

SUBJECT: MANAGEMENT OF THE DEPARTMENT OF ENERGY NUCLEAR
SECURITY ENTERPRISE

1. PURPOSE.

- a. To establish the authorities and responsibilities of the National Nuclear Security Administration (NNSA) for management of the Department of Energy (DOE) Nuclear Security Enterprise (NSE) in accordance with Title XXXII of Public Law 106-65, the National Defense Authorization Act for Fiscal Year 2000, as amended [National Nuclear Security Administration (NNSA) Act]. Specifically:
 - (1) Maintaining and enhancing the safety, reliability, and performance of the United States (U.S.) nuclear weapons stockpile, including the ability to design, produce, and test, in order to meet national security requirements
 - (2) Directing, managing, and overseeing the nuclear weapons productions facilities and national security laboratories
 - (3) Directing, managing, and overseeing assets to respond to incidents involving nuclear weapons and materials
- b. To emphasize that the management of the U.S. nuclear weapons stockpile is DOE's highest priority for NNSA and the NSE.
- c. To affirm the authority and responsibility of the NNSA to sustain and improve the capabilities, technical expertise, and infrastructure of the NSE to maintain and enhance the safety, reliability, and performance of the nuclear weapons stockpile in accordance with Presidential Directives and the Atomic Energy Act of 1954, as amended.
- d. To promote effective, efficient use of NSE capabilities and resources to manage the stewardship of the U.S. nuclear weapons stockpile.
- e. To establish NNSA authority and responsibility to ensure by means of policy directives and administrative procedures that the use of NSE capabilities and resources employed in support of DOE's non-weapon responsibilities or other programs of national interest do not adversely impact or impede the stockpile stewardship activities and the management of the nuclear weapons stockpile.

2. CANCELLATION. DOE O 452.3, *Management of the Department of Energy Weapon Complex*, dated 6-8-05. Cancellation of a directive does not, by itself, modify or otherwise affect any contractual or regulatory obligation to comply with the directive. Contractor Requirements Documents (CRDs) that have been incorporated into a

contract remain in effect throughout the term of the contract unless and until the contract is modified to either eliminate requirements that are no longer applicable or substitute a new set of requirements.

3. APPLICABILITY.

a. Departmental Applicability.

- (1) Except for the equivalencies/exemptions in paragraph 3.c, this Order applies to NNSA employees and other DOE elements that are involved in or interact with management of the NSE. (See Attachment 1).
- (2) The NNSA Administrator must assure that its employees comply with their responsibilities under this directive. Nothing in this directive will be construed to interfere with the NNSA Administrator's authority under section 3212(d) of Public Law (P.L.) 106-65 to establish Administration-specific policies, unless disapproved by the Secretary

b. DOE Contractors.

- (1) Except for the equivalencies/exemptions in paragraph 3.c, the Contractor Requirements Document (CRD), Attachment 2, sets forth requirements of this Order that apply to contractors whose contracts include the CRD.
- (2) This CRD must be included in NSE contracts involving the management, design, construction, operations, and decommissioning of defense nuclear facilities; or equipment or any activities involving the storage, handling, or use of special nuclear materials, radioactive materials, high explosives, and high-intensity lasers. NSE contractors (at Pantex Plant, Y-12 National Security Complex, Kansas City National Security Campus, Sandia National Laboratories, Los Alamos National Laboratory, Lawrence Livermore National Laboratory, Savannah River Site and the Nevada National Security Site) must comply with the CRD or other requirements made part of the laws, regulations, and DOE directives clause of the contracts.
- (3) As the laws, regulations, and DOE directives clause of contracts states, regardless of the performer of the work, the contractor with the CRD incorporated into its contract is responsible for compliance with the requirements of the CRD.
- (4) An affected contractor is responsible for flowing down requirements of this CRD to subcontractors at any tier to the extent necessary to ensure contractor compliance with the requirements.

