

Subsection 2124(b) provides that in carrying out this section, the Secretary shall consider technologies that provide: (1) significant improvement in efficiency of high power density facilities, and in data and telecommunications centers, using advanced thermal control technologies; (2) significant improvements in air-conditioning efficiency in facilities such as data centers and telecommunications facilities; (3) significant advances in peak load reduction; and (4) advanced real time metering and load management and control devices.

Subsection 2124(c) requires that activities pursuant to this program be integrated with other activities of the DOE's Office of Power Technologies.

Sec. 2125. Micro-Cogeneration Energy Technology

Section 2125 requires the Secretary to make competitive, merit-based grants to consortia of private sector entities for the development of micro-cogeneration energy technology. The consortia shall explore the creation of small-scale combined heat and power through the use of residential heating appliances. The section also authorizes \$20.0 million, to remain available until expended.

Sec. 2126. Program Plan

Section 2126 directs the Secretary to consult with appropriate representatives of the distributed energy resources, power transmission, and high power density industries, other appropriate entities, and Federal, State and local agencies, within four months of enactment, to present to Congress a five-year program plan to guide activities under this subtitle.

Sec. 2127. Report

Section 2127 instructs the Secretary, jointly with other appropriate Federal agencies, to report to Congress within two years of enactment and every two years thereafter for the duration of the program on the program's progress made to achieve the purposes of this subtitle.

Sec. 2128. Voluntary Consensus Standards

Under this section, not later than two years after the date of enactment of this Act, the Secretary, in consultation with the NIST, shall work with the Institute of Electrical and Electronic Engineers and other standards development organizations toward the development of voluntary consensus standards for distributed energy systems for use in manufacturing and using equipment and systems for connection with electric distribution systems, for obtaining electricity from, or providing electricity to, such systems.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle C—Secondary Electric Vehicle Battery Use

Sec. 2131. Definitions

Section 2131 defines the terms "battery" and "associated equipment."

Sec. 2132. Establishment of Secondary Electric Vehicle Battery Use Program

Subsection 2132(a) directs the Secretary to establish and carry out a RD&D program for the secondary use of batteries originally used in transportation applications. The program should demonstrate the use of batteries in secondary application, including utility and commercial power storage and power quality and should be structured to evaluate the performance, including longevity of useful service life and costs, of such batteries in field operations, and evaluate the necessary supporting infrastructure, in-

cluding disposal and reuse of batteries. The Secretary is directed to coordinate with ongoing secondary battery use programs underway at the national laboratories and in industry.

Subsection 2132(b) directs the Secretary, no later than six months after the date of the enactment of this Act, to solicit proposals to demonstrate the secondary use of batteries and associated equipment and supporting infrastructure in geographic locations throughout the United States. The Secretary may make additional solicitations for proposals if the Secretary determines that such solicitations are necessary to carry out this section. Proposals submitted in response to a solicitation under this section shall include: (1) a description of the project, including the batteries to be used in the project; the proposed locations and applications for the batteries; the number of batteries to be demonstrated; and the type, characteristics, and estimated life-cycle costs of the batteries compared to other energy storage devices currently in use; (2) the contribution, if any, of State or local governments and other persons to the demonstration project; (3) the type of associated equipment to be demonstrated and the type of supporting infrastructure to be demonstrated; and (4) any other information the Secretary considers appropriate. If the proposal includes a lease arrangement, the proposal shall indicate the terms of such lease arrangement for the batteries and associated equipment.

Subsection 2132(c) directs the Secretary, no later than three months after the closing date established by the Secretary for receipt of proposals under subsection 2132(b), to select at least five proposals to receive financial assistance under this subsection. No one project selected is permitted to receive more than 25 percent of the funds authorized under this section, and no more than three projects selected under this section shall demonstrate the same battery type.

In selecting a proposal under subsection 2132(c), the Secretary must consider:

(1) the ability of the proposer to acquire the batteries and associated equipment and to successfully manage and conduct the demonstration project, including the reporting requirements;

(2) the geographic and climatic diversity of the projects selected;

(3) the long-term technical and competitive viability of the batteries to be used in the project and of the original manufacturer of such batteries;

(4) the suitability of the batteries for their intended uses;

(5) the technical performance of the battery, including the expected additional useful life and the battery's ability to retain energy;

(6) the environmental effects of the use of and disposal of the batteries proposed to be used in the project selected;

(7) the extent of involvement of State or local government and other persons in the demonstration project and whether such involvement will permit a reduction of the Federal cost share per project or otherwise be used to allow the Federal contribution to be provided to demonstrate a greater number of batteries; and

(8) such other criteria as the Secretary considers appropriate.

The Secretary must require that as a part of a demonstration project, the users of the batteries provide to the proposer information regarding the operation, maintenance, performance, and use of the batteries, and the proposer provide such information to the

battery manufacturer, for three years after the beginning of the demonstration project. The Secretary must also require the proposer to provide to the Secretary information regarding the operation, maintenance, performance, and use of the batteries that the Secretary may request during the period of the demonstration project. The proposer must provide at least 50 percent of the costs associated with the proposal.

Sec. 2133. Authorization of appropriations

Section 2133 authorizes (from amounts authorized under section 2161(a)) for purposes of this subtitle \$1.0 million for FY 2002, \$7.0 million for FY 2003 and \$7.0 million for FY 2004, to remain available until expended.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle D—Green School Buses

Sec. 2141. Short Title

Section 2141 cites the subtitle as the "Clean Green School Bus Act of 2001."

Sec. 2142. Establishment of Pilot

Subsection 2142(a) directs the Secretary to establish a pilot program for awarding grants on a competitive basis to eligible entities for the demonstration and commercial application of alternative fuel school buses and ultra-low sulfur diesel school buses.

Subsection 2142(b) requires the Secretary, no later than three months after the date of enactment of this Act, to establish and publish in the Federal Register grant requirements on eligibility for assistance, and on implementation of the program established under subsection (a), including certification requirements to ensure compliance with this subtitle.

Subsection 2142(c) requires the Secretary, no later than six months after the date of enactment of this Act, to solicit proposals for grants under this section.

Subsection 2142(d) requires that a grant be awarded, under this section only, to a local governmental entity responsible for providing school bus service for one or more public school systems or, jointly with a contracting entity that provides school bus service to the public school system or systems.

Subsection 2142(e) requires that grants under this section shall be for the demonstration and commercial application of technologies to facilitate the use of alternative fuel school buses and ultra-low sulfur diesel school buses in lieu of buses manufactured before model year 1977 and diesel-powered buses manufactured before model year 1991. Other than the receipt of the grant, a recipient of a grant under this section may not receive any economic benefit in connection with the receipt of the grant. When awarding grants, the Secretary shall give priority to applicants who can demonstrate the use of alternative fuel buses and ultra-low sulfur diesel school buses in lieu of buses manufactured before model year 1977.

Subsection 2142(f) requires that a grant provided under this section shall include the following conditions:

(1) all buses acquired with funds provided under the grant shall be operated as part of the school bus fleet for which the grant was made for a minimum of five years;

(2) funds provided under the grant may only be used to pay the cost, except as provided in the following paragraph (3), of new alternative fuel school buses or ultra-low sulfur diesel school buses, including State taxes and contract fees to provide-

(i) up to 10 percent of the price of the alternative fuel school buses acquired, for necessary alternative fuel infrastructure if the

infrastructure will only be available to the grant recipient; and

(i) up to 15 percent of the price of the alternative fuel school buses acquired, for necessary alternative fuel infrastructure if the infrastructure will be available to the grant recipient and to other bus fleets;

(3) the grant recipient shall be required to provide at least the lesser of 15 percent of the total cost of each bus received or \$15,000 per bus;

(4) in the case of a grant recipient receiving a grant to demonstrate ultra-low sulfur diesel school buses, the grant recipient shall be required to provide documentation to the satisfaction of the Secretary that diesel fuel containing sulfur at not more than 15 parts per million (PPM) is available for carrying out the purposes of the grant, and a commitment by the applicant to use such fuel in carrying out the purposes of the grant.

Subsection 2142(g) requires that funding under a grant made under this section may be used to demonstrate the use only of new alternative fuel school buses or ultra-low sulfur diesel school buses:

(1) with a gross vehicle weight of greater than 14,000 pounds;

(2) that are powered by a heavy duty engine;

(3) that, in the case of alternative fuel school buses, emit not more than—

(A) 2.5 grains per brake horsepower-hour of non-methane hydrocarbons and oxides of nitrogen and 0.01 grains per brake horsepower-hour of particulate matter for buses manufactured in model years 2001 and 2002; and

(B) 1.8 grams per brake horsepower-hour of non-methane hydrocarbons and oxides of nitrogen and 0.01 grains per brake horsepower-hour of particulate matter for buses manufactured in model years 2003 through 2006; and

(4) that, in the case of ultra-low sulfur diesel school buses, emit not more than—

(A) 3.0 grams per brake horsepower-hour of non-methane hydrocarbons and oxides of nitrogen and 0.01 grams per brake horsepower-hour of particulate matter for buses manufactured in model years 2001 through 2003; and

(B) 2.5 grams per brake horsepower-hour of non-methane hydrocarbons and oxides of nitrogen and 0.01 grams per brake horsepower-hour of particulate matter for buses manufactured in model years 2004 through 2006, except that under no circumstances shall buses be acquired under this section that emit non-methane hydrocarbons, oxides of nitrogen, or particulate matter at a rate greater than the best performing technology of ultra-low sulfur diesel school buses commercially available at the time the grant is made.

Subsection 2142(h) requires the Secretary, to the maximum extent practicable, to achieve nationwide deployment of alternative fuel school buses through the program under this section, and to ensure a broad geographic distribution of grant awards, with a goal of no State receiving more than 10 percent of the grant funding made available under this section for a fiscal year.

Subsection 2142(i) requires the Secretary to provide not less than 20 percent and not more than 25 percent of the grant funding made available under this section for any fiscal year for the acquisition of ultra-low sulfur diesel school buses.

Subsection 2142(j) defines the term "alternative fuel school bus" to mean a bus powered substantially by electricity (including electricity supplied by a fuel cell), or by liquefied natural gas, compressed natural gas, liquefied petroleum gas, hydrogen, propane,

or methanol or ethanol at no less than 85 percent by volume. It also defines the term "Ultra-low sulfur diesel school bus" to mean a school bus powered by diesel fuel which contains not more than 15 PPM sulfur.

Sec. 2143. Fuel Cell Development and Demonstration Program

Subsection 2143(a) requires the Secretary to establish a program for entering into cooperative agreements with private-sector fuel cell bus developers for the development of fuel-cell-powered school buses, and subsequently with not less than two units of local government using natural-gas-powered school buses and such private sector fuel cell bus developers to demonstrate the use of fuel-cell-powered school buses.

Subsection 2143(b) requires the non-Federal contribution for activities funded under this section to be no less than 20 percent for fuel infrastructure development activities and no less than 50 percent for demonstration activities and for non-fuel infrastructure development activities.

Subsection 2143(c) limits the amount authorized under section 2144 that may be used for carrying out this section for the period encompassing FY 2002 through FY 2006 to no more than \$25.0 million.

Subsection 2143(d) requires the Secretary, no later than three years after the date of enactment of this Act, and, again, no later than October 1, 2006, to transmit to Congress a report that evaluates the process of converting natural gas infrastructure to accommodate fuel-cell-powered school buses and assesses the results of the development and demonstration program under this section.

Sec. 2144. Authorization of Appropriations

Section 2144 authorizes \$40.0 million for FY 2002, \$50.0 million for FY 2003, \$60.0 million for FY 2004, \$70.0 million for FY 2005, and \$80.0 million for FY 2006, to remain available until expended, to carry out this subtitle.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle E—Next Generation Lighting

Sec. 2151. Short Title

Section 2151 cites the subtitle as "Next Generation Lighting Initiative Act."

Sec. 2152. Definition

Section 2152 defines the term "Lighting Initiative" to mean the "Next Generation Lighting Initiative" established under subsection 2153(a).

Sec. 2153. Next Generation Lighting Initiative

Subsection 2153(a) authorizes the Secretary to establish a Lighting Initiative to be known as the "Next Generation Lighting Initiative" to research, develop, and conduct demonstration activities on advanced lighting technologies, including white light emitting diodes.

Subsection 2153(b) states the research objectives of the Lighting Initiative to develop, by 2011, advanced lighting technologies that, compared to incandescent and fluorescent lighting technologies as of the date of the enactment of this Act, are longer lasting, more energy-efficient and cost-competitive.

Sec. 2154. Study

Subsection 2154(a) requires the Secretary, in consultation with other Federal agencies, as appropriate, no later than six months after the date of enactment of this Act, to complete a study on strategies for the development and commercial application of advanced lighting technologies. The Secretary shall request a review by the National Academies of Sciences and Engineering of the study under this subsection, and shall trans-

mit the results of the study to the appropriate congressional committees.

Subsection 2154(b) requires that the study include the development of a comprehensive strategy to implement the Lighting Initiative and identifying the research and development, manufacturing, deployment, and marketing barriers that must be overcome to achieve a goal of a 25 percent market penetration by advanced lighting technologies into the incandescent and fluorescent lighting market by the year 2012.

