SUBJECT:  MANAGEMENT OF THE DEPARTMENT OF ENERGY NUCLEAR WEAPONS COMPLEX

1. OBJECTIVES.

   a. To establish the authorities and responsibilities of the National Nuclear Security Administration (NNSA) for management of the Department of Energy (DOE) Nuclear Weapons Complex (NWC).

   b. To emphasize that the management of the United States (U.S.) nuclear weapons stockpile is DOE’s highest priority for NNSA and the NWC.

   c. To affirm the authority and responsibility of the NNSA to sustain and improve the capabilities, technical expertise, and infrastructure of the NWC 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 NWC 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 NWC capabilities and resources employed in support of DOE’s non-weapon responsibilities or other programs of national interest will not adversely impact or impede the stockpile stewardship activities and the management of the nuclear weapons stockpile.

2. CANCELLATION.  DOE O 5600.1, Management of the Department of Energy Weapon Program and Weapon Complex, dated 6-27-79.  Cancellation of an Order does not, by itself, modify or otherwise affect any contractual obligation to comply with the Order.  Canceled Orders that are incorporated by reference in a contract remain in effect until the contract is modified to delete the references to the requirements in the canceled Orders.

3. APPLICABILITY.

   a. DOE Elements.  Except for the exclusion in paragraph 3c, this Order applies to NNSA employees and other DOE elements that are involved in or interact with management of the NWC.  (See Attachment 1.)

      The NNSA Administrator shall assure that NNSA employees and contractors within the NWC comply with their respective requirements under this Order.

AVAILABLE ONLINE AT:  INITIATED BY:
www.directives.doe.gov  National Nuclear Security Administration
b. **NWC Contractors.**

(1) Except for the exclusions in paragraph 3c, the Contractor Requirements Document (CRD), Attachment 2, sets forth requirements of this Order that will apply to contractors whose contracts include the CRD.

(2) This CRD must be included in NWC 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. NWC contractors (at Pantex Plant, Y-12 National Security Complex, Kansas City Plant, Sandia National Laboratories, Los Alamos National Laboratory, Lawrence Livermore National Laboratory, Savannah River Site and the Nevada Test 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 will not flow down requirements to subcontractors unnecessarily or imprudently. That is, the contractor will 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. **Exclusions.**

(1) Activities conducted under the authority of the Director, Naval Nuclear Propulsion Program, pursuant to Executive Order 12344, as set forth in Public Law (P.L.) 98-525, the Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1985, and P.L. 106-65, the National Nuclear Security Administration Act.

(2) All DOE elements except those listed in Attachment 1.
4. **REQUIREMENTS.**

a. The U.S. nuclear weapons stockpile will be the highest priority in the planning, programming, budgeting, execution, and evaluation of NWC work.

b. In accordance with the Homeland Security Act of 2002 (P.L.107-296), and consistent with resources provided, Department of Homeland Security (DHS) projects will be prioritized on an equal basis with the nuclear weapons program and given higher priority status than work-for-others (WFO).

   *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 NWC capabilities and resources in support of non-weapon missions or other programs of national interest will 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.

d. Situations in which conflicts arise between DHS and the nuclear weapons program over competing priorities for limited technical resources will 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. NWC national security mission requirements will 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 452.1B, *Nuclear Explosive and Weapons Surety Program*, dated 8-6-01;

      b. DOE O 452.2B, *Safety of Nuclear Explosive Operations*, dated 8-7-01;

      c. DOE O 452.4A, *Security and Control of Nuclear Explosives and Nuclear Weapons*, dated 12-17-01; and

      d. DOE O 414.1B, *Quality Assurance*, dated 4-29-04.
Preserve NWC research and 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.

Use the established WFO administrative processes to confirm that projects requested by other Federal agencies through WFO channels will not interfere with nuclear weapons programs or create detrimental burdens on NNSA resources in the future.

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.

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.

Develop and maintain the responsive infrastructure necessary to support national security needs.

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.

Store and dismantle nuclear weapons removed from the stockpile safely and securely.

Manage the monitored storage and disposition of legacy and newly generated waste within the NWC in compliance with applicable Federal laws and regulations pertaining to protecting the environment, safety, and health.

NWC resources or capabilities will be managed effectively and efficiently to comply with national security mission requirements.

The Memorandum of Agreement executed between DOE and the Department of Homeland Security states that appropriate mechanisms will be established to
resolve any issues relating to prioritization of work. These mechanisms will be administered by using the WFO 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 will be given priority consideration when the work relates to national security.

5. **RESPONSIBILITIES.**

a. **Secretary of Energy.**

(1) Ensures that the primary NWC 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 NWC do not adversely impact the nuclear weapons program mission and responsibilities.