- (5) In doing so, the contractor must not flow down requirements to subcontractors unnecessarily or imprudently. That is, the contractor must both—
 - (a) ensure that it and its subcontractors comply with the requirements of the CRD to the extent necessary to ensure the contractor's compliance and safe performance of work and
 - (b) incur only costs that would be incurred by a prudent person in the conduct of competitive business.

c. Equivalencies / Exemptions for DOE O 452.3A

- (1) Equivalency. The Deputy Administrator for Naval Reactors (Director) implements and oversees requirements and practices pertaining to this Order for activities under the Director's cognizance, to ensure consistency through the joint Navy/DOE Naval Nuclear Propulsion Program, and as deemed appropriate in accordance with the responsibilities and authorities assigned by Executive Order 12344, codified by 50 USC sections 2406 and 2511.
- (2) Exemption. All DOE elements except those listed in Attachment 1.

4. REQUIREMENTS.

- a. The U.S. nuclear weapons stockpile must be the highest priority in the planning, programming, budgeting, execution, and evaluation of NSE work.
- b. In accordance with the Homeland Security Act of 2002 (P.L.107-296) and DOE O 484.1 Admin Chg 2, *Reimbursable Work for the Department of Homeland Security*, and consistent with resources provided, Department of Homeland Security (DHS) projects must be prioritized on an equal basis with the nuclear weapons program and given higher priority status than Strategic Partnership Projects (SPP).

Notwithstanding any other law governing the administration, mission, use, or operations of any of the Department of Energy national laboratories and sites, such laboratories and sites are authorized to accept and perform work for the Secretary, consistent with resources provided, and perform such work on an equal basis to other missions at the laboratory and not on a noninterference basis with other missions of such laboratory or site.
[P.L.107-296, section 309(a)(2)]

- c. Requests for NSE capabilities and resources in support of non-weapon missions or other programs of national interest must be accepted and conducted in such a manner as to avoid adverse impact or impediments to the management of the U.S. nuclear weapons stockpile in accordance with DOE O 481.1C *Strategic Partnership Projects [Formerly Known As Work for Others (Non-Department Of Energy Funded Work)]*.
- d. Situations in which conflicts arise between DHS and the nuclear weapons program over competing priorities for limited technical resources must be brought to the attention of the NNSA Administrator through the Deputy Administrator for Defense Programs for coordination and resolution with the Secretary and DHS.
- e. NSE national security mission requirements must be prioritized taking into account the following objectives:
 - (1) Maintain and enhance the existing nuclear weapons stockpile in accordance with Presidential Directives and the President's annual Nuclear Weapons Stockpile Memorandum in accordance with—
 - (a) DOE O 452.1E, Nuclear Explosive and Weapons Surety Program, dated 1-26-2015;
 - (b) DOE O 452.2E, Nuclear Explosive Safety, dated 1-26-2015;
 - (c) DOE O 452.4C, Security and Use Control of Nuclear Explosives and Nuclear Weapons, dated 8-28-2015;
 - (d) DOE O 452.6A, Nuclear Weapon Surety Interface with the Department of Defense dated 4-14-2009;

- (e) DOE O 452.7, Protection of Use Control Vulnerabilities and Designs, dated 5-14- 2010;
 - (f) DOE O 452.8, *Control of Nuclear Weapon Data*, dated 7-21-2010; and
 - (g) DOE O 414.1D Admin Chg 1, *Quality Assurance*, dated 5-8-2013.
- (2) Preserve NSE research, development, and infrastructure to support applied research, development, testing, and production capabilities necessary to maintain the nuclear weapons stockpile, to support the annual stockpile assessment, and to address scientific and engineering issues pertinent to stockpile stewardship.
 - (3) Use the established Strategic Partnership Projects (SPP) administrative processes to confirm that projects requested by other Federal agencies through SPP channels must not interfere with nuclear weapons programs or create detrimental burdens on NNSA resources in the future.
 - (4) Meet the immediate needs of the nuclear weapons stockpile as directed by the production and planning directive—
 - (a) replacing limited-life components;
 - (b) repairing weapons; and
 - (c) providing safe, secure transport of warheads, components, and nuclear materials.
 - (5) Conduct surveillance of the stockpile to assess the safety, security, and reliability of the warheads, including disassembly and inspection of weapons, conducting flight and laboratory tests, developing enhanced surveillance techniques, and supporting the annual stockpile assessment.
 - (6) Develop and maintain the responsive infrastructure necessary to support national security needs.
 - (7) Develop and apply comprehensive assessment methodologies, plans, and experimental tools to advance the understanding of scientific and technical issues affecting the safety, reliability, or performance of nuclear weapons.
 - (8) Stage and dismantle nuclear weapons removed from the stockpile safely and securely.
 - (9) Manage the monitored storage and disposition of legacy and newly generated waste within the NSE in compliance with applicable Federal laws and regulations pertaining to protecting the environment, safety, and health.

