FY 1986-1991 Nuclear Weapons Stockpile

I approve the proposed Nuclear Weapons Stockpile Plan for the fiscal years 1986 through 1991 as described in enclosure (1) and as modified by enclosure (7), thereto. The stockpile levels represent authorized ceilings, not to be exceeded, except as provided below or otherwise approved by me.

For the period FY 1986-1991, the following are authorized:

2. DOE may produce and transfer to the Department of Defense (DOD) parts of nuclear weapons, not containing special nuclear materials, as may be agreed by DOE and DOD. These parts may be used in nuclear weapons, training programs, research and development, and production. Additionally, DOE may temporarily transfer parts or test units containing fissile materials or plutonium power supplies for development and flight testing programs.
All modernization programs will incorporate insensitive high explosive, where operationally feasible, to minimize the potential for nuclear material scattering in an accident or sabotage situation. Older weapons lacking modern features, that are planned for extended retention will be reviewed annually by DOD and DOE to determine if they should be included in the Stockpile Improvement Program.

1. Take the necessary steps to provide the needed capacity and capability for nuclear materials and weapons production throughout the full planning and projection periods covered by the stockpile memorandum.

The FY 1992-1996 Stockpile Projection, which was submitted with the Stockpile Plan, has been noted for planning purposes. The FY 1987-1992 Nuclear Weapons Stockpile Plan should be submitted by September 30, 1986. A FY 1993-1997 Stockpile projection should also be included as part of this submission.

Enclosure 1

Denied in full

Exemptions (b)(1), (b)(3)

(TS)
Enclosure 2

Denied in full

Exemptions (b)(1), (b)(3)

(5)
Enclosure 3

Denied in full

Exemptions (b)(1), (b)(3)

(s)
Retirements will be completed for the following systems during the year indicated:

asterisk: DoE retrofits/modifications and the stockpile improvement program are not included. These requirements substantially increase the workload of DoE production facilities.

double asterisk: Sufficient nuclear components will be built to maintain the Congressionally directed limit of a total of 925 modernized projectiles.
(U) Retirements will be completed for the following systems during the year indicated.

* (U) DoE retrofits/modifications and the stockpile improvement program are not included. These requirements substantially increase the workload of DoE production facilities.
General

a. (X) Warheads provided to support quality assurance and reliability testing (QART) programs are included in the total stockpile projections and authorizations. For strategic missiles, additional warheads are provided to ensure operational readiness during temporary and permanent withdrawals for QART. For other systems, warheads are not provided to offset temporary withdrawal for nondestructive testing.

b. (X) DoE will produce and transfer to the DoD parts of nuclear weapons and test units as may be agreed to by the DoE and the DoD. These may be used in nuclear training programs, research and development, and production. A temporary transfer to the DoD of such test units will be part of defense development programs. The test units are not capable of producing either nuclear or conventional explosions but are necessary for evaluation of system reliability.

c. (X) DoE produces and certifies nuclear warheads and components for transfer to the DoD, consistent with the production and retirement provisions of the currently approved stockpile. Subject to the concurrence of the DoD, DoE may delay delivery of a portion of production from one fiscal year to the next in order to economize on transporation resources. DoE produces warheads to replace those required to support underground stockpile confidence tests for weapons currently in production.
ENVELOPE 5

Nuclear Materials Supply/Demand Analysis

The Department of Energy (DoE) presently produces plutonium and tritium in four operating production reactors at the Savannah River Plant (SRP), Aiken, South Carolina, and plutonium in the N Reactor, a dual-purpose reactor, at Richland, Washington. DoE will continue to maintain the capability to produce highly enriched uranium (HEU) in the gaseous diffusion plants. Enclosure 5 reflects pre-Gramm-Rudman-Hollings impacts. Changes in funding, or demand may affect supply including start up date for projects such as SIS.

The nuclear materials supply/demand analysis examines a 16-year period. Materials planning requires long-range projections because of the limited capability of the DoE plutonium and HEU production facilities and the long lead time required to increase these capabilities significantly. The nuclear materials demand is based on the approved and planned Department of Defense (DoD) forces through FY 1991, planned forces through FY 1996, and a projected force structure developed for materials planning for the period FY 1997-2001. Also, since the force structure projections become increasingly uncertain as one looks out further into the 1990's, a nuclear material reserve, beyond the identified force structure, becomes an increasingly integral part of the material requirement projections. The materials analysis for reactor products will be presented first, followed by an analysis for enriched uranium.

* N Reactor provides steam for the generation of electrical power as a byproduct of plutonium production.

This document contains Restricted Data as defined in the Atomic Energy Act of 1954. Its possession or disclosure to any unauthorized person
In order to extend the capability for producing these nuclear materials through this 16-year planning period, DoE has initiated an extensive upgrading of the nuclear materials production complex. The tritium and plutonium producing reactors, the oldest operating in the United States, will be over 40 years old by 1998. Therefore, DoE is developing a reactor strategy to assure a reliable multi-decade capacity for the production of defense nuclear materials. This strategy will be a renovation/replacement campaign focused on time-phased, site-unique actions to achieve assured nuclear materials production well into the next century. The strategy principally involves restoration or replacement of the N Reactor capability and replacement of one of the Savannah River production reactors sometime after FY 2000. If N Reactor is restored rather than replaced, another production reactor probably will be required to be in place about 5 years after the Savannah River replacement reactor is operating.
A nuclear materials inventory summary and the related supply-demand curves projected through FY 2001 are shown in Table 1 and Figures 1.A and 1.B.

Enclosures
Table 1
Nuclear Materials Inventory Summary
FY 1986 - 2001 Nuclear Weapons Program
(Fiscal Years)

(b)(1), (b)(3) (5)
Figures 1. A and 1. B
Derived in full
Exemptions (bY1) and (bY3)
(5)
Enclosure 8

Denied in full

Exemptions (b)(1), (b)(3), (b)(5)

(s)