

HR 610

Energy Research, Development, Demonstration, and Commercial Application Act of 2005

Congress: 109 (2005–2007, Ended)

Chamber: House

Policy Area: Energy

Introduced: Feb 8, 2005

Current Status: Placed on the Union Calendar, Calendar No. 123.

Latest Action: Placed on the Union Calendar, Calendar No. 123. (Jul 29, 2005)

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Sponsor

Name: Rep. Biggert, Judy [R-IL-13]

Party: Republican • State: IL • Chamber: House

Cosponsors (1 total)

Cosponsor	Party / State	Role	Date Joined
Rep. Boehlert, Sherwood [R-NY-24]	R · NY		Feb 8, 2005

Committee Activity

Committee	Chamber	Activity	Date
Energy and Commerce Committee	House	Referred to	Feb 25, 2005
Natural Resources Committee	House	Referred to	Feb 9, 2005
Science, Space, and Technology Committee	House	Reported By	Jul 29, 2005
Transportation and Infrastructure Committee	House	Discharged From	Jul 29, 2005

Subjects & Policy Tags

Policy Area:

Energy

Related Bills

No related bills are listed.

Energy Research, Development, Demonstration, and Commercial Application Act of 2005 - **Title I: Science Programs** - (Sec. 101) Directs the Secretary of Energy to conduct research, development, demonstration, and commercial application programs (R&D) in the following areas: (1) high energy physics and nuclear physics; (2) biological and environmental research (3) basic energy sciences; (4) advanced scientific computing research; and (5) fusion energy sciences.

Sets a deadline for construction of a Rare Isotope Accelerator.

(Sec. 102) Instructs the Secretary to establish an R&D program in: (1) genetics, protein science, and computational biology; (2) catalysis science; (3) hydrogen production from diverse energy sources; and (4) advanced scientific computing research.

(Sec. 106) Instructs the Secretary to transmit a plan to implement U.S. policy for a fusion energy sciences program, including participation of U.S. scientists in the international burning plasma fusion research project (ITER).

(Sec. 107) Authorizes the Secretary to establish a Science and Technology Scholarship Program.

(Sec. 108) Directs the Secretary to maintain within the Department of Energy (DOE) the Office of Scientific and Technical Information.

(Sec. 109) Requires the Secretary to award a grant to Oak Ridge Associated Universities to establish a university consortium to carry out a regional pilot program for enhancing scientific, technological, engineering, and mathematical literacy, creativity, and decisionmaking. Requires such consortium to include leading research universities, one or more universities that train substantial numbers of elementary and secondary school teachers, and, where appropriate, National Laboratories.

(Sec. 110) Authorizes appropriations for FY2006-FY2010.

**Title II: Research Administration and Operations** - (Sec. 201) Prescribes guidelines governing research administration and operations for programs implemented under this Act.

(Sec. 204) Directs the Secretary to establish one or more advisory committees to review and advise DOE applied programs in energy efficiency, renewable energy, nuclear energy, and fossil energy.

(Sec. 207) Requires the Secretary to report to Congress on equal employment opportunity practices at National Laboratories.

(Sec. 208) Prohibits the Secretary from allowing any DOE facility to begin functioning as a user facility without a best practices plan meeting certain criteria.

(Sec. 209) Requires the Secretary to develop and implement a strategy for infrastructure and facilities supported primarily from the Office of Science and the applied programs at each National Laboratory and Department research facility.

**Title III: Energy Efficiency - Subtitle A : Vehicles, Buildings and Industries** - (Sec. 301) Directs the Secretary to conduct programs of energy efficiency R&D, demonstration, and commercial application of advanced, cost-effective technologies to improve the energy efficiency and environmental performance of: (1) light-duty and heavy-duty vehicles; (2) commercial, industrial, institutional, and residential buildings; (3) energy-intensive and waste-intensive industries; (4)

appliances; and (5) secondary use of electric vehicle batteries.

(Sec. 307) Directs the Secretary to carry out a Next Generation Lighting Initiative to support R&D, demonstration, and commercial application activities related to advanced solid-state lighting technologies based on white light emitting diodes.

(Sec. 309) Authorizes appropriations for FY2006-FY2010.