- f. NSE resources or capabilities must be managed effectively and efficiently to comply with national security mission requirements by establishing policies and processes to implement these requirements.
- g. The Memorandum of Agreement executed between DOE and the Department of Homeland Security states that appropriate mechanisms must be established to resolve any issues relating to prioritization of work. These mechanisms must be administered by using the SPP review process to identify instances of constraint in resource availability between the nuclear weapons program and DHS so that the resource availability conflict can be resolved in a timely manner by the appropriate level of NNSA management.
- h. Non-weapon work sponsored by the Department of Defense, agencies of the Intelligence Community, and the Nuclear Regulatory Commission must be given priority consideration when the work relates to national security in accordance with DOE O 481.1C, *Strategic Partnership Projects [Formerly Known as Work for Others (Non-Department Of Energy Funded Work)]*.
- i. Establish a tailored approach to program management of nuclear weapons stockpile activities that considers the complexity, size, nature, and visibility of the NSE activities and balances anticipated gains against implementation costs and requires the following:
 - (1) Conduct program and project management for the acquisition of capital assets in accordance with DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, dated 11-29-2010.
 - (2) Manage activities that require a Selected Acquisition Report (SAR) to Congress in accordance with the *Nuclear Weapons Council (NWC) approved Procedural Guidelines for the Phase 6.X Process*, issued December 16, 2015 and established policies and procedures.
 - (3) Manage all other activities using established policies and procedures.

5. RESPONSIBILITIES.

- a. Secretary of Energy.
 - (1) Ensures that the primary NSE mission remains the management of the nuclear weapons program in accordance with Presidential directives and the annual Nuclear Weapons Stockpile Memorandum.
 - (2) Ensures that other programs within the NSE do not adversely impact the nuclear weapons program mission and responsibilities.
 - (3) Establishes lines of authority for NSE direction and management through the NNSA Administrator to the Deputy Administrator for Defense Programs.

- (4) Designates the NNSA Administrator as the Office of Primary Interest for establishing requirements that apply to contracts for management of NSE sites and facilities.
- (5) Resolves NSE management issues that are of overriding importance to the interests of the national security.
- (6) Serves as the final decision-maker in the resolution of conflicts between NNSA and DHS relating to prioritized assignment of limited scientific and technical resources of the national weapons laboratories between requirements of stockpile stewardship and the DHS.

b. NNSA Administrator.

- (1) As designated by the Secretary of Energy, serves as the Office of Primary Interest for administration of the CRD (Attachment 2 of this Order) for NSE contractors.
- (2) Develops overall strategy and program management review procedures to ensure that the U.S. nuclear weapons stockpile is given the highest priority in the planning, programming, budgeting, execution, and evaluation of NSE work.
- (3) Ensures that NSE work is managed in accordance with established directives, policies, business requirements, and processes to sustain and improve its capability to maintain and enhance the safety, reliability, and performance of the U.S. nuclear weapons stockpile, including the ability to design, assess, produce, and test existing, modified, or new weapons to meet national security requirements.
- (4) Ensures that all NSE work is performed consistent with the policies and principles of security and protection of the environment and the safety and health of the public and of the workforce.
- (5) Ensures that NSE technical capabilities and resources in support of responsibilities not related to the nuclear weapons program do not adversely impact or impede management of the U.S. nuclear weapons stockpile.
- (6) Ensures DHS work at DOE is performed on an equal basis and does not interfere with other missions of such laboratory missions in accordance with the Homeland Security Act, section 309(a)(2) and DOE O 484.1 Admin Chg 2, *Reimbursable Work for the Department of Homeland Security*.
- (7) Ensures that priority consideration is given to non-weapon work related to compelling national security concerns and sponsored by the Department of Defense, the Nuclear Regulatory Commission, or U.S. Intelligence

Community in accordance with DOE O 481.1C *Strategic Partnership Projects [Formerly Known as Work for Others (Non-Department of Energy Funded Work)]*.