(3) Establishes lines of authority for NWC 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 NWC sites and facilities.

(5) Resolves NWC 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 NWC 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 NWC work.
Ensures that NWC work will be managed in accordance with NNSA Program Management Policy [NNSA Business Operating Plan (BOP) 006.001, dated 8-12-04] 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.

Ensures that all NWC 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.

Ensures that NWC 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.

Ensures that work performed for DHS at DOE is performed on an equal basis with and not on a noninterference basis with other missions of such laboratory missions [in accordance with the Homeland Security Act, section 309(a)(2)].

Ensures that priority consideration is given 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.

Administers NWC contracts, including those for management and operations of nuclear weapons production facilities and the national laboratories.

Involves site office managers in NWC policy and planning.

Ensures that procedures are established and enforced at all sites and facilities of the NWC to ensure highly effective levels of protection and accountability for classified information in custody of laboratories, plants, and facilities of the NWC.

c. NNSA Deputy Administrator for Defense Programs.

Ensures that the NWC continues to fulfill the nuclear weapons and national security mission requirements through the planning, programming, budgeting, execution, and evaluation cycle.

Ensures that all NWC 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 NWC nuclear weapons stockpile mission that might result from the allocation of technical resources and capabilities to ongoing, new, or proposed WFO projects.

(4) Uses WFO 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 NWC program priorities, strategic objectives, and work authorizations are identified and communicated, and that programs are managed in accordance with the guidelines established by the NNSA Program Management Policy.

(7) In coordination with the NNSA Service Center and site office managers, ensures that administrative oversight and tracking of WFO projects within the NWC is in place to assure that WFO projects are properly monitored, and that the resources required to support WFO projects do not adversely affect the performance of nuclear weapons program responsibilities.

(8) Promotes the seamless integration of NWC agencies to meet national security mission requirements.

(9) Reports directly to the NNSA Administrator in a timely manner all matters pertaining to availability of NWC resources, constraints, capabilities, performance, and mission and actual or potential conflicts in priorities to meet national security requirements.

(10) Ensures that NWC facilities maintain compliance and accountability with security, safety, and environmental regulations; and meet accepted standards for waste management, industrial health and safety, and environmental protection.

(11) Oversees and ensures effective compliance with security, safety and, environmental assessments and waste management; industrial/radiological health and safety, and environmental practices for the NWC.

(12) Reviews and concurs in proposed DOE directives that may apply to the NWC.
d. **Associate Administrator for Defense Nuclear Security.**

(1) Responsible for development and implementation of security programs for the NWC, including protection control and accountability of materials and for all physical and cyber security activities.

(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 O 470.1, *Safeguards and Security Program*, dated 9-28-95.

(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 NWC.

e. **Assistant Secretary for Environment, Safety and Health.**

(1) Oversees and monitors NWC 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 NWC 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 NWC or associated operations.

(4) Develops and maintains quality assurance policy (QAP) and requirements (including DOE Order 414.1B) in compliance with Title 10 Code of Federal Regulations (CFR) 830.121, Quality Assurance Requirements, 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. Manager, NNSA Service Center.

(1) Supports Headquarters and the site office managers in NWC management and stewardship and ensures that the NWC continues to meet the national security mission requirements.

(2) Supports the nuclear weapons program and national security mission requirements throughout the Department’s annual planning, programming, budgeting, execution, and evaluation cycle.

(3) Provides responsive business, technical, financial, and management advice and services to enable NNSA to accomplish the nuclear weapons stockpile stewardship mission successfully.

(4) Supports the oversight and integration of WFO activities among the NWC sites.

g. Managers, Site Offices (Pantex, Y-12, 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 NWC are affected by requirements of this Order.

(2) Report to the NNSA Administrator on matters pertaining to this Order or affecting the NWC, including submittal of the long-range work projections and potentially negative issues requiring the Administrator’s attention.

(3) In coordination with Deputy Administrator for Defense Programs and the NNSA Service Center, provide NWC administrative oversight and tracking to ensure that WFO projects are monitored properly and that the resources required to support WFO projects do not adversely affect nuclear weapons program responsibilities.

(4) Ensure that organizations and contractors under their cognizance comply with this Order and that appropriate under the WFO program administrative procedures are in place to assess all potential adverse impacts relative to acceptance of WFO.

(5) Review and assess planned and assigned NWC work in accordance with this Order, NNSA policy, approved work authorizations, and related Departmental directives and guidance provided by the NNSA Administrator.
(6) Determine whether proposals for applying NWC resources or capabilities to WFO projects will adversely affect execution of assigned programs or will create detrimental future burden on NNSA resources.

(7) Ensure that NWC 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 site offices to ensure integration of NWC work.