Subsection 2154(c) requires the Secretary to modify the implementation of the Lighting Initiative, if necessary, to take into consideration the recommendations of the National Academies of Sciences and Engineering, as soon as practicable after the review of the study under subsection 2154(a) is transmitted to the Secretary by the National Academies of Sciences and Engineering.

Sec. 2155. Grant Program

Subsection 2155(a) permits the Secretary to make merit-based competitive grants to firms and research organizations that conduct RD&D projects related to advanced lighting technologies, subject to section 2603 of this Act.

Subsection 2155(b) requires an annual independent review of the grant-related activities of firms and research organizations receiving a grant under this section to be conducted by a committee appointed by the Secretary under the Federal Advisory Committee Act (5 U.S.C. App.), or, at the request of the Secretary, a committee appointed by the National Academies of Sciences and Engineering. Using clearly defined standards established by the Secretary, the review shall assess technology advances and progress toward commercialization of the grant-related activities of firms or research organizations during each fiscal year of the grant program.

Subsection 2155(c) requires the national laboratories and other Federal agencies, as appropriate, to cooperate with and provide technical and financial assistance to firms and research organizations.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle F—Department of Energy

Authorization of Appropriations

Sec. 2161. Authorization of Appropriations

Subsection 2161 (a) authorizes \$625.0 million for FY 2002, \$700.0 million for FY 2003; and (3) \$800 million for FY 2004 for Energy Conservation operation and maintenance (including Building Technology, State and Community Sector, Industry Sector, Transportation Sector, Power Technologies, and Policy and Management), to remain available until expended. These amount are in addition to: (1) \$200.0 million authorized for FY 2002 under section 2105 for alternative fuel and ultra-low sulfur diesel vehicles; (2) \$20.0 million for FY 2002 authorized under section 2125 for micro-cogeneration energy technology; and (3) \$40.0 million for FY 2002, \$50.0 million for FY 2003, and \$60.0 million for FY 2004 authorized under section 2144 for green school buses.

Subsection 2161(b) provides that none of the funds authorized to be appropriated in subsection 2131(a) may be used for: "(1) Building Technology, State and Community Sector—(A) Residential Building Energy Codes; (B) Commercial Building Energy Codes; (C) Lighting and Appliance Standards; (D) Weatherization Assistance Program; (E) State Energy Program; or (2) Federal Energy Management Program." These limitations are included to preserve the Science Committee's sole jurisdiction over the bill since

the jurisdiction of programs under this subsection 2131(b) either resides with the Committee on Energy and Commerce or is shared with that Committee.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle G—Environmental Protection Agency Office of Air and Radiation Authorization of Appropriations

Sec. 2171. Short Title

Section 2171 cites the subtitle as the “Environmental Protection Agency Office of Air and Radiation Authorization Act of 2001.”

Sec. 2172. Authorization of Appropriations

Section 2172 authorizes to be appropriated to the Administrator for the Office of Air and Radiation Climate Change Protection Programs \$121.942 million for FY 2002, \$126.8 million for FY 2003, and \$131.8 million for FY 2004, to remain available until expended, of which:

(1) \$52.731 million for FY 2002, \$54.8 million for FY 2003, and \$57.0 million for FY 2004 shall be for Buildings;

(2) \$32.441 million for FY 2002, \$33.7 million for FY 2003, and \$35.0 million for FY 2004 shall be for Transportation;

(3) \$27.295 million FY 2002, \$28.4 million for FY 2003, and \$29.5 million for FY 2004 shall be for Industry;

(4) \$1.7 million for FY 2002, \$1.8 million FY 2003, and \$1.9 million for FY 2004 shall be for Carbon Removal;

(5) \$2.5 million for FY 2002, \$2.6 million for FY 2003, and \$2.7 million for FY 2004 shall be for State and Local Climate; and

(6) \$5.275 million for FY 2002, \$5.5 million for FY 2003, and \$5.7 million for FY 2004 shall be for International Capacity Building.

Sec. 2173. Limits on Use of Funds

Subsection 2173(a) prohibits EPA from using funds to produce or provide articles or services for the purpose of selling the articles or services to a person outside the Federal Government, unless the Administrator determines that comparable articles or services are not available from a commercial source in the United States.

Subsection 2173(b) prohibits EPA from using funds to prepare or initiate Requests for Proposals for a program if Congress has not authorized the program.

Sec. 2174. Cost Sharing

Except as otherwise provided in this subtitle, subsection 2174(a) mandates that for R&D programs carried out under this subtitle, the Administrator shall require a commitment from non-Federal sources of at least 20 percent of the cost of the project. The Administrator may reduce or eliminate the non-Federal requirement under this subsection if the Administrator determines that the R&D is of a basic or fundamental nature.

Similarly, under subsection 2174(b) the Administrator shall require at least 50 percent of the costs directly and specifically related to any demonstration or commercial application project under this subtitle to be provided from non-Federal sources. The Administrator may reduce the non-Federal requirement under this subsection if the Administrator determines that the reduction is necessary and appropriate considering the technological risks involved in the project and is necessary to meet the objectives of this subtitle.

In calculating the amount of the non-Federal commitment under subsection (a) or (b), subsection 2174(c) permits the Administrator to include personnel, services, equipment, and other resources.

Sec. 2175. Limitations on Demonstrations and Commercial Application of Energy Technology

Section 2175 requires the Administrator to provide funding only for scientific or energy demonstration or commercial application programs, projects or activities for technologies or processes that can reasonably be expected to yield new, measurable benefits to the cost, efficiency, or performance of the technology or process.

Sec. 2176. Reprogramming

Section 2176 prohibits the reprogramming of funds in excess of 105 percent of the amount authorized for a program, project, or activity, or in excess of \$0.25 million above the amount authorized for the program, project, or activity until the Administrator submits a report to the appropriate congressional committees and a period of 30 days has elapsed after the date on which the report is received. Such reprogramming of funds is limited to no more than the total amount authorized to be appropriated by this subtitle and such funds may not be reprogrammed or used for a program, project, or activity for which Congress has not authorized appropriation.

Sec. 2177. Budget Request Format

Section 2177 requires the Administrator to provide to the appropriate congressional committees, to be transmitted at the same time as the EPA's annual budget request submission, a detailed justification for budget authorization for the programs, projects, and activities for which funds are authorized by this subtitle.

Each such document shall include, for the fiscal year for which funding is being requested and for the two previous fiscal years: (1) a description of, and funding requested or allocated for, each such program, project, or activity; (2) an identification of all recipients of funds to conduct such programs, projects, and activities; and (3) an estimate of the amounts to be expended by each recipient of funds under (2).

Sec. 2178. Other Provisions

Subsection 2178(a) requires the Administrator to provide simultaneously to the Committee on Science: (1) any annual operating plan or other operational funding document, including any additions or amendments thereto; and (2) any report relating to the environmental research or development, scientific or energy research, development, or demonstration, or commercial application of energy technology programs, projects, or activities of the EPA, provided to any committee of Congress.

Subsection 2178(b) requires the Administrator to provide notice to the appropriate congressional committees not later than 15 days before any reorganization of any environmental research or development, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity of the Office of Air and Radiation.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle H—National Building Performance Initiative

Not later than three months after the date of the enactment of this Act, subsection 2181(a) requires the Director of the OSTP to establish an Interagency Group responsible for the development and implementation of a National Building Performance Initiative to address energy conservation and R&D and related issues. The NIST shall provide necessary administrative support for the Interagency Group.

Under subsection 2181(b), not later than nine months after the date of the enactment of this Act, the Interagency Group shall transmit to the Congress a multiyear implementation plan describing the Federal role in reducing the costs, including energy costs, of using, owning, and operating commercial, institutional, residential, and industrial buildings by 30 percent by 2020. The plan shall include: (1) RD&D of systems and materials for new construction and retrofit, on the building envelope and components; and (2) the collection and dissemination, in a usable form, of research results and other pertinent information to the design and construction industry, government officials, and the general public.

Subsection 2181(c) requires the establishment of a National Building Performance Advisory Committee to advise on creation of the plan, review progress made under the plan, advise on any improvements that should be made to the plan, and report to the Congress on actions that have been taken to advance the Nation's capability in furtherance of the plan. The members shall include representatives of a broad cross-section of interests such as the research, technology transfer, architectural, engineering, and financial communities; materials and systems suppliers; State, county, and local governments; the residential, multi-family, and commercial sectors of the construction industry; and the insurance industry.

Subsection 2181(d) requires the Interagency Group, within 90 days after the end of each fiscal year, to transmit a report to the Congress describing progress achieved during the preceding fiscal year by government at all levels and by the private sector, toward implementing the plan developed under subsection (b), and including any amendments to the plan.

TITLE II—RENEWABLE ENERGY

Subtitle A—Hydrogen

Sec. 2201. Short Title

Section 2201 cites the subtitle as the “Robert S. Walker and George E. Brown, Jr. Hydrogen Energy Act of 2001.”

Sec. 2202. Purposes

Section 2202 amends section 102(b) the Spark M. Matsunaga Hydrogen RD&D Act of 1990 (1990 Act) to include RD&D activities leading to the use of hydrogen for commercial applications, information dissemination and education, and development of a hydrogen production methodology that minimizes adverse environmental impacts, including efficient and cost-effective production from renewable and nonrenewable resources.

Sec. 2203. Definitions

Section 2203 amends section 102(c) of the 1990 Act to include the definition of “advisory committee.”

Sec. 2204. Reports to Congress

Section 2204 amends section 103 of the 1990 Act by requiring the Secretary to submit to Congress a detailed report on the status and progress of the programs and activities authorized under the Act within one year of its enactment, and biennially thereafter.

Sec. 2205. Hydrogen Research and Development

Section 2205 amends section 104 of the 1990 Act by streamlining the text. Also, for R&D programs carried out under this section, the Secretary shall require a commitment from non-Federal sources of at least 20 percent of the cost of the project. The Secretary may reduce or eliminate the non-Federal requirement under this subsection if the Secretary determines that the R&D is of a basic or fundamental nature.

Sec. 2206. Demonstrations

Section 2206 amends section 105 of the 1990 Act by eliminating the requirement that demonstration of critical technologies and small-scale demonstrations be conducted in or at "self-contained locations." In addition, the small-scale demonstrations are to include a fuel cell bus demonstration program to address hydrogen production, storage, and use in transit bus applications.

Sec. 2207. Technology Transfer

Section 2207 amends section 106 of the 1990 Act by requiring the Secretary to conduct a hydrogen technology transfer program designed to accelerate wider application of hydrogen production, storage, transportation and use technologies, including application in foreign countries to increase the global market for hydrogen technologies and foster global economic development without harmful environmental effects.

Sec. 2208. Coordination and Consultation

Section 2208 amends section 107 of the 1990 Act by requiring the Secretary to establish a central point for coordination of all DOE hydrogen RD&D activities. It also requires the Secretary to consult with other Federal agencies, as appropriate, and the advisory committee established under section 2209.

Sec. 2209. Advisory Committee

Section 2209 amends section 108 of the 1990 Act by requiring the Secretary to enter into arrangements with the National Academies of Sciences and Engineering to establish an advisory committee to replace the current Hydrogen Technical Advisory Panel.

Sec. 2210. Authorization of Appropriations

Subsection 2210 amends section 109 of the 1990 Act to provide authorization of appropriations for the five-year period, FY 2002 through FY 2006.

Subsection 2210(a) authorizes \$40.0 million for FY 2002, \$45.0 million for FY 2003, \$50.0 million for FY 2004, \$55.0 million for FY 2005, and \$60.0 million for FY 2006 for hydrogen R&D activities and the advisory committee.

Subsection 2210(b) authorizes \$20.0 million for FY 2002, \$25.0 million for FY 2003, \$30.0 million for FY 2004, \$35.0 million for FY 2005, and \$40.0 million for FY 2006 for hydrogen demonstration activities.

Sec. 2211. Repeal

Section 2211 amends the Hydrogen Future Act of 1996 to repeal title 11 containing the program relating to the integration of fuel cells with hydrogen production systems.

TITLE II—RENEWABLE ENERGY

Subtitle B—Bioenergy

Sec. 2221. Short Title

Section 2221 cites the subtitle as the "Bioenergy Act of 2001."

Sec. 2222. Findings

Section 2222 lists five findings.

Sec. 2223. Definitions

Section 2223 defines the terms "bioenergy," "biofuels," "biopower," and "integrated bioenergy research and development."

Sec. 2224. Authorizations

Section 2224 authorizes the Secretary to conduct bioenergy-related RD&D and commercial application programs, projects, and activities, including: (1) biopower energy systems, (2) biofuels energy systems, and (3) integrated bioenergy R&D.

Sec. 2225. Authorization of Appropriations

As shown in the following table, subsections 2225(a), 2225(b), and 2225(c) authorize a total of \$912.2 million for Biopower Energy Systems, Biofuels Energy Systems, and Integrated Bioenergy R&D for the five-year period, FY 2002 through FY 2006.