- (8) Administers NSE contracts, including those for management and operations of nuclear weapons production facilities and the national laboratories.
- (9) Involves field office managers in NSE policy and planning.
- (10) Ensures that procedures are established and enforced at all sites and facilities of the NSE to ensure highly effective levels of protection and accountability for classified information in custody of laboratories, plants, and facilities of the NSE.
- (11) Serves as a member of the Nuclear Weapons Council (NWC) as specified in 10 USC§179 and chair the Council meeting whenever the matter under consideration is within the primary responsibility or concern of the DOE, as determined by majority vote of the Council as provided in 10 USC§179(b)(2).

c. NNSA Deputy Administrator for Defense Programs.

- (1) Ensures that the NSE continues to fulfill the nuclear weapons and national security mission requirements through the planning, programming, budgeting, execution, and evaluation cycle.
- (2) Ensures that all NSE work is performed in accordance with policies and principles for maintaining security and accountability for classified information and nuclear materials, protecting the environment, and safeguarding the safety and health of the public and the workforce.
- (3) Reports to the NNSA Administrator any potential for or actual adverse impact on the work of the NSE nuclear weapons stockpile mission that might result from the allocation of technical resources and capabilities to ongoing, new, or proposed SPP.
- (4) Uses SPP administrative procedures to evaluate and set priorities for national security work sponsored by the DHS, the Department of Defense, the Nuclear Regulatory Commission, or the Intelligence Community.
- (5) Provides priority consideration when non-weapon work sponsored by the Department of Defense, the Nuclear Regulatory Commission, or Intelligence Community is related to national security.
- (6) Ensures that NSE program priorities, strategic objectives, and work authorizations are identified and communicated, and that programs are

managed in accordance with established policies, business requirements, and processes.

- (7) In coordination with the field office managers, ensures that administrative oversight and tracking of SPP within the NSE is in place to assure that SPP are properly monitored, and that the resources required to support SPP do not adversely affect the performance of nuclear weapons program responsibilities.
- (8) Promotes the seamless integration of NSE agencies to meet national security mission requirements by-
 - (a) Establishing policies and processes for implementation of these requirements
 - (b) Ensuring accountability and maximize credibility in cost, schedule, and performance reporting
 - (c) Identifying the total program cost and the major drivers of the cost and;
 - (d) Directing independent assessment of a program to validate information before submission to the NNSA Administrator.
- (9) Reports directly to the NNSA Administrator in a timely manner all matters pertaining to availability of NSE resources, constraints, capabilities, performance, and mission and actual or potential conflicts in priorities to meet national security requirements.
- (10) Reviews and concurs in proposed DOE directives that may apply to the NSE.
- (11) Manages programs through the application of a systems engineering approach that optimizes total system performance and minimizes total ownership costs.
- (12) Manages the nation's investments in technologies, programs, and product support necessary to achieve the National Security Strategy and support the nuclear weapon stockpile. Posture the investment strategy to support not only current stockpile needs, but also stockpile modernization.
- (13) Meets mission requirements and needs with measurable improvements to mission capability and operational support, in a timely manner, and at a fair and reasonable price.
- (14) Serves as the Co-Chair of the Nuclear Weapons Standing & Safety Committee consistent with the NWC flexibility to establish support functions to perform the NWC responsibilities.

