accessible Text

Accessible Text for Figure 1: Selected Activities of Seven National Nuclear Security Administration Sites in Our Review

Lawrence Livermore National Laboratory (Livermore, CA): Performs research and development for nuclear components of nuclear weapons; supports surveillance, assessment, and refurbishment of the nuclear weapons stockpile; performs research on high explosives.

Sandia National Laboratories (Albuquerque, NM): Performs research and development for nonnuclear components of nuclear weapons; supports surveillance, assessment, and refurbishment of the nuclear weapons stockpile; conducts environmental testing of nuclear weapons systems and is responsible for the engineering of nonnuclear components and production of some of these components.

Los Alamos National Laboratory (Los Alamos, NM): Performs research and development for nuclear components of nuclear weapons; supports surveillance, assessment, and refurbishment of the nuclear weapons stockpile; manufactures plutonium components and weapons detonators; and conducts other activities.

Kansas City National Security Campus (Kansas City, MO): Manufactures and procures nonnuclear components for nuclear weapons, including electrical, electronic, mechanical, and plastic components.

Y-12 National Security Complex (Oak Ridge, TN): Manufactures components for nuclear weapons, including uranium components; evaluates, tests, assembles, and disassembles these components; supplies highly enriched uranium for use in naval reactors.

Pantex Plant (Amarillo, TX): Assembles nuclear and nonnuclear components into nuclear weapons; conducts disassembly, testing, quality assurance, repair, refurbishment, retirement, and final disposition of nuclear weapon assemblies, components, and materials; fabricates chemical high explosives for nuclear weapons applications.

Nevada National Security Site (Mercury, NV): Conducts high-hazard operations, testing, and training in support of the National Nuclear Security Administration (NNSA), the Department of Defense, and other federal agencies; maintains the capability to resume underground nuclear testing should the President deem necessary.

Sources: NNSA; Map Resources (map). | GAO-16-710

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 GAO's website (<http://www.gao.gov>). Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to <http://www.gao.gov> and select "E-mail Updates."

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, <http://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](#), [Twitter](#), and [YouTube](#).
Subscribe to our [RSS Feeds](#) or [E-mail Updates](#). Listen to our [Podcasts](#).
Visit GAO on the web at www.gao.gov.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Website: <http://www.gao.gov/fraudnet/fraudnet.htm>

E-mail: fraudnet@gao.gov

Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Katherine Siggerud, Managing Director, siggerudk@gao.gov, (202) 512-4400,
U.S. Government Accountability Office, 441 G Street NW, Room 7125,
Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548

Strategic Planning and External Liaison

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