(9) Ensure that NWC program priorities, strategic objectives, and work authorizations are linked into contractor performance incentives.

(10) Advise the Deputy Administrator for Defense Programs on NWC policy and planning and ensure that programs are managed in accordance with guidelines established by NNSA Program Management Policy.

(11) Ensure that the NWC 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.

(12) Monitor the WFO 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.

(13) Ensure that site capabilities and resources in support of DOE’s non-defense responsibilities or other programs for non-DOE entities will not adversely impact execution of assigned programs of the facility and will not create a detrimental future burden on the facility.

h. Contracting Officers. Incorporate the CRD into the laws, regulations, and DOE directives clause of affected contracts for managing sites and facilities of the NWC.

6. DEFINITIONS.

a. Long-range projections are 5- to 10-year estimates of weapon and non-weapon work to be accomplished at NWC 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;
(3) new facility requirements broken down in accordance with each sponsor’s area of responsibility; and

(4) additional resources and expertise needed to support DHS or WFO 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. The NWC includes 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 NWC, 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 Plant, 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 Test Site, Nevada.

7. REFERENCES. See Attachment 3.

8. CONTACT. Questions concerning this Order should be addressed to the Office of Program Integration, at 202-586-2181.

SAMUEL W. BODMAN
Secretary of Energy
DOE ELEMENTS TO WHICH DOE O 452.3, *Management of the Department of Energy Nuclear Weapons Complex*, IS APPLICABLE

Office of the Secretary
National Nuclear Security Administration
Office of Environment, Safety and Health
CONTRACTOR REQUIREMENTS DOCUMENT

DOE O 452.3, Management of the Department of Energy Nuclear Weapons Complex

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

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 will 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 NWC 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 NWC missions to support DOE budget planning.

4. Submit to the NNSA site office long-range projections of work to be accomplished including work-for-others (WFO) to support DOE and NNSA institutional planning requirements.

5. During quarterly NWC program reviews, assess WFO 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 NWC 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 NWC 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. Store and dismantle safely and securely nuclear weapons that have been removed from the stockpile.

8. Conduct all NWC work consistent with the principles of protecting the environment and safeguarding the safety and health of the public and of the workforce.

9. Use NWC capabilities and resources in managing the U.S. nuclear weapons stockpile effectively and efficiently.
REFERENCES

   a. P.L. 106-377, the Department of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 2001;
   d. P.L. 108-136, the National Defense Authorization Act for Fiscal Year 2004; and

2. P.L. 72-212, the Economy Act of 1932, as amended (31 U.S.C. 1535), which authorizes an agency to place orders for goods and services, subject to availability, with another Government agency when the head of the ordering agency determines that it is in the best interest of the Government.

3. P.L. 83-703, the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), Sections 31, 32, and 33, which authorizes the conduct of research and development and certain training activities for non-DOE entities, provided that private facilities or laboratories are inadequate for that purpose. It authorizes such charges as may be appropriate for the conduct of those activities.

4. P.L. 93-438, Energy Reorganization Act of 1974, Section 205 (U.S.C. 5845), which requires Federal agencies to furnish to the Nuclear Regulatory Commission, on a reimbursable basis, such research services deemed necessary and requests for the performance of its function.


6. 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.

7. 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.
8. FAR 35.017, Federally Funded Research and Development Centers (FFRDCs), which establishes Government-wide policies for review and termination of FFRDCs.


11. DOE P 413.1, Program and Project Management Policy for the Planning, Programming, Budgeting, and Acquisition of Capital Assets, dated 6-10-00 and in accordance with the following Office of Management and Budget circulars:
   a. A-11, Preparation, Submission and Execution of the Budget (7-25-03), Part 3, Selected Actions Following Transmittal of the Budget.
   b. A-123 Management Accountability and Control (6-21-95).
   c. A-127, Financial Management Systems (7-23-93), and
   d. A-130, Management of Federal Information Resources (11-28-00).

12. DOE O 414.1B, Quality Assurance, dated 4-29-04.

13. DOE O 452.1B, Nuclear Explosive and Weapons Surety Program, dated 8-6-01.

14. DOE O 452.2B, Safety of Nuclear Explosive Operations, dated 8-7-01.

15. DOE O 452.4A, Security and Control of Nuclear Explosives and Nuclear Weapons, dated 12-17-01.


17. DOE N 481.1A, Reimbursable Work for Department of Homeland Security, dated 4-21-03, which authorizes a modified process for the acceptance, performance, and administration of work from the DHS by DOE contractor and federally operated laboratories, sites, and other facilities.

18. DOE O 481.1C, Work-for-Others (Non-Department of Energy Funded Work), dated 1-24-05. 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.

19. CFR 830.121, Quality Assurance Requirements.