- d. Chief and Associate Administrator for Defense Nuclear Security.
- (1) Responsible for development and implementation of security programs, operations and facilities for the NSE, including physical security, personnel security, material control and accountability, classified and controlled information protection, and technical security.
 - (2) Oversees and ensures effective compliance with safeguards and security policy in accordance with P.L. 106-65, Section 3232c; Title 50 United States Code (U.S.C.) 2422; and DOE P 470.1B, *Safeguards and Security Program*, dated 2-10-2016.
 - (3) Informs the Deputy Administrator for Defense Programs when significant changes in the security protection requirement from long-range projections occur with potential to adversely affect or impede the nuclear weapons stockpile activities of the NSE.
- e. Associate Under Secretary for Environment, Health, Safety and Security.
- (1) Oversees and monitors NSE safety and environmental assessments and industrial/radiological health and safety and environmental practices not associated with safety of weapon design, assembly, disassembly, test, and transportation.
 - (2) Advises the Administrator or Deputy Administrators, as appropriate and in accordance with the Departmental directives and principles for protecting the environment, and safeguarding the safety and health of the public and the workforce, on NNSA and NSE compliance with and implementation of such policies, orders, and related regulations.
 - (3) Coordinates with NNSA in the review and development of comments and DOE positions and policies related to environmental, health or safety related regulations that may impact the NSE or associated operations.
 - (4) Develops and maintains quality assurance policy and requirements (including DOE Order 414.1D) in compliance with Title 10 Code of Federal Regulations (CFR) Subpart A §830.121, *Quality Assurance Program (QAP)*, and with guides and standards for all DOE/NNSA work.
 - (5) Provides implementation, advice, assistance, and QAP reviews to NNSA program elements and contractors.
 - (6) Serves as the central point of contact for coordination within DOE/NNSA and liaison with other agencies and groups for development of QAP, requirements, guides, and standards.

- (7) Reviews proposed statutes, regulations, standards, DOE/NNSA directives, and Defense Nuclear Facility Safety Board documents for applicability to and potential impact on DOE/NNSA quality programs.

f. Associate Administrator for Safety, Infrastructure & Operations.

- (1) Ensures that NSE facilities are available and maintain compliance and accountability with safety and environmental regulations; and meet accepted standards for waste management, industrial health and safety, and environmental protection.
- (2) Oversees and ensures effective compliance with safety and environmental assessments and waste management, industrial/radiological health and safety, and environmental practices for the NSE.
- (3) Informs the Deputy Administrator for Defense Programs when significant changes from long-range projections occur with potential to adversely affect or impede the nuclear weapons stockpile activities of the NSE.

g. Manager, Field or Production Office (NNSA, Kansas City, Sandia, Los Alamos, Livermore, Savannah River, Nevada).

- (1) Notify contracting officers when contracts related to the management of sites and facilities of the NSE are affected by requirements of this Order.
- (2) Report to the NNSA Administrator on matters pertaining to this Order or affecting the NSE, including submittal of the long-range work projections and potentially negative issues requiring the Administrator's attention.
- (3) Provide NSE administrative oversight and tracking in coordination with the Deputy Administrator for Defense Programs to ensure that SPP are monitored properly and that the resources required to support SPP do not adversely affect nuclear weapons program responsibilities.
- (4) Ensure that organizations and contractors under their cognizance comply with this Order and that appropriate program administrative procedures are in place to assess all potential adverse impacts relative to acceptance of SPP.
- (5) Review and assess planned and assigned NSE work in accordance with this Order, NNSA and DP policies, and processes, approved work authorizations, and related Departmental directives and guidance provided by the NNSA Administrator.
- (6) Determine whether proposals for applying NSE resources or capabilities to SPP do not adversely affect execution of assigned programs or do not create detrimental future burden on NNSA resources.