BIOENERGY ACT OF 2001 AUTHORIZATIONS: FY 2002–FY 2006

(In thousands of dollars)

Program (subsection)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	Total (FY 2002–FY 2006)
Biopower (2225(a))	45,700	52,500	60,300	69,300	79,600	307,400
Biofuels (2225(b))	53,500	61,400	70,600	81,100	93,200	359,800
Integrated Bioenergy R&D (2225(c))	49,000	49,000	49,000	49,000	49,000	245,000
Total	148,200	162,900	179,900	199,400	221,800	912,200

Also, Integrated Bioenergy R&D activities funded under subsection 2225(c) are to be coordinated with ongoing related programs of other Federal agencies, including the NSF Plant Genome Program.

Subsection 2225(d) authorizes amounts under this subtitle to be used to assist in the planning, design, and implementation of projects to convert rice straw and barley grain into biopower or biofuels.

TITLE II—RENEWABLE ENERGY

Subtitle C—Transmission Infrastructure Systems

Sec. 2241. Transmission Infrastructure Systems RD&D and Commercial Application

Subsection 2241(a) requires the Secretary to develop and implement a comprehensive RD&D and commercial application program to ensure the reliability, efficiency, and environmental integrity of electrical transmission systems. Such program shall include advanced energy technologies and systems, high capacity superconducting transmission lines and generators, advanced grid reliability and efficiency technologies development, technologies contributing to significant load reductions, advanced metering, load management and control technologies, and technology transfer and education.

In carrying out this subtitle, subsection 2241(b) allows the Secretary to include RD&D on and commercial application of improved transmission technologies including the integration of the following technologies into improved transmission systems: (1) high temperature superconductivity; (2) advanced transmission materials; (3) self-adjusting equipment, processes, or software for survivability, security, and failure containment; (4) enhancements of energy transfer over existing lines; and (5) any other infrastructure technologies, as appropriate.

Sec. 2242. Program Plan

Section 2242 requires the Secretary, within four months after the date of the enactment of this Act and in consultation with other appropriate Federal agencies, to prepare and transmit to Congress a five-year program plan to guide activities under this subtitle. In preparing the program plan, the Secretary shall consult with appropriate representatives of the transmission infrastructure systems industry to select and prioritize appropriate program areas. The Secretary shall also seek the advice of utilities, energy services providers, manufacturers, institutions of higher learning, other appropriate State and local agencies, environmental organizations, professional and technical societies, and any other persons as the Secretary considers appropriate.

Sec. 2243. Report

Under section 2243, two years after the date of the enactment of this Act, and at two year intervals thereafter, the Secretary, in consultation with other appropriate Federal agencies, shall transmit a report to Congress describing the progress made to achieve the purposes of this subtitle and identifying any additional resources needed to continue the development and commercial application of transmission infrastructure technologies.

TITLE II—RENEWABLE ENERGY

Subtitle D—Authorization of Appropriations

Sec. 2261. Authorization of Appropriations

Including the amounts authorized for hydrogen R&D under section 2210 and for bioenergy R&D under section 2225, subsection 261(a) authorizes \$535.0 million for FY 2002, \$639.0 million for FY 2003, and \$683.0 million for FY 2004 for Renewable Energy operation and maintenance, including subtitle C (Transmission Infrastructure Systems), Geo-

thermal Technology Development, Hydro-power, Concentrating Solar Power, Photovoltaic Energy Systems, Solar Building Technology Research, Wind Energy Systems, High Temperature Superconducting Research and Development, Energy Storage Systems, Transmission Reliability, International Renewable Energy Program, Renewable Energy Production Incentive Program, Renewable Program Support, National Renewable Energy Laboratory, and Program Direction, to remain available until expended.

Subsection 2281(b) requires the Secretary to carry out a research program, in conjunction with other appropriate Federal agencies, on wave powered electric generation within the amounts authorized under subsection 2281(a).

Using funds authorized in subsection 2281(a), subsection 2281(c) requires the Secretary to transmit to the Congress, within one year after the date of the enactment of this Act, an assessment of all renewable energy resources available within the United States. The report shall include a detailed inventory describing the available amount and characteristics of solar, wind, biomass, geothermal, hydroelectric, and other renewable energy sources, and an estimate of the costs needed to develop each resource. The report shall also include such other information as the Secretary believes would be useful in siting renewable energy generation, such as appropriate terrain, population and load centers, nearby energy infrastructure, and location of energy resources. The information and cost estimates in this report shall be updated annually and made available to the public, along with the data used to create the report. This subsection shall expire at the end of FY 2004.

Subsection 2261(d) provides that none of the funds authorized to be appropriated in subsection 2241(a) may be used for: “(1) Departmental Energy Management Program; or (2) Renewable Indian Energy Resources.” These limitations are included to preserve the Science Committee’s sole jurisdiction over the bill, since the jurisdiction of these programs either resides with the Committee on Energy and Commerce, or is shared with that Committee.

TITLE III—NUCLEAR ENERGY

Subtitle A—University, Nuclear Science and Engineering

Sec. 2301. Short Title

Section 2301 cites the subtitle as the “Department of Energy University Nuclear Science and Engineering Act.”

Sec. 2302. Findings

Section 2302 lists three findings.

Sec. 2303. Department of Energy Program

Subsection 2303(a) directs the Secretary, through the Office of Nuclear Energy, Science and Technology (Office) to maintain the Nation’s human resource investment and infrastructure related to civilian nuclear R&D.

Subsection 2303(b) requires the Director of the Office to: (1) develop a robust graduate and undergraduate program to attract new students; (2) develop a Junior Faculty Research Initiation Grant to recruit and maintain new faculty; (3) maintain investment in the Nuclear Engineering Education Research Program; (4) encourage collaborative nuclear research between industry, national labs and universities through Nuclear Energy Research Initiative (NERI); (5) support public outreach regarding nuclear science and engineering; and (6) support communication and outreach related to nuclear science and engineering.

Subsection 2303(c) directs the Office to provide for: (1) university research reactor refueling with low enriched fuels, operational instrumentation upgrading, and reactor sharing among universities; (2) assistance in relicensing and upgrading university training reactors as part of a student training program in collaboration with the U.S. nuclear industry; and (3) awards for reactor improvements for research, training and education.

Subsection 2303(d) directs the Secretary to develop a program in the Office for: nuclear science and technology sabbatical fellowships for university professors at the Department labs and for student fellowships at Department labs; and a visiting scientist program for Department lab staff to visit universities’ nuclear science programs to work with faculty and staff.

Subsection 2303(e) requires the host institution to provide at least 50 percent of the cost of a university research reactor’s operation when funds authorized under this subtitle are used to supplement operation of such research reactor.

Subsection 2303(f) requires that all grants, contracts, cooperative agreements or other financial assistance awards under this Act be made based on independent merit review.

Subsection 2303(g) requires the Secretary to prepare a report within six months of enactment of this Act, laying out a five-year plan on the programs authorized in this section. This report is to be delivered to the appropriate congressional committees.

Sec. 2304. Authorization of Appropriations

Subsection 2304(a) authorizes total appropriation of funds to carry out the purposes of this subtitle and for all funds to remain

available until expended: \$30.2 million for FY 2002; \$41.0 million for FY 2003; \$47.9 million for FY 2004; \$55.6 million for FY 2005; and \$64.1 million for FY 2006.

For the Graduate and Undergraduate Fellowships to carry out subsection 2303(b)(1) from the funds authorized in subsection 2304(a), subsection 2304(b) authorizes \$3.0 million for FY 2002, \$3.1 million for FY 2003, \$3.2 million for FY 2004, \$3.2 million for FY 2005, and \$3.2 million for FY 2006.

For the Junior Faculty Research Initiation Grant Program to carry out subsection 2303(b)(2) from the funds authorized in subsection 2304(a), subsection 2304(c) authorizes \$5.0 million for FY 2002, \$7.0 million for FY 2003, \$8.0 million for FY 2004, \$9.0 million for FY 2005, and \$10.0 million for FY 2006.

For the Nuclear Engineering and Education Research Program to carry out subsection 2303(b)(3) from the funds authorized in subsection 2304(a), subsection 2304(d) authorizes \$8.0 million for FY 2002, \$12.0 million for FY 2003, \$13.0 million for FY 2004, \$15.0 million for FY 2005, and \$20.0 million for FY 2006.

For Communication and Outreach Related to Nuclear Science and Engineering to carry out subsection 2303(b)(5) from the funds authorized in subsection 2304(a), subsection 2304(e) authorizes \$0.2 million for each of FY 2002 and FY 2003, and \$0.3 million for each of FY 2004 through FY 2006.

For Refueling of Research Reactors and Instrumentation Upgrades to carry out subsection 2303(c)(1) from the funds authorized in subsection 2304(a), subsection 2304(f) authorizes \$6.0 million for FY 2002, \$6.5 million for FY 2003, \$7.0 million for FY 2004, \$7.5 million for FY 2005, and \$8.0 million for FY 2006.

For Relicensing Assistance to carry out subsection 2303(c)(2) from the funds authorized in subsection 2304(a), subsection 2304(g) authorizes \$1.0 million for FY 2002, \$1.1 million for FY 2003, \$1.2 million for FY 2004, and \$1.3 million for each of FY 2005 and FY 2006.

For the Reactor Research and Training Award Program to carry out subsection 2303(c)(3) from the funds authorized in subsection 2304(a), subsection 2304(h) authorizes \$6.0 million for FY 2002, \$10.0 million for FY 2003, \$14.0 million for FY 2004, \$18.0 million for FY 2005, and \$20.0 million for FY 2006.

For University-Department Laboratory Interactions to carry out subsection 2303(d) from the funds authorized in subsection 2304(a), subsection 2304(i) authorizes \$1.0 million for FY 2002, \$1.1 million for FY 2003, \$1.2 million for FY 2004, and \$1.3 million for each of FY 2005 and FY 2006.

TITLE III—NUCLEAR ENERGY

Subtitle B—Advanced Fuel Recycling Technology Research and Development Program

Sec. 2321. Program

Section 2321(a) requires the Secretary, through the Director of the Office, to conduct an advanced fuel recycling technology R&D program to further the availability of proliferation resistant fuel recycling technologies as an alternative to aqueous reprocessing in support of evaluation of alternative national strategies for spent nuclear fuel and the Generation IV advanced reactor concepts, subject to annual review by the Secretary’s Nuclear Energy Research Advisory Committee or other independent entity, as appropriate.

Section 2321(b) requires the Secretary to report on the activities of the advanced fuel recycling technology R&D program as part of the Department’s annual budget submission.

Section 2321(c) authorizes: (1) \$10.0 million for FY 2002, and (2) such sums as are necessary for FY 2003 and FY 2004.

TITLE III—NUCLEAR ENERGY

Subtitle C—Department of Energy Authorization of Appropriations

Sec. 2341. Nuclear Energy Research Initiative

Subsection 2341(a) requires the Secretary, through the Office, to conduct a Nuclear Energy Research Initiative for grants to be competitively awarded and subject to peer review for research relating to nuclear energy.

Subsection 2341(b) mandates that the program be directed toward accomplishing the objectives of: (1) developing advanced concepts and scientific breakthroughs in nuclear fission and reactor technology to address and overcome the principal technical and scientific obstacles to the expanded use of nuclear energy in the United States; (2) advancing the state of nuclear technology to maintain a competitive position in foreign markets and a future domestic market; (3) promoting and maintaining a United States nuclear science and engineering infrastructure to meet future technical challenges; (4) providing an effective means to collaborate on a cost-shared basis with international agencies and research organizations to address and influence nuclear technology development worldwide; and (5) promoting United States leadership and partnerships in bilateral and multilateral nuclear energy research.

Subsection 2341(c) authorizes to be appropriated to the Secretary to carry out this section: (1) \$60.0 million for FY 2002; and (2) such sums as are necessary for FY 2003 and FY 2004.

Sec. 2342. Nuclear Energy Plant Optimization Program

Subsection 2342(a) requires the Secretary to conduct a Nuclear Energy Plant Optimization R&D program jointly with industry and cost-shared by industry by at least 50 percent and subject to annual review by the Secretary’s Nuclear Energy Research Advisory Committee or other independent entity, as appropriate.

Subsection 2342(b) states the program shall be directed toward accomplishing the following technical objectives: (1) managing long-term effects of component aging; and (2) improving efficiency and productivity of existing nuclear power stations.

Subsection 2342(c) authorizes to be appropriated to the Secretary to carry out this section: (1) \$15.0 million for FY 2002; and (2) such sums as are necessary for FY 2003 and FY 2004.

Sec. 2343. Nuclear Energy Technologies

Subsection 2343(a) requires the Secretary to conduct a study of Generation IV nuclear energy systems, including development of a technology roadmap and performance of R&D necessary to make an informed technical decision regarding the most promising candidates for commercial application.