**Subtitle B: Distributed Energy and Electric Energy Systems** - (Sec. 321) Directs the Secretary to conduct programs to improve reliability and efficiency of: (1) distributed energy resources and systems; and (2) electric transmission and distribution.

(Sec. 323) Authorizes appropriations for FY2006-FY2010.

**Title IV: Renewable Energy** - (Sec. 404) Directs the Secretary to conduct R&D programs for: (1) solar energy; (2) bioenergy; (3) wind energy; (4) geothermal energy; and (5) photovoltaic technology.

(Sec. 409) Authorizes additional programs for: (1) ocean energy, including wave energy; (2) kinetic hydro turbines; and (3) the combined use of renewable energy technologies with one another and with other energy technologies, especially in public buildings. Requires a National Academy of Sciences study of marine renewable energy.

(Sec. 411) Authorizes appropriations for FY2006-FY2010.

**Title V: Nuclear Energy Programs** - (Sec. 502) Directs the Secretary to conduct R&D programs in civilian nuclear energy.

**Subtitle A: Nuclear Energy Research Programs** - (Sec. 511) Directs the Secretary to conduct R&D programs in advanced fuel recycling technology and to seek to engage international partners with expertise in such technologies.

(Sec. 512) Directs the Secretary to conduct a program to invest in human resources and infrastructure in the nuclear sciences and related fields, including health physics, nuclear engineering, and radiochemistry.

(Sec. 513) Directs the Secretary to 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.

(Sec. 514) Directs the Secretary to implement: (1) a Nuclear Power 2010 Program, consistent with recommendations in the October 2001 report entitled "A Roadmap to Deploy New Nuclear Power Plants in the United States by 2010;" and (2) a Generation IV Nuclear Energy Systems Initiative regarding commercial application of advanced fission reactor technology for the generation of electricity.

(Sec. 516) Instructs the Secretary to operate and maintain nuclear energy infrastructure and facilities to support radiological facilities management, isotope production, and facilities management.

(Sec. 518) Requires the Secretary to develop a comprehensive plan for the facilities at the Idaho National Laboratory.

(Sec. 519) Authorizes appropriations for FY2006-FY2010.

**Subtitle B: Next Generation Nuclear Plan Program** - (Sec. 532) Directs the Secretary to: (1) conduct R&D programs of

advanced nuclear fission reactor technology to demonstrate the technical and economic feasibility of an advanced nuclear fission reactor power plant design for the commercial production of electricity, including construction and operation of the demonstration plant; and (2) appoint a Next Generation Nuclear Power Plant Subcommittee of the Nuclear Energy Research Advisory Council to advise on technical matters and program management for the duration of the program and construction project.

(Sec. 535) Authorizes appropriations for FY2006-FY2010.

**Title VI: Fossil Energy - Subtitle A: Research Programs** - (Sec. 601) Directs the Secretary to conduct enhanced fossil energy R&D programs for: (1) precombustion technologies; (2) carbon capture and sequestration; (3) coal based gasification projects; (4) transportation fuels; (4) fuel cells; and (5) carbon dioxide recapture technologies for pulverized coal combustion units.

(Sec. 607) Authorizes appropriations for FY2006-FY2010.

**Subtitle B: Ultra-Deepwater and Unconventional Natural Gas and Other Petroleum Resources** - (Sec. 611) Instructs the Secretary to implement a technology R&D program to maximize use of ultra-deepwater and onshore unconventional natural gas.

(Sec. 615) Directs the Secretary to establish the Ultra-Deepwater Advisory Committee and the Unconventional Resources Technology Advisory Committee.

(Sec. 619) Establishes the Ultra-Deepwater and Unconventional Natural Gas and Other Petroleum Research Fund. Prescribes funding procedures to deposit into it \$150 million diverted from Treasury deposits comprising federal royalties, rents, and bonuses from certain oil and gas leases.

**Title VII: Hydrogen** - (Sec. 702) Instructs the Secretary to: (1) plan programs directly related to fuel cells or hydrogen; and (2) conduct programs in partnership with the private sector to address hydrogen production from diverse energy sources.

(Sec. 704) Directs the President to establish an interagency task force to work toward fuel infrastructure for hydrogen and hydrogen-carrier fuels, including buses and other fleet transportation and fuel cell applications.