- (7) Ensure that NSE work is performed at the site is conducted in accordance with the contractual and legal requirements and in compliance with applicable laws and regulations regarding public safety, worker health, and environmental protection.
 - (8) Communicate with other field and production offices to ensure integration of NSE work.
 - (9) Ensure that NSE program priorities, requirements, strategic objectives, and work authorizations are linked into contractor performance incentives.
 - (10) Advise the Deputy Administrator for Defense Programs on NSE policy and planning and ensure that programs are managed in accordance with guidelines established by directives, policies and processes. Ensure that the NSE accepts and provides technical support to DHS programs, which are given equal priority with the nuclear weapons program as required by P.L. 107-296.
 - (11) Monitor the SPP program and alert the NNSA Administrator, through Deputy Administrator for Defense Programs, of any actual or potential delay or adverse impact on a nuclear weapon program project caused by the acceptance of DHS support work.
 - (12) Ensure that NSE capabilities and resources in support of DOE's non-defense responsibilities or other programs for non-DOE entities do not adversely impact execution of assigned programs of the facility and do not create a detrimental future burden on the facility.
- h. Contracting Officers. Once notified, incorporate the CRD into the laws, regulations, and DOE directives clause of affected contracts for managing sites and facilities of the NSE.
7. REFERENCES. See Attachment 3
8. DEFINITIONS.
- a. **Long-range projections**: 5- to 10-year estimates of weapon and non-weapon work to be accomplished at NSE facilities, based on broad guidance and constraints provided by Headquarters NNSA and the President's latest budget. They include descriptions of—
 - (1) the general nature and scope of the work involved;
 - (2) associated annual manpower, funding, technical expertise required; new facility requirements broken down in accordance with each sponsor's area of responsibility; and

- (3) additional resources and expertise needed to support DHS or SPP requests for support.

Capital equipment and plant facilities not required primarily for a single sponsor are categorized as general support. Details of content, format, publication, and scheduling are prescribed by the Deputy Administrator for Defense Programs. To provide commonality with other Departmental documentation, the laboratory long-range projections are identified as institutional plans.

- b. **Nuclear Security Enterprise (NSE)**: the national security laboratories, nuclear weapon production facilities, and any DOE facility that the Secretary of Energy, in consultation with the Administrator of the NNSA and the Congress, designates a part of the NSE, including—
 - (1) Lawrence Livermore National Laboratory, Livermore, California;
 - (2) Los Alamos National Laboratory, Los Alamos, New Mexico;
 - (3) Sandia National Laboratories, Albuquerque, New Mexico, and Livermore, California;
 - (4) Pantex Plant, Amarillo, Texas;
 - (5) Kansas City National Security Campus, Kansas City, Missouri;
 - (6) Y-12 National Security Complex, Oak Ridge, Tennessee;
 - (7) Tritium operations facilities at the Savannah River Site, Aiken, South Carolina; and
 - (8) Nevada National Security Site, Nevada.
9. **CONTACT**. Questions concerning this Order should be addressed to the NNSA/DP Office of Systems Engineering and Integration, at 202-586-6506.

BY ORDER OF THE SECRETARY OF ENERGY

ELIZABETH SHERWOOD-RANDALL
Deputy Secretary

ATTACHMENT 1 - DOE ELEMENTS TO WHICH DOE O 452.3A, *Management of the Department of Energy Nuclear Security Enterprise*, IS APPLICABLE

Office of the Secretary

Office of the Under Secretary for Nuclear Security and National Nuclear Security Administration

Office of Environment, Health, Safety & Security

ATTACHMENT 2 - CONTRACTOR REQUIREMENTS DOCUMENT

DOE O 452.3A, *Management of the Department of Energy Nuclear Security Enterprise*

This Contractor Requirements Document (CRD) establishes requirements for Department of Energy (DOE) and National Nuclear Security Administration (NNSA) contractors within the DOE Nuclear Security Enterprise (NSE).

Regardless of the performer of the work, the contractor is responsible for complying with the requirements of this CRD. The contractor is responsible for flowing down the requirements of this CRD to subcontractors at any tier to the extent necessary to ensure the contractor's compliance with the requirements. In doing so, the contractor must not flow down requirements to subcontractors unnecessarily or imprudently. That is, the contractor must ensure that it and its subcontractors comply with the requirements of this CRD and incur only those costs that would be incurred by a prudent person in the conduct of competitive business.