Under subsection 2343(b), to the extent practicable, in conducting the study under subsection 2343(a), the Secretary shall study nuclear energy systems that offer the highest probability of achieving the goals for Generation IV nuclear energy systems, including: (1) economics competitive with any other generators; (2) enhanced safety features, including passive safety features; (3) substantially reduced production of high-level waste, as compared with the quantity of waste produced by reactors in operation on the date of enactment of this Act; (4) highly proliferation-resistant fuel and waste;

(5) sustainable energy generation including optimized fuel utilization; and (6) substantially improved thermal efficiency, as compared with the thermal efficiency of reactors in operation on the date of enactment of this Act.

In preparing the study under subsection 2343(b), subsection 2343(c) requires the Secretary to consult with appropriate representatives of industry, institutions of higher education, Federal agencies, and international, professional and technical organizations.

Subsection 2343(d) requires that, not later than December 31, 2002, the Secretary shall transmit to the appropriate congressional committees a report describing the activities of the Secretary under this section, and plans for R&D leading to a public/private cooperative demonstration of one or more Generation IV nuclear energy systems. The report shall contain: (A) an assessment of all available technologies; (B) a summary of actions needed for the most promising candidates to be considered as viable commercial options within the five to ten years after the date of the report, with consideration of regulatory, economic, and technical issues; (C) a recommendation of not more than three promising Generation IV nuclear energy system concepts for further development; (D) an evaluation of opportunities for public/private partnerships; (E) a recommendation for the structure of a public/private partnership to share in development and construction costs; (F) a plan leading to the selection and conceptual design, by September 30, 2004, of at least one Generation IV nuclear energy system concept recommended under subparagraph (C) for demonstration through a public/private partnership; (G) an evaluation of opportunities for siting demonstration facilities on DOE land; and (H) a recommendation for appropriate involvement of other Federal agencies.

Subsection 2343(e) authorizes to be appropriated to the Secretary to carry out this section: (1) \$20.0 million for FY 2002; and (2) such sums as are necessary for FY 2003 and FY 2004.

Sec. 2344. Authorization of Appropriations

Subsection 2344(a) authorizes activities under this title for nuclear energy operation and maintenance, including amounts authorized under sections 2304(a) (University Nuclear Science and Engineering), 2321(c) (Advanced Fuel Recycling Technology R&D Program), 2341(c) (Nuclear Energy Research Initiative), 2342(c) (Nuclear Energy Plant Optimization Program), and 2343(e) (Nuclear Energy Technologies), and including Advanced Radioisotope Power Systems, Test Reactor Landlord, and Program Direction, \$191.2 million for FY 2002, \$199.0 million for FY 2003, and \$207.0 million for FY 2004, to remain available until expended.

Subsection 2344(b) authorizes:

(1) \$0.95 million for FY 2002, \$2.2 million for FY 2003, \$1.246 million for FY 2004, and \$1.699 million for FY 2005 for completion of construction of Project 99-E-200, Test Reactor Area (TRA) Electric Utility Upgrade, Idaho National Engineering and Environmental Laboratory (INEEL); and

(2) \$0.5 million for each of FY 2002 through FY 2005 for completion of construction of Project 95-E-201, TRA Fire and Life Safety Improvements, INEEL.

Subsection 2344(c) provides that none of the funds authorized to be appropriated in subsection 2481(a) may be used for: "(1) Nuclear Energy Isotope Support and Production; (2) Argonne National Laboratory-West Operations; (3) Fast Flux Test Facility; or (4) Nuclear Facilities Management." These lim-

itations are included to preserve the Science Committee's sole jurisdiction over the bill since the jurisdiction of programs under this subsection either resides with the Committee on Energy and Commerce or is shared with that Committee.

TITLE IV—FOSSIL ENERGY

Subtitle A—Coal

Sec. 2401. Coal and Related Technologies Programs

Subsection 2401(a) authorizes to be appropriated to the Secretary \$172.0 million for FY 2002, \$179.0 million for FY 2003, and \$186.0 million for FY 2004, to remain available until expended, for other coal and related technologies programs, which shall include: (1) Innovations for Existing Plants; (2) Integrated Gasification Combined Cycle; (3) advanced combustion systems; (4) Turbines; (5) Sequestration Research and Development; (6) innovative technologies for demonstration; (7) Transportation Fuels and Chemicals; (8) Solid Fuels and Feedstocks; (9) Advanced Fuels Research; and (10) Advanced Research.

Notwithstanding subsection 2401(a), subsection 2405(b) prohibits the use of funds to carry out the activities authorized by this subtitle after September 30, 2002, unless the Secretary has transmitted to the appropriate congressional committees the report required by this subsection and one month have elapsed since that transmission. The report must include a plan containing: (1) a detailed description of how proposals will be solicited and evaluated, including a list of all activities expected to be undertaken; (2) a detailed list of technical milestones for each coal and related technology that will be pursued; and (3) a description of how the programs authorized in this section will be carried out so as to complement and not duplicate activities authorized under division E (Clean Coal Power Initiative).

TITLE IV—FOSSIL ENERGY

Subtitle B—Oil and Gas

Sec. 2421. Petroleum-Oil Technology

Section 2421 directs the Secretary to conduct a RD&D and commercial application program on petroleum-oil technology. The programs shall address: (1) Exploration and Production Supporting Research; (2) Oil Technology Reservoir Management/Extension; and (3) Effective Environmental Protection.

Sec. 2422. Gas

Section 2422 directs the Secretary to conduct a program of RD&D and commercial application on natural gas technologies. The program shall address: (1) Exploration and Production; (2) Infrastructure; and (3) Effective Environmental Protection.

TITLE IV—FOSSIL ENERGY

Subtitle C—Ultra-Deepwater and Unconventional Drilling

Sec. 2441. Short Title

Section 2441 cites the subtitle as the "Natural Gas and Other Petroleum Research, Development, and Demonstration Act of 2001."

Sec. 2442. Definitions

Section 2442 defines six terms, including the terms "deepwater" to mean water depths greater than 200 meters but less than 1,500 meters, "ultra-deepwater" to mean water depths greater than 1,500 meters, and "unconventional" to mean located in heretofore inaccessible or uneconomic formations on land.

Sec. 2443. Ultra-Deepwater Program

Section 2443 requires the Secretary to establish a program of RD&D of ultra-deep-

water natural gas and other petroleum exploration and production technologies, in areas currently available for Outer Continental Shelf leasing. The program shall be carried out by the Research Organization as provided in this subtitle.

Sec. 2444. National Energy Technology Laboratory

The National Energy Technology Laboratory (NETL) and the U.S. Geological Survey (USGS), when appropriate, shall carry out programs of long-term research into new natural gas and other petroleum exploration and production technologies and environmental mitigation technologies for production from unconventional and ultra-deepwater resources, including methane hydrates. NETL shall conduct a program of RD&D of new technologies for the reduction of greenhouse gas emissions from unconventional and ultra-deepwater natural gas or other petroleum exploration and production activities, including sub-sea floor carbon sequestration technologies.

Sec. 2445. Advisory Committee

Within six months after the date of the enactment of this Act, subsection 2445(a) requires the Secretary to establish an Advisory Committee consisting of seven members, each having extensive operational knowledge of and experience in the natural gas and other petroleum exploration and production industry who are not Federal Government employees or contractors. A minimum of four members shall have extensive knowledge of ultra-deepwater natural gas or other petroleum exploration and production technologies, a minimum of two members shall have extensive knowledge of unconventional natural gas or other petroleum exploration and production technologies, and at least one member shall have extensive knowledge of greenhouse gas emission reduction technologies, including carbon sequestration.

Subsection 2445(b) defines the function of the Advisory Committee to be to advise the Secretary on the selection of an organization to create the Research Organization and on the implementation of this subtitle.

Under subsection 2445(c), members of the Advisory Committee shall serve without compensation but shall receive travel expenses, including per diem in lieu of subsistence, in accordance with applicable provisions under subchapter I of chapter 57 of title 5, United States Code.

Subsection 2445(d) provides that the costs of activities carried out by the Secretary and the Advisory Committee under this subtitle shall be paid or reimbursed from the Fund established in section 2450.

Under subsection 2455(e), Section 14 of the Federal Advisory Committee Act shall not apply to the Advisory Committee.

Sec. 2446. Research Organization

Subsection 2446(a) requires the Secretary, within six months after the date of the enactment of this Act, to solicit proposals from eligible entities for the creation of the Research Organization, and within three months after such solicitation, to select an entity to create the Research Organization.

Under subsection 2446(b), entities eligible to create the Research Organization shall: (1) have been in existence as of the date of the enactment of this Act; (2) be entities exempt from tax under section 501(c)(3) of the Internal Revenue Code of 1986; and (3) be experienced in planning and managing programs in natural gas or other petroleum exploration and production RD&D.

Subsection 24246(c) requires that a proposal from an entity seeking to create the Research Organization shall include a detailed

description of the proposed membership and structure of the Research Organization.

The functions of the Research Organization, as defined in subsection 2446(c) are to: (1) award grants on a competitive basis to qualified research institutions, institutions of higher education, companies, and consortia of same for the purpose of conducting RD&D of unconventional and ultra-deepwater natural gas or other petroleum exploration and production technologies; and (2) review activities under those grants to ensure that they comply with the requirements of this subtitle and serve the purposes for which the grants were made.

Sec. 2447. Grants

Subsection 2447(a) provides for three types of grants: (1) unconventional, for RD&D of technologies aimed at unconventional reservoirs; (2) ultra-deepwater, for R&D of technologies aimed at ultra-deepwater areas; and (3) ultra-deepwater architecture. In the case of ultra-deepwater architecture, the Research Organization shall award a grant to one or more consortia for the purpose of developing and demonstrating the next generation architecture for ultra-deepwater production of natural gas and other petroleum.

Subsection 2447(b) provides that grants under this section shall contain seven specific conditions:

1. If the grant recipient consists of more than one entity, the recipient shall provide a signed contract agreed to by all participating members clearly defining all rights to intellectual property for existing technology and for future inventions conceived and developed using funds provided under the grant, in a manner that is consistent with applicable laws.

2. There shall be a repayment schedule for Federal dollars provided for demonstration projects under the grant in the event of a successful commercialization of the demonstrated technology. Such repayment schedule shall provide that the payments are made to the Secretary with the express intent that these payments not impede the adoption of the demonstrated technology in the marketplace. In the event that such impedance occurs due to market forces or other factors, the Research Organization shall renegotiate the grant agreement so that the acceptance of the technology in the marketplace is enabled.

3. Applications for grants for demonstration projects shall clearly state the intended commercial applications of the technology demonstrated.

4. The total amount of funds made available under a grant provided under subsection 2447(a)(3) for ultra-deepwater architecture shall not exceed 50 percent of the total cost of the activities for which the grant is provided.

5. The total amount of funds made available under a grant provided either under subsection 2447(a)(1) for unconventional reservoirs or under subsection 2447(a)(2) for ultra-deepwater areas shall not exceed 50 percent of the total cost of the activities covered by the grant, except that the Research Organization may elect to provide grants covering a higher percentage, not to exceed 90 percent, of total project costs in the case of grants made solely to independent producers.

6. An appropriate amount of funds provided under a grant shall be used for the broad dissemination of technologies developed under the grant to interested institutions of higher education, industry, and appropriate Federal and State technology entities to ensure the greatest possible benefits for the public and use of government resources.

7. Demonstrations of ultra-deepwater technologies for which funds are provided under a grant may be conducted in ultra-deepwater or deepwater locations.

Subsection 2447(c) requires that funds available for grants under this subtitle be allocated as follows: (1) 15 percent shall be for grants under subsection 2447(a)(1) for unconventional reservoirs; (2) 15 percent shall be for grants under subsection 2447(a)(2) for ultra-deepwater areas; (3) 60 percent shall be for grants under subsection 2447(a)(3) for ultra-deepwater architecture; and (4) 10 percent shall be for the NETL and the USGS, when appropriate, for carrying out section 2444.

Sec. 2448. Plan and Funding

Subsection 2448(a) requires the Research Organization to transmit to the Secretary an annual plan proposing projects and funding of activities under each paragraph of section 2447(a).

Under subsection 2448(b), the Secretary shall have one month to review the annual plan, and shall approve the plan, if it is consistent with this subtitle. If the Secretary approves the plan, the Secretary shall provide funding as proposed in the plan. If the Secretary does not approve the plan, subsection 2448(c) provides that the Secretary shall notify the Research Organization of the reasons for disapproval and shall withhold funding until a new plan is submitted which the Secretary approves. Within one month after notifying the Research Organization of a disapproval, the Secretary shall notify the appropriate congressional committees of the disapproval.

Sec. 2449. Audit

Section 2449 requires the Secretary to retain an independent, commercial auditor to determine the extent to which the funds authorized by this subtitle have been expended in a manner consistent with the purposes of this subtitle. The auditor must transmit a report annually to the Secretary, who shall transmit the report to the appropriate congressional committees, along with a plan to remedy any deficiencies cited in the report.

Sec. 2450. Fund

Subsection 2450(a) establishes a fund to be known as the "Ultra-Deepwater and Unconventional Gas Research Fund" (Fund) in the United States Treasury (Treasury), which shall be available for obligation to the extent provided in advance in appropriations Acts for allocation under section 2447(c) above.

