

One Hundred Ninth Congress  
of the  
United States of America

AT THE FIRST SESSION

*Began and held at the City of Washington on Tuesday,  
the fourth day of January, two thousand and five*

An Act

To ensure jobs for our future with secure, affordable, and reliable energy.

*Be it enacted by the Senate and House of Representatives of  
the United States of America in Congress assembled,*

**SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

(a) SHORT TITLE.—This Act may be cited as the “Energy Policy Act of 2005”.

(b) TABLE OF CONTENTS.—The table of contents for this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—ENERGY EFFICIENCY

Subtitle A—Federal Programs

- Sec. 101. Energy and water saving measures in congressional buildings.
- Sec. 102. Energy management requirements.
- Sec. 103. Energy use measurement and accountability.
- Sec. 104. Procurement of energy efficient products.
- Sec. 105. Energy savings performance contracts.
- Sec. 106. Voluntary commitments to reduce industrial energy intensity.
- Sec. 107. Advanced Building Efficiency Testbed.
- Sec. 108. Increased use of recovered mineral component in federally funded projects involving procurement of cement or concrete.
- Sec. 109. Federal building performance standards.
- Sec. 110. Daylight savings.
- Sec. 111. Enhancing energy efficiency in management of Federal lands.

Subtitle B—Energy Assistance and State Programs

- Sec. 121. Low-income home energy assistance program.
- Sec. 122. Weatherization assistance.
- Sec. 123. State energy programs.
- Sec. 124. Energy efficient appliance rebate programs.
- Sec. 125. Energy efficient public buildings.
- Sec. 126. Low income community energy efficiency pilot program.
- Sec. 127. State Technologies Advancement Collaborative.
- Sec. 128. State building energy efficiency codes incentives.

Subtitle C—Energy Efficient Products

- Sec. 131. Energy Star program.
- Sec. 132. HVAC maintenance consumer education program.
- Sec. 133. Public energy education program.
- Sec. 134. Energy efficiency public information initiative.
- Sec. 135. Energy conservation standards for additional products.
- Sec. 136. Energy conservation standards for commercial equipment.
- Sec. 137. Energy labeling.
- Sec. 138. Intermittent escalator study.
- Sec. 139. Energy efficient electric and natural gas utilities study.
- Sec. 140. Energy efficiency pilot program.
- Sec. 141. Report on failure to comply with deadlines for new or revised energy conservation standards.

Subtitle D—Public Housing

- Sec. 151. Public housing capital fund.

(C) use fuels that are proliferation resistant and have substantially reduced production of high-level waste per unit of output; and

(D) use improved instrumentation.

(e) REACTOR PRODUCTION OF HYDROGEN.—The Secretary shall carry out research to examine designs for high-temperature reactors capable of producing large-scale quantities of hydrogen.

**SEC. 953. ADVANCED FUEL CYCLE INITIATIVE.**

(a) IN GENERAL.—The Secretary, acting through the Director of the Office of Nuclear Energy, Science and Technology, shall conduct an advanced fuel recycling technology research, development, and demonstration program (referred to in this section as the “program”) to evaluate proliferation-resistant fuel recycling and transmutation technologies that minimize environmental and public health and safety impacts as an alternative to aqueous reprocessing technologies deployed as of the date of enactment of this Act in support of evaluation of alternative national strategies for spent nuclear fuel and the Generation IV advanced reactor concepts.

(b) ANNUAL REVIEW.—The program shall be subject to annual review by the Nuclear Energy Research Advisory Committee of the Department or other independent entity, as appropriate.

(c) INTERNATIONAL COOPERATION.—In carrying out the program, the Secretary is encouraged to seek opportunities to enhance the progress of the program through international cooperation.

(d) REPORTS.—The Secretary shall submit, as part of the annual budget submission of the Department, a report on the activities of the program.

**SEC. 954. UNIVERSITY NUCLEAR SCIENCE AND ENGINEERING SUPPORT.**

(a) IN GENERAL.—The Secretary shall conduct a program to invest in human resources and infrastructure in the nuclear sciences and related fields, including health physics, nuclear engineering, and radiochemistry, consistent with missions of the Department related to civilian nuclear research, development, demonstration, and commercial application.

(b) REQUIREMENTS.—In carrying out the program under this section, the Secretary shall—

(1) conduct a graduate and undergraduate fellowship program to attract new and talented students, which may include fellowships for students to spend time at National Laboratories in the areas of nuclear science, engineering, and health physics with a member of the National Laboratory staff acting as a mentor;

(2) conduct a junior faculty research initiation grant program to assist universities in recruiting and retaining new faculty in the nuclear sciences and engineering by awarding grants to junior faculty for research on issues related to nuclear energy engineering and science;

(3) support fundamental nuclear sciences, engineering, and health physics research through a nuclear engineering education and research program;

(4) encourage collaborative nuclear research among industry, National Laboratories, and universities; and

(5) support communication and outreach related to nuclear science, engineering, and health physics.

(c) UNIVERSITY-NATIONAL LABORATORY INTERACTIONS.—The Secretary shall conduct—

(1) a fellowship program for professors at universities to spend sabbaticals at National Laboratories in the areas of nuclear science and technology; and

(2) a visiting scientist program in which National Laboratory staff can spend time in academic nuclear science and engineering departments.

(d) STRENGTHENING UNIVERSITY RESEARCH AND TRAINING REACTORS AND ASSOCIATED INFRASTRUCTURE.—In carrying out the program under this section, the Secretary may support—

(1) converting research reactors from high-enrichment fuels to low-enrichment fuels and upgrading operational instrumentation;

(2) consortia of universities to broaden access to university research reactors;

(3) student training programs, in collaboration with the United States nuclear industry, in relicensing and upgrading reactors, including through the provision of technical assistance; and

(4) reactor improvements as part of a taking into consideration effort that emphasizes research, training, and education, including through the Innovations in Nuclear Infrastructure and Education Program or any similar program.

(e) OPERATIONS AND MAINTENANCE.—Funding for a project provided under this section may be used for a portion of the operating and maintenance costs of a research reactor at a university used in the project.

(f) DEFINITION.—In this section, the term “junior faculty” means a faculty member who was awarded a doctorate less than 10 years before receipt of an award from the grant program described in subsection (b)(2).

**SEC. 955. DEPARTMENT OF ENERGY CIVILIAN NUCLEAR INFRASTRUCTURE AND FACILITIES.**

(a) IN GENERAL.—The Secretary shall operate and maintain infrastructure and facilities to support the nuclear energy research, development, demonstration, and commercial application programs, including radiological facilities management, isotope production, and facilities management.

(b) DUTIES.—In carrying out this section, the Secretary shall—

(1) develop an inventory of nuclear science and engineering facilities, equipment, expertise, and other assets at all of the National Laboratories;

(2) develop a prioritized list of nuclear science and engineering plant and equipment improvements needed at each of the National Laboratories;

(3) consider the available facilities and expertise at all National Laboratories and emphasize investments which complement rather than duplicate capabilities; and

(4) develop a timeline and a proposed budget for the completion of deferred maintenance on plant and equipment, with the goal of ensuring that Department programs under this subtitle will be generally recognized to be among the best in the world.

(c) PLAN.—The Secretary shall develop a comprehensive plan for the facilities at the Idaho National Laboratory, especially taking