1. Manage facilities and sites of NSE in accordance with DOE policies that give highest priority to U.S. nuclear weapons stockpile activities.
2. Maintain and improve the U.S. nuclear weapons stockpile safety, reliability, and performance and maintain the capabilities to design, produce, and test weapons to meet national security requirements in accordance with guidance, direction of Deputy Administrator for Defense Programs.
3. Document plans and program functions and identify fiscal requirements for NSE missions to support DOE budget planning.
4. Submit to the NNSA field office long-range projections of work to be accomplished including Strategic Partnership Projects (SPP) to support DOE and NNSA institutional planning requirements.
5. During quarterly NSE program reviews, assess SPP to determine whether there is actual or potential for adverse impact on essential work for the nuclear weapons program.
6. Support DOE's non-weapon responsibilities or other programs of national interest as directed, while ensuring that this work does not impact or impede management of the U.S. nuclear weapons stockpile.
7. Manage NSE facilities and programs in a manner consistent with the following national security mission requirements:

- a. Conduct stockpile surveillance to assess the safety, security, and reliability of the weapons including disassembly and inspection of weapons, conducting flight and laboratory tests, developing enhanced surveillance techniques, and supporting Annual Certification.
 - b. Develop and apply comprehensive methodologies, plans, and tools for certification; including high-energy density physics experiments, simulations, hydrodynamic testing, engineering sciences, and materials science.
 - c. Develop options for the future nuclear deterrent working with the Department of Defense.
 - d. Extend the lifetimes of weapons currently in the stockpile and incorporate modern technologies and enhanced surety features where necessary in accordance with the Nuclear Weapons Council planning.
 - e. Develop and restore required manufacturing capabilities for identified weapon priorities.
 - f. Plan, complete, and operate required NSE capital projects required to meet U.S. nuclear weapons stockpile activities.
 - g. Be ready to conduct nuclear tests.
 - h. Maintain a flexible, responsive, robust infrastructure, including Research and Development, Engineering, Production, and Testing required to support U.S. nuclear weapons stockpile activities.
 - i. Stage and dismantle safely and securely nuclear weapons that have been removed from the stockpile.
8. Conduct all NSE work consistent with the principles of protecting the environment and safeguarding the safety and health of the public and of the workforce.
 9. Use NSE capabilities and resources in managing the U.S. nuclear weapons stockpile effectively and efficiently by implementing the established directives, policies and processes.

ATTACHMENT 3 - REFERENCES

1. P.L. 106-65, National Nuclear Security Administration Act, the National Defense Authorization Act for Fiscal Year 2000, (50 USC 2404), as amended, establishes a separately organized agency with the Department of Energy.
2. P.L. 107-296, Homeland Security Act of 2002, Section 309 on requirements relating to utilization of Department of Energy National Laboratories and Sites in Support of Homeland Security activities, dated November 25, 2002.
3. Memorandum of Agreement between Department of Energy and Department of Homeland Security (February 28, 2003), which allows work directly funded by DHS to be accepted, performed, and administered in accordance with the terms of the MOA and a Department of Energy Reimbursable Work Procedures for the Department of Homeland Security.
4. Federal Acquisition Regulation (FAR), Subpart 17.5, *Interagency Acquisitions under the Economy Act*, which prescribes policies and procedures for a Federal agency to obtain supplies and services from another Federal agency.
5. FAR 35.017, *Federally Funded Research and Development Centers (FFRDCs)*, which establishes Government-wide policies for review and termination of FFRDCs.
6. NNSA Policy Letter NAP-24A, *Weapon Quality Policy*, dated 11-24-2015, develops, maintains and assures NSE Weapon Quality and Nuclear Enterprise Assurance (NEA) policies and requirements in support of all NSE Nuclear Weapon and Nuclear Weapon related design and production activities.
7. DOE O 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, dated 11-29-2010 provides the Department of Energy (DOE) Elements, including the National Nuclear Security Administration (NNSA), with program and project management direction for the acquisition of capital assets.
8. DOE O 414.1D, *Quality Assurance*, dated 4-25-2011 ensures that DOE, including NNSA, products, and services meet or exceed customers' requirements and expectations.
9. DOE O 452.1E, *Nuclear Explosive and Weapons Surety Program*, dated 1-26-2015, establishes the DOE Nuclear Explosive Surety Standards and specifies other requirements and responsibilities for the Nuclear Explosive and Weapon Surety Program to prevent unintended and unauthorized detonation and deliberate unauthorized use of nuclear explosives.
10. DOE O 452.2E, *Nuclear Explosive Safety*, dated 1-25-2015, establishes DOE objectives, requirements, and responsibilities to implement nuclear explosive safety for routine and planned nuclear explosive operations.