Subsection 2450(b) specifies the Fund's three funding sources:

1. Loans from the Treasury—Subsection 2450(b)(1) authorizes to be appropriated to the Secretary \$900.0 million for the period encompassing FY 2002 through FY 2009. Such amounts shall be deposited by the Secretary in the Fund, and shall be considered loans from the Treasury. Income received by the United States in connection with any ultra-deepwater oil and gas leases shall be deposited in the Treasury and considered as repayment for the loans under this paragraph.

2. Additional Appropriations—Subsection 2450(b)(2) authorizes to be appropriated to the Secretary such sums as may be necessary for FY 2002 through FY 2009, to be deposited in the Fund.

3. Oil and Gas Lease Income—To the extent provided in advance in appropriations Acts, not more than 7.5 percent of the income of the United States from Federal oil and gas leases may be deposited in the Fund for FY 2002 through FY 2009. The Congressional Budget Office estimates these amounts to total \$3.616 billion.

Sec. 2451. Sunset

Under section 2451, no funds are authorized to be appropriated for carrying out this subtitle after FY 2009, and the Research Organization is terminated when it has expended all funds made available pursuant to this subtitle.

TITLE IV—FOSSIL ENERGY

Subtitle D—Fuel Cells

Sec. 2461. Fuel Cells

Section 2461(a) requires the Secretary to conduct a program of research, development, RD&D and commercial application on fuel cells. The program shall address: (1) Advanced Research; (2) Systems Development; (3) Vision 21-Hybrids; and (4) Innovative Concepts.

In addition to the program under subsection 2461(a), subsection 2461(b) requires the Secretary, in consultation other Federal agencies, as appropriate, to establish a program for the demonstration of fuel cell technologies, including fuel cell proton exchange membrane technology, for commercial, residential, and transportation applications. The program shall specifically focus on promoting the application of and improved manufacturing production and processes for fuel cell technologies.

Under subsection 2461(c), within the amounts authorized to be appropriated under subsection 2481(a), there are authorized to be appropriated to the Secretary for the purpose of carrying out subsection 2461 (b) \$28.0 million for each of FY 2002, 2003, and 2004.

TITLE IV—FOSSIL ENERGY

Subtitle E—DOE Authorization of Appropriations

Sec. 2481. Authorization of appropriations

Subsection 2481 (a) authorizes appropriations for subtitle B (Oil and Gas) and subtitle D (Fuel Cells), and for Fossil Energy Research and Development Headquarters Program Direction, Field Program Direction, Plant and Capital Equipment, Cooperative Research and Development, Import/Export Authorization, and Advanced Metallurgical Processes \$282.0 million for FY 2002, \$293.0 million for FY 2003, and \$305.0 million for FY 2004.

Subsection 2481(b) provides that none of the funds authorized to be appropriated in subsection 2481(a) may be used for: "(1) Gas Hydrates; (2) Fossil Energy Environmental Restoration; or (3) RD&D and commercial application on coal and related technologies, including activities under subtitle A." The first limitation is imposed because the Methane Hydrate Act of 2000 has been recently enacted and has its own separate authorization. The second limitation is included to preserve the Science Committee's sole jurisdiction over the bill, since the jurisdiction of Fossil Energy Environmental Restoration is shared with the Committee on Energy and Commerce. The third limitation is imposed to limit the amount of coal funding to that contained in subtitle A.

TITLE V—SCIENCE

Subtitle A—Fusion Energy Sciences

Sec. 2501. Short Title

Section 2501 cites the subtitle as the "Fusion Energy Sciences Act of 2001."

Sec. 2502. Findings

Section 2502 lists nine findings.

Sec. 2503. Plan for Fusion Experiment

Subsection 2503(a) requires the Secretary, in full consultation with the Fusion Energy Sciences Advisory Committee and the Secretary of Energy Advisory Board as appropriate, to develop a plan for construction in

the United States of a magnetic fusion burning plasma experiment for the purpose of accelerating scientific understanding of fusion plasmas. The Secretary shall request a review of the plan by the National Academy of Sciences (NAS), and shall transmit the Department plan and the NAS review to the Congress by July 1, 2004.

Subsection 2503(b) requires the plan to: (1) address key burning plasma physics issues; and (2) include specific information on the scientific capabilities of the proposed experiment, the relevance of these capabilities to the goal of practical fusion energy, and the overall design of the experiment including its estimated cost and identifying potential construction sites.

Subsection 2503(c) authorizes the Secretary, in full consultation with the Fusion Energy Sciences Advisory Committee and the Secretary of Energy Advisory Board as appropriate, to develop a plan for the United States participation in an international burning plasma experiment for the purpose of accelerating scientific understanding of fusion plasmas, whose construction is found by the Secretary to be highly likely and where the United States participation is cost effective relative to the cost and scientific benefits of a domestic experiment described in subsection 2503(a). If the Secretary elects to develop a plan under this subsection, the Secretary shall include the information described in subsection 2503(b), and an estimate of the cost of United States participation in such an international experiment. The Secretary shall request a review by the NAS of any such plan, shall transmit the plan and the review to the Congress by July 1, 2004.

Subsection 2503(d) authorizes the Secretary, through the Department's Fusion Energy Sciences Program, to conduct any R&D necessary to fully develop the plans described in this section.

Sec. 2504. Plan for Fusion Energy Sciences Program

Section 2504 requires that within six months after the enactment of this Act, the Secretary, in full consultation with the Fusion Energy Sciences Advisory Committee, to develop and transmit to the Congress a plan for the purpose of ensuring a strong scientific base for the Fusion Energy Sciences Program and to enable the burning plasma experiment described in section 2503. Such plan shall ensure: (1) that existing fusion research facilities and equipment are more fully utilized with appropriate measurements and control tools; (2) a strengthened fusion science theory and computational base; (3) that the selection of and funding for new magnetic and inertial fusion research facilities is based on scientific innovation and cost effectiveness; (4) improvement in the communication of scientific results and methods between the fusion science community and the wider scientific community; (5) that adequate support is provided to optimize the design of the magnetic fusion burning plasma experiment referred to in section 2503; (6) that inertial confinement fusion facilities are utilized to the extent practicable for the purpose of inertial fusion energy R&D; (7) the development of a roadmap for a fusion-based energy source that shows the important scientific questions, the evolution of confinement configurations, the relation between these two features, and their relation to the fusion energy goal; (8) the establishment of several new centers of excellence, selected through a competitive peer-review process and devoted to exploring the frontiers of fusion science; (9) that the NSF, and other agencies, as appropriate, play a

role in extending the reach of fusion science and in sponsoring general plasma science; and (10) that there be continuing broad assessments of the outlook for fusion energy and periodic external reviews of fusion energy sciences.

Sec. 2505. Authorization of Appropriations

Section 2505 authorizes—for ongoing activities in Department's Fusion Energy Sciences Program and for the purpose of planning activities under section 2503, but not for implementation of such plans—\$320.0 million for FY 2002 and \$335.0 million for FY 2003 of which up to \$15 million for each of FY 2002 and FY 2003 may be used to establish several new centers of excellence under section 2504(8).

TITLE V—SCIENCE

Subtitle B—Spallation Neutron Source

Sec. 2521. Definition

Section 2521 defines the term "Spallation Neutron Source" to mean Department Project 99E-334, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

Sec. 2522. Authorization of Appropriations

Subsection 2522(a) authorizes to be appropriated to the Secretary for construction of the Spallation Neutron Source (SNS): (1) \$276.3 million for FY 2002, (2) \$210.571 million for FY 2003, (3) \$124.6 million for FY 2004, (4) \$79.8 million for FY 2005, and (5) \$41.1 million for FY 2006 for completion of construction.

Subsection 2522(b) authorizes appropriation for other SNS project costs (including R&D necessary to complete the project, preoperations costs, and capital equipment not related to construction) \$15.353 million for FY 2002 and \$103.279 million for FY 2003 through 2006, to remain available until expended through September 30, 2006.

Sec. 2523. Report

Section 2523 requires the Secretary to report on the SNS as part of Department's annual budget submission, including a description of the achievement of milestones, a comparison of actual costs to estimated costs, and any changes in estimated project costs or schedule.

Sec. 2524. Limitations

Section 2524 limits the total amount obligated for the SNS by the Department, including prior year appropriations, to not more than: (1) \$1,192.7 million for costs of construction; (2) \$219.0 million for other project costs; and (3) \$1,411.7 million for total project cost.

TITLE V—SCIENCE

Subtitle C—Facilities, Infrastructure, and User Facilities

Sec. 2541. Definition

Subsection 2541(1) defines the term "non-military energy laboratory" to mean: (A) Ames Laboratory; (B) Argonne National Laboratory; (C) Brookhaven National Laboratory; (D) Fermi National Accelerator Laboratory; (E) Lawrence Berkeley National Laboratory; (F) Oak Ridge National Laboratory; (G) Pacific Northwest National Laboratory; (H) Princeton Plasma Physics Laboratory; (I) Stanford Linear Accelerator Center; (J) Thomas Jefferson National Accelerator Facility; or (K) any other facility of the Department that the Secretary, in consultation with the Director, Office of Science and the appropriate congressional committees, determines to be consistent with the mission of the Office of Science.

Subsection 2541(2) defines the term "user facility" to mean: (A) an Office of Science facility at a non-military energy laboratory

that provides special scientific and research capabilities, including technical expertise and support as appropriate, to serve the research needs of the Nation's universities, industry, private laboratories, Federal laboratories, and others, including research institutions or individuals from other nations where reciprocal accommodations are provided to United States research institutions and individuals or where the Secretary considers such accommodation to be in the national interest; and (B) any other Office of Science funded facility designated by the Secretary as a user facility.

Sec. 2542. Facility and Infrastructure Support for Nonmilitary Energy Laboratories

Subsection 2542(a) requires the Secretary to develop and implement a least-cost non-military energy laboratory facility and infrastructure strategy for: (1) maintaining existing facilities and infrastructure, as needed; (2) closing unneeded facilities; (3) making facility modifications; and (4) building new facilities.

Subsection 2542(b) requires the Secretary to prepare a comprehensive ten-year plan for conducting future facility maintenance, making repairs, modifications, and new additions, and constructing new facilities at each nonmilitary energy laboratory. Such plan is to provide for facilities work in accordance with the following priorities: (1) providing for the safety and health of employees, visitors, and the general public with regard to correcting existing structural, mechanical, electrical, and environmental deficiencies; (2) providing for the repair and rehabilitation of existing facilities to keep them in use and prevent deterioration, if feasible; and (3) providing engineering design and construction services for those facilities that require modification or additions in order to meet the needs of new or expanded programs.

Subsection 2542(c) requires the Secretary to prepare and transmit to the appropriate congressional committees a report containing the plan prepared under subsection 2542(b) within one year after the date of the enactment of this Act. For each nonmilitary energy laboratory, the report is to contain: (1) the current priority list of proposed facilities and infrastructure projects, including cost and schedule requirements; (2) a current ten-year plan that demonstrates the re-configuration of its facilities and infrastructure to meet its missions and to address its long-term operational costs and return on investment; (3) the total current budget for all facilities and infrastructure funding; and (4) the current status of each facilities and infrastructure project compared to the original baseline cost, schedule, and scope.

The report shall also: (1) include a plan for new facilities and facility modifications at each nonmilitary energy laboratory that will be required to meet the Department's changing missions for the twenty-first century, including schedules and estimates for implementation, and including a section outlining long-term funding requirements consistent with anticipated budgets and annual authorization of appropriations; (2) address the coordination of modernization and consolidation of facilities among the nonmilitary energy laboratories in order to meet changing mission requirements; and (3) provide for annual reports to the appropriate congressional committees on accomplishments, conformance to schedules, commitments, and expenditures.

Sec. 2543. User Facilities

Under subsection 2543(a), when the Department makes a user facility available to universities and other potential users, or seeks

input from universities and other potential users regarding significant characteristics or equipment in a user facility or a proposed user facility, the Department shall ensure broad public notice of such availability or such need for input to universities and other potential users.

Subsection 2543(b) requires the Department to employ full and open competition in selecting participants when the Department considers the participation of a university or other potential user in the establishment or operation of a user facility.

Section 2543(c) prohibits the Department from redesignating a user facility, as defined by section 2541 (b) as something other than a user facility to avoid the requirements of subsections (a) and (b).

TITLE V—SCIENCE

Subtitle D—Advisory Panel on Office of Science

Sec. 2561. Establishment

Section 2561 requires the Director of the Office of Science and Technology Policy, in consultation with the Secretary, to establish an Advisory Panel on the Office of Science comprised of knowledgeable individuals to: (1) address concerns about the current status and the future of scientific research supported by the Office; (2) examine alternatives to the current organizational structure of the Office within the Department, taking into consideration existing structures for the support of scientific research in other Federal agencies and the private sector; and (3) suggest actions to strengthen the scientific research supported by the Office that might be taken jointly by the Department and Congress.

Sec. 2562. Report

Under section 2562, within six months after the date of the enactment of this Act, the Advisory Panel shall transmit its findings and recommendations in a report to the Director of the Office of Science and Technology Policy and the Secretary. The Director and the Secretary shall jointly: (1) consider each of the Panel's findings and recommendations, and comment on each as they consider appropriate; and (2) transmit the Panel's report and the comments of the Director and the Secretary on the report to the appropriate congressional committees within nine months after the date of the enactment of this Act.