(Sec. 705) Establishes the Hydrogen Technical and Fuel Cell Advisory Committee.

(Sec. 706) Directs the Secretary to arrange with the National Academy of Sciences for an external review of the plan regarding programs directly related to fuel cells or hydrogen; and (2) conduct programs in partnership with the private sector to address hydrogen production from diverse energy sources.

(Sec. 709) Authorizes appropriations for FY2006-FY2010.

**Title VIII: Advanced Vehicles - Subtitle A: Pilot Program** - (Sec. 802) Directs the Secretary to establish a pilot program of up to 15 geographically dispersed competitive grants to state or local governments or metropolitan transportation authorities for: (1) acquisition of alternative fueled vehicles, hybrid vehicles, fuel cell vehicles, or ultra-low sulfur diesel vehicles; and (2) installation or acquisition of infrastructure necessary to directly support an alternative fueled vehicle, fuel cell vehicle, or hybrid vehicle project.

(Sec. 804) Authorizes appropriations.

**Subtitle B : Clean School Buses** - (Sec. 812) Directs the Administrator of the Environmental Protection Agency to establish a grant program for: (1) the replacement of certain school buses with alternative fuel and ultra-low sulfur diesel fuel school buses; and (2) installation of retrofit technologies for diesel school buses.

(Sec. 814) Instructs the Secretary to enter into cooperative agreements: (1) with private sector fuel cell bus developers for the development of fuel cell-powered school buses; and (2) local government entities using natural gas-powered school buses and private sector fuel cell bus developers to demonstrate fuel cell-powered school buses. Authorizes appropriations for FY2006-FY2008.

**Subtitle C: Fuel Cell Transit Bus Demonstration** - (Sec. 821) Directs the Secretary to establish a fuel cell transit bus demonstration program.

Authorizes appropriations for FY2006-FY2010.

**Title IX: Clean Coal Power Initiative** - (Sec. 901) Authorizes appropriations for FY2006-FY2012 for a Clean Coal Power Initiative. Sets forth project, technical, and financial criteria.

(Sec. 904) Directs the Secretary to award competitive, merit-based grants to universities for the establishment of Centers of Excellence for Energy Systems of the Future to advance new clean coal technologies.

**Title X: Improved Coordination and Management of Civilian Science and Technology Programs** - (Sec. 1001) Amends the Department of Energy Organization Act to replace the Director of the Office of Science with an Assistant Secretary of Science, appointed by the President, by and with the advice and consent of the Senate, to implement fundamental science and engineering research functions of the Department, including the responsibility for policy and management of such research.

Expresses the sense of Congress that leadership for departmental missions in nuclear energy should be at the Assistant Secretary level.

## Actions Timeline

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- **Jul 29, 2005:** Reported (Amended) by the Committee on Science. H. Rept. 109-216, Part I.
- **Jul 29, 2005:** Reported (Amended) by the Committee on Science. H. Rept. 109-216, Part I.
- **Jul 29, 2005:** Referred sequentially to the House Committee on Transportation and Infrastructure for a period ending not later than July 29, 2005 for consideration of such provisions of the bill and the amendment as fall within the jurisdiction of that committee pursuant to clause 1(r), rule X.
- **Jul 29, 2005:** Committee on Resources discharged.
- **Jul 29, 2005:** Committee on Energy and Commerce discharged.
- **Jul 29, 2005:** Committee on Resources discharged.
- **Jul 29, 2005:** Committee on Energy and Commerce discharged.
- **Jul 29, 2005:** Committee on Transportation discharged.
- **Jul 29, 2005:** Committee on Transportation discharged.
- **Jul 29, 2005:** Placed on the Union Calendar, Calendar No. 123.
- **Feb 25, 2005:** Referred to the Subcommittee on Energy and Air Quality, for a period to be subsequently determined by the Chairman.
- **Feb 10, 2005:** Committee Consideration and Mark-up Session Held.
- **Feb 9, 2005:** Referred to the Subcommittee on Energy and Mineral Resources.
- **Feb 8, 2005:** Introduced in House
- **Feb 8, 2005:** Introduced in House
- **Feb 8, 2005:** Referred to the Committee on Science, and in addition to the Committees on Energy and Commerce, and Resources, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned.
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