11. DOE O 452.4C, *Security and Use Control of Nuclear Explosives and Nuclear Weapons*, dated 8-28-2015, establishes the requirements to implement the nuclear explosive security and use control (UC) elements of DOE O 452.1E
12. DOE O 452.6A, *Nuclear Weapon Surety Interface with the Department of Defense*, dated 4-14-2009, establishes DOE and NNSA requirements and responsibilities for addressing joint nuclear weapon and nuclear weapon system surety activities in conjunction with the Department of Defense (DoD).
13. DOE O 452.7, *Protection of Use Control Vulnerabilities and Designs*, dated 5-14- 2010, establishes the policy, process and procedures for control of sensitive use control information in nuclear weapon data (NWD) categories Sigma 14 and Sigma 15 to ensure that dissemination of the information is restricted to individuals with valid need-to-know.
14. DOE O 452.8, *Control of Nuclear Weapon Data*, dated 7-21-2010; establishes the policy, process and procedures for control of nuclear weapon data to ensure that dissemination of the information is restricted to individuals with appropriate clearances, approved authorization and valid need-to-know in keeping with the Atomic Energy Act (as amended) stipulation of ensuring common defense and security.
15. DOE P 470.1B, *Safeguards and Security Program*, dated 2-10-2016, ensures that the Department of Energy efficiently and effectively meets all its obligations to protect Special Nuclear Material, other nuclear materials, classified matter, sensitive information, government property and facilities, and the safety and security of employees, contractors, and the general public.
16. DOE O 484.1, *Reimbursable Work for Department of Homeland Security*, dated 8-17-2006, with Administrative Change 2 dated 6-30-2014 and certified 1-15-2015, establishes DOE policies and procedures for the acceptance, performance, and administration of reimbursable work directly funded by the Department of Homeland Security.
17. DOE O 481.1C, *Strategic Partnership Projects [(Formerly Known as Work for Others (Non-Department of Energy Funded Work))]*, dated 1-24-2005, with Administrative Change 2 dated 3-9-2015. This order sets forth the objectives, applicability, requirements, and responsibilities for DOE Federal employees and DOE contractor personnel performing work and/or using DOE facilities to perform work that has not been directly funded by DOE appropriations for non-DOE entities.
18. Title 10 Code of Federal Regulations (CFR) Subpart A, *Quality Assurance Requirements*, § 830.121, *Quality Assurance Plan (QAP)*, which establishes quality assurance criteria for conducting activities that affect, or may affect, the nuclear safety of DOE nuclear facilities.
19. Executive Order 12344, *Naval Nuclear Propulsion Program*, dated 2-1-1982 and codified by 50 USC sections 2406 and 2511, establishes the roles and responsibilities for the Naval Nuclear Propulsion Program.

20. The National Defense Authorization Act for FY 2013, Section 4217, *Selected Acquisition Reports and Independent Cost Estimates on Life Extension Programs and New Nuclear Facilities*, issued January 2, 2013, establishes the requirements for reporting nuclear weapon systems undergoing life extension reporting to the congressional defense committees.
21. *Nuclear Weapons Council (NWC) approved Procedural Guidelines for the Phase 6.X Process*, issued December 16, 2015, describes the roles and functions of the NWC and the NWC Standing and Safety Committee, Department of Defense, and the Department of Energy/National Nuclear Security Administration for the Phase 6.X nuclear weapon refurbishment activities.
22. 10 U.S. Code § 179 - *Nuclear Weapons Council* provides for the establishment of the NWC and specific responsibilities, including evaluating, maintaining, and ensuring the safety, security, and control of the nuclear weapons stockpile, as well as developing nuclear weapons stockpile options. Public Law (P.L.) 112-239 amended the NWC responsibilities to include an annual certification of the sufficiency of the DOE/NNSA budget request to meet the NWC stockpile requirements.