TITLE V—SCIENCE

Subtitle E—Department of Energy Authorization of Appropriations

Sec. 2581. Authorization of appropriations

Including the amounts authorized to be appropriated for FY 2002 under section 2505 for Fusion Energy Sciences and under subsection 2522(b) for the SNS, subsection 2581(a) authorizes to be appropriated to the Secretary for the Office of Science (also including subtitle C—Facilities, Infrastructure, and User Facilities, High Energy Physics, Nuclear Physics, Biological and Environmental Research, Basic Energy Sciences (except for the SNS authorization under subsection 2522(b)), Advanced Scientific Computing Research, Energy Research Analysis, Multiprogram Energy Laboratories-Facilities Support, Facilities and Infrastructure, Safeguards and Security, and Program Direction) operation and maintenance \$3,299.558 million for FY year 2002, to remain available until expended.

Subsection 2581(b) provides that within the amounts authorized under subsection (a), \$5.0 million for FY 2002 may be used to carry out research in the use of precious metals

(excluding platinum, palladium, and rhodium) in catalysis, either directly through national laboratories, or through the award of grants, cooperative agreements, or contracts with public or nonprofit entities.

Subsection 2581(c) provides that in addition to the amounts authorized under subsection 2522(a) for SNS construction, subsection 2581 (b) authorizes:

(1) \$11.4 million for FY 2002 for completion of construction of Project 98-G-304, Neutrinos at the Main Injector, Fermi National Accelerator Laboratory;

(2) \$11.405 million for FY 2002 for completion of construction of Project 01-E-300, Laboratory for Comparative and Functional Genomics, Oak Ridge National Laboratory;

(3) \$4.0 million for FY 2002, \$8.0 million for FY 2003, and \$2.0 million for FY 2004 for completion of construction of Project 02-SC-002, Project Engineering Design (PED), Various Locations;

(4) \$3.183 million for FY 2002 for completion of construction of Project 02-SC-002, Multiprogram Energy Laboratories Infrastructure Project Engineering Design (PED), Various Locations; and

(5) \$18.633 million for FY 2002 and \$13.029 million for FY 2003 for completion of construction of Project MEL-001, Multiprogram Energy Laboratories, Infrastructure, Various Locations.

Subsection 2581(d) provides that none of the funds authorized to be appropriated in subsection 2581(b) may be used for construction at any national security laboratory as defined in section 3281(1) of the National Defense Authorization Act for Fiscal Year 2000 (50 U.S.C. 2471(1)) or at any nuclear weapons production facility as defined in section 3281(2) of the National Defense Authorization Act for 2000 (50 U.S.C. 2471(2)). This limitation is included to preserve the Science Committee's sole jurisdiction over the bill, since the jurisdiction of these laboratories and facilities reside with the Committee on Armed Services.

TITLE VI—MISCELLANEOUS

Subtitle A—General Provisions for the Department of Energy

Sec. 2601. Research, Development, Demonstration and Commercial Application of Energy Technology Programs, Projects, and Activities

Subsection 2601(a) requires that RD&D and commercial application programs, projects, and activities authorized under this Act be carried out under the procedures of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.), the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.), or any other Act under which the Secretary is authorized to carry out such programs, projects, and activities, only to the extent the Secretary is authorized to carry out such activities under each Act and except as otherwise provided in this Act.

Subsection 2601(b) authorizes the Secretary to use grants, joint ventures, and any other form of agreement available to the Secretary to the extent authorized under applicable provisions of law, contracts, cooperative agreements, cooperative R&D agreements under the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), except as otherwise provided in this Act, to carry out RD&D and commercial application programs, projects, and activities.

Subsection 2601(c) defines the term "joint venture" for the purpose of this section to have the meaning given that term under section 2 of the National Cooperative Research and Production Act of 1993 (15 U.S.C. 4301),

except that such term applies to RD&D and commercial application of energy technology joint ventures.

Subsection 2601(d) requires that section 12(c)(7) of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3710a(c)(7)), relating to the protection of information, will apply to RD&D and commercial application of energy technology programs, projects, and activities under this Act.

Under subsection 2601(e), an invention conceived and developed by any person using funds provided through a grant under this Act shall be considered a subject invention for the purposes of chapter 18 of title 35, United States Code (commonly referred to as the Bayh-Dole Act).

Subsection 2601(f) requires the Secretary to ensure that each program authorized by this Act includes an outreach component to provide information, as appropriate, to manufacturers, consumers, engineers, architects, builders, energy service companies, universities, facility planners and managers, State and local governments, and other entities.

Subsection 2601(g) requires the Secretary to provide guidelines and procedures for the transition of energy technologies from research through development and demonstration to commercial application of energy technology where appropriate. Nothing in this section precludes the Secretary from: (1) entering into a contract, cooperative agreement, cooperative R&D agreement under the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grant, joint venture, or any other form of agreement available to the Secretary under this section that relates to RD&D and commercial application of energy technology; or (2) extending a contract, cooperative agreement, cooperative R&D agreement under the Stevenson-Wylder Technology Innovation Act of 1980, grant, joint venture, or any other form of agreement available to the Secretary that relates to RD&D to cover commercial application of energy technology.

Subsection 2601(h) states that this section shall not apply to any contract, cooperative agreement, cooperative R&D agreement under the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grant, joint venture, or any other form of agreement available to the Secretary that is in effect as of the date of enactment of this Act.

Sec. 2602. Limits on Use of Funds

Subsection 2602(a) prohibits the use of funds authorized by this Act to award a management and operating contract for a federally owned or operated nonmilitary energy laboratory of the Department unless such contract is awarded using competitive procedures or the Secretary grants, on a case-by-case basis, a waiver to allow for such a deviation. The Secretary may not delegate the authority to grant such a waiver. At least 60 days before a contract award, amendment, or modification for which the Secretary intends to grant such a waiver, the Secretary shall submit to the appropriate congressional committees a report notifying the committees of the waiver and setting forth the reasons for the waiver.

Subsection 2602(b) prohibits the Secretary from using funds to produce or provide articles or services for the purpose of selling the articles or services to a person outside the Federal Government, unless the Secretary determines that comparable articles or services are not available from a commercial source in the United States.

Subsection 2602(c) prohibits the Secretary from using funds to prepare or initiate Requests for Proposals for a program if Congress has not authorized the program.

Sec. 2603. Cost Sharing

Except as otherwise provided in this subtitle, subsection 2603(a) mandates that for R&D programs carried out under this subtitle, the Secretary shall require a commitment from non-Federal sources of at least 20 percent of the cost of the project. The Secretary may reduce or eliminate the non-Federal requirement under this subsection if the Secretary determines that the R&D is of a basic or fundamental nature.

Similarly, under subsection 2603(b) the Secretary shall require at least 50 percent of the costs directly and specifically related to any demonstration or commercial application project under this subtitle to be provided from non-Federal sources. The Secretary may reduce the non-Federal requirement under this subsection if the Secretary determines that the reduction is necessary and appropriate considering the technological risks involved in the project and is necessary to meet the objectives of this subtitle.

In calculating the amount of the non-Federal commitment under subsection (a) or (b), the Secretary may include personnel, services, equipment, and other resources.

Sec. 2604. Limitations on Demonstrations and Commercial Application of Energy Technology

Section 2604 requires the Secretary to provide funding only for scientific or energy demonstration and commercial application of energy technology programs, projects or activities for technologies or processes that can reasonably be expected to yield new, measurable benefits to the cost, efficiency, or performance of the technology or process.

Sec. 2605. Reprogramming

Section 2605 prohibits the reprogramming of funds in excess of 105 percent of the amount authorized for a program, project, or activity, or in excess of \$0.25 million above the amount authorized for the program, project, or activity until the Secretary submits a report to the appropriate congressional committees and a period of 30 days has elapsed after the date on which the report is received. The report shall be a full and complete statement of the proposed reprogramming and the facts and circumstances in support of the proposed reprogramming. This section prohibits the Secretary from obligating funds in excess of the total amount authorized to be appropriated to the Secretary by this Act and prohibits the Secretary from using funds for any use for which Congress has declined to authorize funds.

TITLE VI—MISCELLANEOUS

Subtitle B—Other Miscellaneous Provisions

Sec. 2611. Notice of Reorganization

Section 2611 requires the Secretary to provide notice to the appropriate congressional committees not later than 15 days before any reorganization of environmental research or development, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity of the Department.

Sec. 2612. Limits on General Plant Projects

Section 2612 requires the Secretary to halt the construction of a civilian environmental research, development, or demonstration, or commercial application of energy technology "general plant project" if the estimated cost of the project (including any revisions) exceeds \$5.0 million unless the Secretary has furnished a complete report to the appropriate congressional committees explaining the project and the reasons for the estimate or revision.

Sec. 2613. Limits on Construction Projects

Section 2613 prohibits construction on a civilian environmental R&D, scientific or energy RD&D, or commercial application of energy technology project for which funding has been specifically authorized by law to be initiated and continued if the estimated cost for the project exceeds 110 percent of the higher of: (1) the amount authorized for the project; or (2) the most recent total estimated cost presented to Congress as budget justification for such project. To exceed such limits, the Secretary must report in detail to the appropriate congressional committees on the related circumstances and the report must be before the appropriate congressional committees for 30 legislative days (excluding any day on which either House of Congress is not in session because of an adjournment of more than three days to a day certain). This section shall not apply to any construction project that has a current estimated cost of less than \$5.0 million.

Sec. 2614. Authority for Conceptual and Construction Design

Section 2614 limits the Secretary's authority to request construction funding in excess of \$5.0 million for a civilian environmental R&D, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity until the Secretary has completed a conceptual design for that project. Furthermore, if the estimated cost of completing a conceptual design for the construction project exceeds \$0.75 million, the Secretary must submit a request to Congress for funds for the conceptual design before submitting a request for the construction project. In addition, the subsection allows the Secretary to carry out construction design (including architectural and engineering services) in connection with any proposed construction project that is in support of a civilian environmental R&D, scientific or energy research, development, and demonstration, or commercial application of energy technology program, project, or activity of the Department if the total estimated cost for such design does not exceed \$0.25 million; if the total estimated cost for construction design exceeds \$0.25 million, funds for such design must be specifically authorized by law.

Sec. 2615. National Energy Policy Group Mandated Reports

Subsection 2615(a) requires that upon completion of the Secretary's review of current funding and historic performance of the Department's energy efficiency, renewable energy, and alternative energy R&D programs in response to the recommendations of the May 16, 2001, Report of the National Energy Policy Development Group, the Secretary shall transmit a report containing the results of such review to the appropriate congressional committees.

Subsection 2615(b) requires that upon completion of the Office of Science and Technology Policy and the President's Council of Advisors on Science and Technology reviewing and making recommendations on using the Nation's energy resources more efficiently, in response to the recommendations of the May 16, 2001, Report of the National Energy Policy Development Group, the Director of the Office of Science and Technology Policy shall transmit a report containing the results of such review and recommendations to the appropriate congressional committees.

Sec. 2616. Independent Reviews and Assessments

Section 2616 requires the Secretary to enter into appropriate arrangements with

the National Academies of Sciences and Engineering to ensure that there be periodic reviews and assessments of the programs authorized by this Act, as well as the goals for such programs as established under section 2004. Such reviews and assessments shall be conducted at least every five years, and the Secretary shall transmit to the appropriate congressional committees reports containing the results of these reviews and assessments.

III. COMMITTEE ON SCIENCE VIEWS ON H.R. 4, SECURING AMERICA'S FUTURE ENERGY (SAFE) ACT OF 2001

DIVISION B: COMPREHENSIVE ENERGY RESEARCH AND TECHNOLOGY ACT OF 2001

Sec. 2004. Goals

The cost and performance-based goals in section 2004 guide and unify the RD&D and commercial applications programs authorized in this Act. The Secretary must refine and update measurable cost and performance-based goals in furtherance of the Act's purposes in section 2003 on a biennial basis. As provided in section 2616, the Secretary must enter into arrangements with the National Academies of Sciences and Engineering for periodic reviews and assessments of the programs in the Act and the goals established under section 2004.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle A—Alternative Fuel Vehicles

In selecting applicants and project sites, the Secretary should, consistent with subsection 2103(d)(1), give special consideration to proposals that address environmental needs in actual and potential Clean Air Act nonattainment areas like the Washington, DC metropolitan region and in communities seeking to meet zero air emissions goals, like Santa Clara County, California.

The Committee considers the United States Postal Service (USPS) a "partner" or entity eligible for funding under the alternative fuel vehicle program. The Committee commends the USPS for taking a leadership role in the conversion of its aging fleet to more environmentally sound electric vehicles. Over the next five years, some 6,000 Long-Life Vehicles will replace an aging fleet of trucks in southern California, New York, and the Washington, DC metropolitan area. It is estimated that over three million gallons of fuel will be saved, and 170,000 tons of carbon dioxide will be removed from the environment as a result of the effort. The Committee encourages the USPS to continue this important procurement and, in doing so, show leadership to other governmental entities considering the advancement and deployment of alternative fuel vehicles.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle B—Distributed Power Hybrid Energy Systems

The Committee notes that the National Renewable Energy Laboratory (NREL) currently performs certain duties of this subtitle, especially with regard to performing and integrating RD&D activities related to distributed power hybrid systems, and expects NREL to continue and expand these activities.

