nuclear weapons to support the United States' nuclear deterrent policy. The mission of the DOE nuclear weapons complex is to provide the nation with safe and reliable nuclear weapons and components so that an effective nuclear deterrent can be maintained into the foreseeable future, and to accomplish this in a way that protects the environment and the health and safety of workers and the public.

Recent changes in national security needs have necessitated corresponding changes in the way the Department must meet its responsibilities regarding the nation's nuclear weapons. As a result of international arms-control agreements (the START I treaty and the START II protocol) and unilateral decisions by the United States, the nation's stockpile will be significantly reduced by the year 2003. Consequently, the nation has halted the development of new nuclear weapons, has begun closing portions of the Complex, and is considering further consolidation or downsizing of the remaining elements in the Complex. In addition, the nation is observing a moratorium on nuclear testing and is pursuing a Comprehensive Test Ban Treaty.

However, international dangers remain and, as the President has emphasized, nuclear deterrence will continue to be a cornerstone of the United States' national security policy. Thus, the Department's responsibilities for ensuring the safety and reliability of the nation's nuclear weapons stockpile will also continue for the foreseeable future.

Because of the moratorium on nuclear testing, the termination of new nuclear weapons development and production, and the closure of several production facilities, a new approach to ensure confidence in the stockpile is needed. In announcing the indefinite extension of the nuclear testing moratorium (July 1993), President Clinton reaffirmed the importance of maintaining confidence in the enduring United States nuclear stockpile and the need to ensure that the nation's nuclear deterrent remains unquestioned during a test ban. By Presidential Decision Directive and Act of Congress (Pub. L. 103-160), the Department of Energy was directed to establish a stewardship program to ensure the preservation of the core intellectual and technical competencies of the United States in nuclear weapons in the absence of nuclear testing.

Without nuclear testing, this new approach must rely on scientific understanding and expert judgment to predict, identify, and correct problems affecting the safety and reliability of the stockpile. This program is essential if

the nation is to properly safeguard its nuclear weapons and maintain an unquestioned nuclear deterrent.

The SSM program is being developed to meet the challenges involved in ensuring the safety and reliability of the stockpile. Three particular challenges must be met:

- Fully supporting, at all times, the nation's nuclear deterrent with safe and reliable nuclear weapons, while transforming the nuclear weapons complex (laboratories and production facilities) to one that is more appropriate for the smaller stockpile.
- Preserving the core intellectual and technical competencies of the weapons laboratories. Without nuclear testing, confidence in the nation's nuclear deterrent will depend largely on the continued competency of the people who must make the scientific and technical judgments related to the safety and reliability of nuclear weapons.
- Ensuring that the activities needed to maintain the nation's nuclear deterrent are consistent with the nation's arms-control and nonproliferation objectives.

DOE Nuclear Weapons Complex: The current DOE nuclear weapons complex consists of 8 major facilities located in 7 states. Currently, the Complex maintains a limited capability to design and manufacture nuclear weapons; provides surveillance of and maintains nuclear weapons in the stockpile; and retires and disposes of nuclear weapons. Major facilities and their primary responsibilities within the Complex are listed below:

Pantex Plant (Amarillo, Texas)— Dismantles retired weapons; fabricates high explosives components; assembles high explosives, nuclear components, and nonnuclear components into nuclear weapons; repairs and modifies weapons; evaluates and performs nonnuclear testing of nuclear weapons.

Savannah River Site (SRS) (Aiken, South Carolina)—Tritium loading/unloading and surveillance of tritium reservoirs.

Y-12 Plant (Oak Ridge, Tennessee)— Maintains the capability to produce and assemble uranium and lithium components; recovers uranium and lithium materials from the component fabrication process and retired weapons; produces nonnuclear weapon components.

Kansas City Plant (KCP) (Kansas City, Missouri)—Manufactures nonnuclear weapons components.

Lawrence Livermore National
Laboratory (LLNL) (Livermore,
California)—Conducts research and
development of nuclear weapons;
designs and tests advanced technology

concepts; maintains a weapons design program; maintains a limited capability to fabricate plutonium components; provides safety and reliability assessments of the stockpile.

Los Alamos National Laboratory (LANL) (Los Alamos, New Mexico)— Conducts research and development of nuclear weapons; designs and tests advanced technology concepts; maintains a weapons design program; maintains a limited capability to fabricate plutonium components; provides safety and reliability assessments of the stockpile.

Sandia National Laboratories (SNL) (Albuquerque, New Mexico)—Conducts system engineering of nuclear weapons; designs and develops nonnuclear components; conducts field and laboratory nonnuclear testing; manufactures nonnuclear weapons components; and provides safety and reliability assessments of the stockpile.

Nevada Test Site (NTS) (Las Vegas, Nevada)—Maintains capability to conduct underground nuclear testing and nonnuclear experiments.

SSM Program Foundational Framework. In the SSM program and SSM PEIS, DOE will:

- Emphasize compliance with applicable laws and regulations, and accepted practices regarding industrial and weapons safety; safeguarding the health of Complex workers and the general public; protecting the environment; and ensuring the security of nuclear materials and weapons components.
- Safely and reliably maintain the nuclear weapons stockpile as directed by the President and mandated by Congress
- Analyze alternatives for configuration of the nuclear weapons complex that are reflective of, and consistent with, policy direction from the Nuclear Posture Review.
- Maximize efficiency and minimize costs associated with the maintenance of the weapons stockpile.
- Maximize the transfer of nonnuclear materials production activities to the private sector.
- Maintain core intellectual and technical competencies in nuclear weapons.
- Sustain confidence in safety and reliability of the stockpile in the absence of underground nuclear testing.
- Minimize the use of hazardous materials and the number and volume of waste streams.

PEIS Decisions. In addition to the PEIS, supporting cost, technical, and schedule studies will be prepared for the SSM program. The PEIS and these other studies will be balanced with