

into account the resources available at other National Laboratories. In developing the plan, the Secretary shall—

(1) evaluate the facilities planning processes utilized by other physical science and engineering research and development institutions, both in the United States and abroad, that are generally recognized as being among the best in the world, and consider how those processes might be adapted toward developing such facilities plan;

(2) avoid duplicating, moving, or transferring nuclear science and engineering facilities, equipment, expertise, and other assets that currently exist at other National Laboratories;

(3) consider the establishment of a national transuranic analytic chemistry laboratory as a user facility at the Idaho National Laboratory;

(4) include a plan to develop, if feasible, the Advanced Test Reactor and Test Reactor Area into a user facility that is more readily accessible to academic and industrial researchers;

(5) consider the establishment of a fast neutron source as a user facility;

(6) consider the establishment of new hot cells and the configuration of hot cells most likely to advance research, development, demonstration, and commercial application in nuclear science and engineering, especially in the context of the condition and availability of these facilities elsewhere in the National Laboratories; and

(7) include a timeline and a proposed budget for the completion of deferred maintenance on plant and equipment.

(d) TRANSMITTAL TO CONGRESS.—Not later than 1 year after the date of enactment of this Act, the Secretary shall transmit the plan under subsection (c) to Congress.

#### **SEC. 956. SECURITY OF NUCLEAR FACILITIES.**

The Secretary, acting through the Director of the Office of Nuclear Energy, Science and Technology, shall conduct a research and development program on cost-effective technologies for increasing—

(1) the safety of nuclear facilities from natural phenomena;

and

(2) the security of nuclear facilities from deliberate attacks.

#### **SEC. 957. ALTERNATIVES TO INDUSTRIAL RADIOACTIVE SOURCES.**

(a) SURVEY.—

(1) IN GENERAL.—Not later than August 1, 2006, the Secretary shall submit to Congress the results of a survey of industrial applications of large radioactive sources.

(2) ADMINISTRATION.—The survey shall—

(A) consider well-logging sources as one class of industrial sources;

(B) include information on current domestic and international Department, Department of Defense, State Department, and commercial programs to manage and dispose of radioactive sources; and

(C) analyze available disposal options for currently deployed or future sources and, if deficiencies are noted for either deployed or future sources, recommend legislative options that Congress may consider to remedy identified deficiencies.

(b) PLAN.—

(1) IN GENERAL.—In conjunction with the survey conducted under subsection (a), the Secretary shall establish a research and development program to develop alternatives to sources described in subsection (a) that reduce safety, environmental, or proliferation risks to either workers using the sources or the public.

(2) ACCELERATORS.—Miniaturized particle accelerators for well-logging or other industrial applications and portable accelerators for production of short-lived radioactive materials at an industrial site shall be considered as part of the research and development efforts.

(3) REPORT.—Not later than August 1, 2006, the Secretary shall submit to Congress a report describing the details of the program plan.

## Subtitle F—Fossil Energy

### SEC. 961. FOSSIL ENERGY.

(a) IN GENERAL.—The Secretary shall carry out research, development, demonstration, and commercial application programs in fossil energy, including activities under this subtitle, with the goal of improving the efficiency, effectiveness, and environmental performance of fossil energy production, upgrading, conversion, and consumption. Such programs take into consideration the following objectives:

(1) Increasing the energy conversion efficiency of all forms of fossil energy through improved technologies.

(2) Decreasing the cost of all fossil energy production, generation, and delivery.

(3) Promoting diversity of energy supply.

(4) Decreasing the dependence of the United States on foreign energy supplies.

(5) Improving United States energy security.

(6) Decreasing the environmental impact of energy-related activities.

(7) Increasing the export of fossil energy-related equipment, technology, and services from the United States.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out fossil energy research, development, demonstration, and commercial application activities, including activities authorized under this subtitle—

(1) \$611,000,000 for fiscal year 2007;

(2) \$626,000,000 for fiscal year 2008; and

(3) \$641,000,000 for fiscal year 2009.

(c) ALLOCATIONS.—From amounts authorized under subsection (a), the following sums are authorized:

(1) For activities under section 962—

(A) \$367,000,000 for fiscal year 2007;

(B) \$376,000,000 for fiscal year 2008; and

(C) \$394,000,000 for fiscal year 2009.

(2) For activities under section 964—

(A) \$20,000,000 for fiscal year 2007;

(B) \$25,000,000 for fiscal year 2008; and

(C) \$30,000,000 for fiscal year 2009.

(3) For activities under section 966—