The Committee encourages the Secretary to solicit proposals from institutions of higher education for sharing costs of acquisitions, installation, instrumentation, data acquisition, and data analysis and reporting for building cooling/heating and power systems, district energy systems, and other distributed energy resources. In this regard, the Secretary should consider, proposals emphasizing installations using emerging technologies, developed with the support of the

Department, that offer energy efficiency and/or environmental benefits. The Committee also encourages the Department to require performance reports back from recipients of these awards detailing steps taken, efficiency gains achieved, and educational benefits realized. These reports would constitute "case studies" demonstrating the viability of these systems. Should the Secretary require such reports, funding for the reporting should be included in the grant or contract.

Sec. 2123. Strategy, Sec. 2124. High Power Density Industry Program

Subsection 2123(b)(5) describes a RD&D and commercial application program to be implemented as part of the Distributed Power Hybrid Systems Strategy. Subsection 2124(b) identifies areas that should be considered in carrying out the program to improve energy efficiency, reliability, and environmental responsibility in high power density industries. Existing programs are already researching real-time performance monitoring, conserving and optimizing energy systems, simulation and analysis of power systems, and utilization of power generation byproducts in an environmentally friendly manner. This work can become a base for implementing the Distributed Power Hybrid Systems Strategy and the High Power Density Industry Program. The Secretary should rely on research and technology development work already begun at State Centers of Excellence such as the Center for Electric Power at Tennessee Technological University to accelerate implementation of sections 2123 and 2124.

Sec. 2125. Micro-Cogeneration Energy Technology

Section 2125 is intended to help realize the potential of cogeneration technology as a clean source of energy for a variety of applications. Many believe the space heating industry is often overlooked in the development of such distributed cogeneration systems. The Committee believes that, with further research and development, cogeneration of electric power as a byproduct of building heating system operation could provide significant environmental benefits at low cost and high reliability and that the heating appliance industry is uniquely positioned to provide reliable electricity using environmentally friendly cogeneration power with practical technology.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle D—Green School Buses

The Committee directs the Secretary to ensure that grants under this subtitle will demonstrate the use of alternative fuel school buses and, as a result, lead to the replacement of pre-1977 (model year) diesel and gas buses and pre-1991 (model year) diesel buses and, in limited situations (such as in low income areas), the expansion of existing fleets using conventional fuel buses with new, alternative fuel buses. In providing grants under this subtitle, the Secretary shall ensure that recipients of assistance certify that replaced buses are crushed or otherwise appropriately disposed of in accordance with law.

Coordination of Alternative Fuel Bus Programs

Division B contains various authorities relating to alternative fuel buses, such as title I, subtitle A (Alternative Fuel Vehicles), title I, subtitle D (Green School Buses), section 2206(2) (fuel cell bus demonstrations under the Spark M. Matsunaga Hydrogen

RD&D Act of 1990), and relating to transportation applications for fuel cells (subsection 2461 (b)). The Committee intends that the Secretary will coordinate implementation of the various provisions to maximize their integration and effectiveness.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle F—DOE Authorization of Appropriations

The Committee directs the Department to continue RD&D on Smart Window technologies including electro-chromics and other advanced technologies in energy-efficient windows, doors, and skylights.

The Committee is aware of the potential of optical/graphical programming for driving, controlling, and improving virtually all types of electric motors. Successful development of a simple, low cost, and generic solution for the intelligent control of electric motors could significantly improve the energy efficiency of electric motors. Such technology could have tremendous impact on the heating, ventilation, and air conditioning industry, among others. In FY 2001, the DOE, through the Office of Industrial Technologies, invested in several promising energy efficient technologies, including the development of an optical programming system for intelligent control of electric air conditioning motors. The Committee strongly encourages the Department to further increase its investment in optical/graphical programming technologies.

The Committee is aware of various engine technologies, including an axial piston OX2 engine, which have numerous potential advantages over the design of conventional internal combustion engines. The Secretary should, where appropriate, support efforts by universities and the private sector to continue, and expand, development and testing of technologies that provide environmental advantages over current conventional engines, such as improved power-to-weight ratios, improved fuel efficiencies, and reduced air emissions.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle G—EPA Office of Air and Radiation Authorization of Appropriations

Sec. 2175. Limitation on Demonstration and Commercial Applications of Energy Technology

The phrase "measurable benefits to the cost, efficiency, or performance of the technology or process" in section 2175 includes environmental considerations. The Committee does not intend for this provision to curtail the demonstration or commercial application of energy technologies that are efficient, effective, and environmentally beneficial. The Committee believes this interpretation regarding EPA technologies should also apply to section 2604, relating to DOE technologies.

TITLE II—RENEWABLE ENERGY

Subtitle A—Hydrogen

Section 2206 amends the Spark M. Matsunaga Hydrogen RD&D Act of 1990 to establish a fuel cell bus demonstration program to address hydrogen production, storage, and use in transit bus applications. The Committee recognizes that fuel cell technology could significantly contribute to improving the cost effectiveness and environmental impact of mass transit options, particularly in municipal buses and in shuttle buses such as those operating at large airports. However, more research needs to be done to address a number of issues related to this technology.

This demonstration program should specifically address all aspects of the introduction of this new technology, including the following components:

(1) Development, installation, and operation of a hydrogen delivery system located on-site at transit bus terminals.

(2) Development, installation, and operation of on-site storage associated with the hydrogen delivery systems as well as storage tank systems incorporated into the bus itself.

(3) Demonstration of use of hydrogen as a practical, safe, renewable energy source in a highly efficient, zero-emission power system for buses.

(4) Development of a hydrogen proton exchange membrane fuel cell power system that is confirmed and verified as being compatible with transit bus application requirements.

(5) Durability testing of the fuel cell bus.

(6) Identification and implementation of necessary codes and standards for the safe use of hydrogen as a fuel suitable for bus application, including the fuel cell power system and related operational facilities.

(7) Identification and implementation of maintenance and overhaul requirements for hydrogen proton exchange membrane fuel cell transit buses.

(8) Completion of fleet vehicle evaluation program by bus operators along normal transit routes, providing equipment manufacturers and transit operators with the necessary analyses to enable operation of the hydrogen proton exchange membrane fuel cell bus under a range of operating environments.

The Committee is aware that the Department of Transportation is currently developing and funding a number of Bus Rapid Transit (BRT) demonstration programs around the country. The Committee believes that the BRT program is structured in a way that would facilitate the execution of this fuel cell bus demonstration program, as well as reducing redundancy in interagency research, and recommends the Secretary consider integrating this fuel cell demonstration with existing BRT initiatives where there is local support to do so.

TITLE II—RENEWABLE ENERGY

Subtitle B—Bioenergy

Sec. 2225. Authorization of Appropriations

Subsection 2225(b) authorizes funds for biofuels energy systems. The Committee is aware of a proposal to establish a biofuels processing facility in New York to convert cellulose materials into levulinic acid for multiple applications. As part of the proposal, the State University of New York College of Environmental Science and Forestry would also develop a Bioenergy and Bioproducts Technology Center, focusing on biofuels from lignocellulosic biomaterial. The Committee strongly encourages the Secretary to consider providing substantial financial assistance for this biofuels proposal.

Subsection 2225(d) authorizes the Secretary to provide assistance for an integrated rice straw project in Gridley, California, to convert rice straw into ethanol, electric power, and silica, and an ethanol production facility in Maryland to convert barley grain into ethanol for use in motor vehicles or other uses.

TITLE II—RENEWABLE ENERGY

Subtitle D—DOE Authorization of Appropriations

Sec. 2261. Authorization of Appropriations

As pointed out in a recent National Research Council review, geothermal energy research at the DOE may be undervalued in

light of the significant U.S. and international resource base.

DOE should consider establishing a national geothermal research center with the resources necessary to lead an expanded multi-laboratory geothermal research effort in the years ahead. DOE should also continue to build upon its past efforts to involve industry, university researchers and the national laboratories in strategic planning for the geothermal energy program as it moves this program forward.

The Committee is aware of the promise of emerging geothermal energy systems. Within the Department's budget for geothermal research, the committee urges on-going support for university research on enhanced geothermal systems. University research programs, such as the Energy & Geoscience Institute (EGI) at the University of Utah and the "Geothermal of the West" program, offer the promise of tapping into under-utilized geothermal resources. This program has specific relevance for electrical power in the West, including the Great Basin, Northern California Coast and Cascade Range. Continued investment by DOE in the research into these promising geothermal systems may dramatically reduce dependence on other energy sources, and improve the sustainability of existing geothermal energy systems.

The Committee is aware of the capabilities of Texas Southern University's (TSU) Photovoltaic Laboratory, which has experience in demonstrating the potential of using commercially available photovoltaic equipment to generate electric power for electrically isolated applications in the small commercial sector. The Committee urges the Department to consider using the capabilities of the TSU laboratory in testing and demonstrating components in the R&D phase as well as those already commercialized.

Subsection 2261(b) directs the Secretary to carry out a research program, in conjunction with "other appropriate Federal agencies" on wave powered electric generation. The Committee intends the term "other appropriate Federal agencies" to mean the Office of Naval Research.

TITLE III—NUCLEAR ENERGY

Subtitle A—University Nuclear Science and Engineering

Sec. 2303. Department of Energy Program

The Committee is aware of concerns within the university nuclear research reactor community that DOE may be considering downscaling its support for numerous university reactors. The Committee's authorization of Nuclear Education Programs stands as a strong signal of our desire to see the Department continue to maintain, and even expand, its support of the existing research reactor infrastructure. Institutions such as the University of Utah Nuclear Engineering Program run robust nuclear research reactor centers. Without their involvement, and the maintenance of their reactor infrastructure, necessary expertise on nuclear safety and storage would be lost to the Western region, at the exact time that nuclear waste products may arrive within the region. The Committee believes that a balanced approach to nuclear power must include on-going support for nuclear research reactors throughout the various regions of the United States.

TITLE IV—FOSSIL ENERGY

SUBTITLE C—ULTRA-DEEPWATER AND UNCONVENTIONAL DRILLING

Subtitle C of title IV, the Natural Gas and Other Petroleum Research, Development, and Demonstration Act of 2001, authorizes a new, ten-year program at the Department

for research, development and demonstration of ultra-deepwater natural gas and other petroleum exploration technologies. For purposes of this program, ultra-deepwater is defined to be in excess of 1,500 meters, or approximately 5,000 feet, below the surface of the ocean. The Committee is hopeful that this technology will enable the U.S. to increase the supplies of oil and gas from the middle and western Gulf of Mexico and other areas already open to drilling.

The Department is to carry out the program through a non-profit Research Organization. The Committee based this model on the highly successful example of SEMATECH, which guided jointly-funded efforts of the Department of Defense and the semiconductor industry.

The Committee intends that the Secretary exercise continuing oversight over the Research Organization. It is the Secretary's responsibility to ensure that the public interest is being served by the Research Organization's projects, that the projects are making the desired technical progress, and that the public's money is being properly spent. The Act requires that the Secretary receive and review a specific research plan from the Research Organization each year, and allows the Secretary to withhold the Research Organization's funding for the year until the research plan is satisfactory. The Act also requires annual audits by an independent, outside auditing firm. Such audits were also required of SEMATECH.

The Act provides specific allocations for each of the types of activities enumerated. However, in running the program, the Secretary may find that these allocations are preventing the most efficient and effective expenditure of funds. The Secretary should notify the Committee if the allocations prove problematic.

The Act requires that all the projects undertaken under this program have among their major goals the improvement of safety and the limiting of environmental impacts. The Committee expects the Secretary to carefully monitor the program to ensure that safety and environmental impacts are specifically addressed in the projects funded through the Research Organization.

This program of RD&D would only be applicable in certain areas. Section 2443 prohibits activities through the RD&D provisions of this Act or through any new technologies developed under this section (or any other part of subtitle C) in any offshore areas that are currently under federal moratoria, such as areas off the coasts of California or North Carolina.

TITLE IV—FOSSIL ENERGY

Subtitle D—Fuel Cells

The Committee notes that three separate sections of the bill authorize fuel cell RD&D and commercial application: section 2143(c) pertaining to fuel-cell school buses, section 2206(2) pertaining to fuel cell bus demonstration programs, and section 2461 pertaining to fuel cells. The Committee intends that the Secretary will coordinate implementation of these three provisions to maximize their integration and effectiveness.

The Committee also recognizes that local organizations, such as the Houston-Galveston Area Council, are well equipped to assist the Federal government in demonstrating the benefits from research on fuel cell technologies used for low-emission mass transit vehicles.

TITLE V—SCIENCE

Subtitle E—DOE Authorization of Appropriations

The Committee is concerned about practices employed by the Department to enforce

security at DOE scientific laboratories funded under this section. The Committee notes that the perception of racial profiling may have fostered a hostile work environment and may be discouraging certain employees and potential employees from working at DOE facilities. The Committee is concerned that such loss of talent at DOE would endanger DOE's missions to remain technologically competitive and to protect national security.

Mr. Chairman, these provisions reflect a balanced, bipartisan comprehensive approach to energy policy. They significantly increase the Nation's investments in R&D, on conservation and renewable energy sources, two fundamental public needs that are unlikely to be adequately addressed by market forces alone. At the same time, we continue and enhance our investment in research in oil, gas, coal, and nuclear power. We do so in a responsible way.

I am pleased that the bill includes two measures I introduced, one to promote the use of alternative vehicles in general, and the other to promote the use of alternative fuel school buses in particular. These programs will both demonstrate the viability of hybrid electric, natural gas, and ultra-clean diesel technologies and help lower their cost in the marketplace.

Many other Members of Congress on our committee on both sides of the aisle have contributed to portions of the bill, but I want to especially draw attention to the ultra-deep oil drilling research supported by our ranking member, the gentleman from Texas (Mr. HALL), the biofuels section introduced by our Subcommittee on Energy chairman, the gentleman from Maryland (Mr. BARTLETT), numerous sections promoting clean energy supported by our Subcommittee on Energy ranking member, the gentlewoman from California (Ms. WOOLSEY), nuclear science provisions brought to us by the gentlewoman from Illinois (Mrs. BIGGERT), and the hydrogen provision sponsored by the gentleman from California (Mr. CALVERT). That is just the beginning of a long list of contributors. This is a bipartisan team effort.

I also want to draw attention to division E, which includes clean coal provisions worked out in arduous negotiations with the Committee on Energy and Commerce. I want to thank the gentleman from Louisiana (Chairman TAUZIN) and the gentleman from Texas (Mr. BARTON) and the ranking members, the gentleman from Michigan (Mr. DINGELL) and the gentleman from Virginia (Mr. BOUCHER), and their staffs for their cooperation in reaching these agreements. We all agreed to put jurisdictional claims aside for the moment to have the tough decisions and discussions necessary to come up with a good program.

I have to say though that those discussions were made more difficult by the behavior of the coal industry, which continues to display the same

sort of sense of entitlement that has made past clean coal programs questionably productive. That is why in this program we have strict environmental and financial standards, to ensure that the projects we fund truly need a taxpayer subsidy; that they will result in marketable advances in technology; and that those technologies will result in real improvements in efficiency and emissions.

Most importantly, we require that at least 80 percent of the money be spent on gasification technology, which, among its other attributes, provides the best chance of preventing carbon dioxide, the leading man-made greenhouse gas, from escaping into the atmosphere.

In fact, throughout the Committee on Science portions of the bill, we are cognizant of the very real threat of global climate change, and we worked to ensure that our Nation's energy policy takes climate change and other environmental issues into account.

I wish that were true of every portion of H.R. 4, but it is not. That is why I oppose the bill in its current form, and I will vote against it if it is not amended. I will be supporting two key amendments. Let me just speak about them for a moment.

If we are serious about reducing our dependence on foreign-source oil, and we have to be serious about that, if we are serious about protecting our environment, and that is of the highest priority, if we are serious about conserving energy, and if we are serious about helping the consumer, then we must pass the Boehlert-Markey amendment to raise corporate average fuel economy standards.

H.R. 4 takes the smallest of steps in the direction of raising CAFE standards, far smaller steps than the National Academy of Sciences says are possible. We do not need a fig leaf CAFE provision that will still leave us exposed to oil shortages, high gas prices and environmental degradation. We need a real, feasible moderate CAFE increase, and that is what the Boehlert-Markey amendment would provide.

Let me point out that the previous speaker said if we go too fast, too far, too soon, we will, and then he outlined some concerns. We are not going too fast, we are not going too far, we are not going too soon. We have come up with a reasonable standard, supported by the documentation of the National Academy of Sciences.

Mr. Chairman, I urge the passage when we get to those amendments.

Mr. Chairman, I reserve the balance of my time.

Mr. HALL of Texas. Mr. Chairman, I yield myself such time as I may consume.

Mr. HALL of Texas. Mr. Chairman, I rise, of course, in support of H.R. 4, aptly termed the Securing America's Future Energy Act of 2001.

The Committee on Science has worked hard and in a very highly cooperative fashion, I think, to report a comprehensive bill that authorizes existing energy research and development programs of the Department of Energy and authorizes new programs to meet the challenging research needs of this Nation.

I think the committee has done a good job. They certainly have recognized that we cannot put all of our eggs in one basket. We need to pursue research and development activities in energy conservation and energy efficiency and renewable energy technologies, as well as in fossil fuel energy and nuclear energy programs. We need them all. In short, we need to support these applied research programs, which we know are the basic energy research programs of the office of science.

I think we have been generous in funding the program at the National Laboratories and colleges and universities throughout the Nation that are engaged in energy research.

Before yielding time to others, I want to take the opportunity to thank this good chairman, the gentleman from New York (Mr. BOEHLERT), for his interest in working with us to craft a bill that is supported by all the members of the committee. I think that is very unusual for a chairman. That does not happen very often here, but it has happened in our committee. We have worked together.

I thank also the staff of the committee for their tireless efforts in putting together the kind of bill from the Committee on Science that we should all feel very proud to support.

Finally, thanks also to the members of the committee for their suggestions and their contributions and their willingness to work on the committee's bill.

Mr. Chairman, I yield 2 minutes to the gentlewoman from California (Ms. WOOLSEY), the ranking member of the Subcommittee on Energy, Ms. Woolsey.

Ms. WOOLSEY. Mr. Chairman, I thank the gentleman for yielding me time, and I thank the gentleman for getting the pronunciation of my name right.

As the ranking member on the Committee on Science's Subcommittee on Energy, I was pleased that the gentleman from Texas (Mr. HALL) and the gentleman from New York (Mr. BOEHLERT) led the way so that the Committee on Science was able to report out a bill that accomplishes much of what I consider important to bring our country's energy policy into the 21st century. In fact, the Committee on Science bill reflects my push for aggressive R&D goals and funding levels for all renewable energy sources. I appreciate the chairman working with me on this shared priority. Unfortunately, this bipartisan model did not take root in the final bill.

It is no surprise to me that in this Chamber we have a variety of visions on what our energy future should look like, but there are points where the people of this country know what is best. And we ought to look at them to be our leaders. For example, many in my district share in the Nation's opposition to drilling for oil in ANWR. They consider it outrageous that drilling in this area is even included in this legislation.

Americans around the country also cringe when they learn that this bill lines the pockets of the fossil fuel and nuclear industries, making these industries, as this bill reflects, our number one priority. It is not appropriate that these industries should be our number one priority, when we know that our focus must be to reduce reliance on fossil fuels and expensive, dangerous nuclear energy. Instead, we should be investing in renewable, safe, and efficient energy sources.

Despite massive financial and scientific investments—not to mention a new PR campaign—the facts about nuclear power are unchanged. It's dangerous, expensive and has not delivered on decades-old promises of energy security and independence.

While the nuclear industry claims that nuclear power is safe, the fact remains that people are skeptical—especially if a plant or disposal site is in their backyard, or nuclear waste is transported through their community.

Americans want, need and deserve a smart energy policy that will take us into the 21st century—not a bill that continues down the path we've traveled for the last 100 years—a path that has led to global warming because of our overdependence on fossil fuels. That's why I can't vote for this energy bill.

□ 1330

Mr. BOEHLERT. Mr. Chairman, I proudly yield 1 minute to the gentlewoman from Illinois (Mrs. BIGGERT), a valuable member of the committee.

Mrs. BIGGERT. Mr. Chairman, I rise today to commend all who have worked on H.R. 4, the Securing America's Future Energy Act. A national energy policy is long overdue; and this bill is a step in the right direction, and we need to include all sources of energy in this bill.

As a Member of the Committee on Science, I was very pleased that the bill our committee reported included provisions to strengthen nuclear research and nuclear science and engineering programs at America's universities and colleges. Fewer Americans are entering this field and even fewer institutions are left with the capability to train them. Current projections are that 25 to 30 percent of the nuclear industry's workforce and 76 percent of the nuclear workforce at our national laboratories will begin to retire in the next 5 years.

Nuclear science and energy engineering in the United States is a 50-year success story that has been written by

some of the brightest minds the world has ever known. America has truly been blessed as the world leader in this area, and this bill assures we maintain our leadership.

Mr. Chairman, I urge my colleagues to support this bill.

Mr. HALL of Texas. Mr. Chairman, I yield 1 minute to the gentlewoman from California (Ms. LOFGREN).

Ms. LOFGREN. Mr. Chairman, I want to salute the chairman and the ranking member of the committee for working together as a bipartisan team. The portion of this bill that came out of the Committee on Science is pretty darn good. It has a balance of conservation and renewable energies, and I am very proud and satisfied with it. The Fusion Energy Sciences Act was also included and, for our planet, it is going to be key in the long run.

The problem in the bill is the things that did not come from the Committee on Science. Here is what is wrong: It provides no help for California to collect the \$9 billion that we are owed by out-of-state energy providers; it lacks protection for oil drilling in the Arctic National Wildlife Refuge; it does not increase the CAFE standards for motor vehicles.

The bill that did not go through the Committee on Science is short on vision and long on special interests. With over \$36 billion in tax breaks to fat cats, the United States is going to have to borrow the money to give these tax breaks. So if there is a Texas equivalent to a Bronx cheer, that is what the President is giving to California once again.

Mr. BOEHLERT. Mr. Chairman, I yield 1 minute to the gentleman from California (Mr. ROHRBACHER).

Mr. ROHRBACHER. Mr. Chairman, I rise in strong support of President Bush's comprehensive energy legislation. In California, we are on the edge of an economic disaster because for decades our State has turned down every effort to develop oil and natural gas resources, not to mention nuclear power, of course.

The President's bill is a positive bill. It has provisions in it for conservation and, yes, my colleague is right, we in the Committee on Science have participated in this process, because this bill also contains provisions for developing alternative energy resources.

But most important, this bill enables us to increase the supply of oil and natural gas in the United States of America. We have no reason to be ashamed of that. Of course, there will never be an energy bill that is good enough for the fanatic environmentalists who oppose us every time we try to increase our Nation's oil and natural gas supplies.

This bill will help us have more oil and natural gas, take us off of foreign dependency and ensure American prosperity.

Mr. Chairman, I support the President's comprehensive bill.

Mr. HALL of Texas. Mr. Chairman, I yield 1½ minutes to the gentleman from Pennsylvania (Mr. HOEFFEL).

Mr. HOEFFEL. Mr. Chairman, I thank the gentleman for yielding time.

Mr. Chairman, for 25 years, this country has not permitted the commercial reprocessing of spent nuclear fuel. We have said that the reactor waste generated around this country at reactors shall not be reprocessed, for the very sound reason that the reprocessing of this reactor waste generates plutonium, and plutonium is the key ingredient in nuclear weapons. And if we are generating plutonium through reprocessing, that is going to threaten our efforts to stop the proliferation of weapons around the world and to keep the supply of plutonium away from rogue nations and dictators.

Now, this bill very quietly reverses that 25-year policy. It says that we shall now have research and development spending on what they call advanced fuel recycling technology. That is reprocessing. That is taking spent reactor waste and reprocessing it, creating plutonium, which threatens our nonproliferation regime around the world.

There was very little debate on this in the Committee on Science, and no consideration on the floor. The rule did not permit an amendment by the gentlewoman from California (Ms. WOOLSEY) that would have allowed a straight up-or-down vote.

Mr. Chairman, this is not just an issue for our national energy policy; it affects our international relations as well. And there is no way, with so little debate and so little public notice and no hearings, that we should be approving this. Vote no.

Mr. BOEHLERT. Mr. Chairman, I yield 1 minute to the gentleman from Michigan (Mr. SMITH).

Mr. SMITH of Michigan. Mr. Chairman, as a former member of the Presidential Oil Policy Commission, I have seen how energy policy mistakes can contribute to supply disruptions and high prices.

This legislation supports my vision for a broad portfolio of energy options by making traditional sources of energy cleaner, by researching and making alternative and renewable sources of energy more available, and by educating the next generation of scientists.

The Committee on Science has contributed to this legislation by authorizing the research and development programs that will help increase supplies of clean, renewable, and affordable energy. Coal is an abundant domestic source of power that plays a truly critical role in electricity generation in States like Michigan. However, we do need to make it cleaner and more efficient, and this legislation's

provisions for clean coal technology point us in that direction.

Nuclear power, which accounts now for 28 percent of the Nation's electricity, is a critical energy source that produces nearly zero greenhouse gas emissions. However, we are in danger of losing international leadership in nuclear technologies, and that is why I support the nuclear R&D provisions in this bill.

Mr. Chairman, this is a good bill that will ensure that we have the energy needed to power the economic growth of the future.

Mr. HALL of Texas. Mr. Chairman, I yield 1½ minutes to the gentleman from California (Mr. FARR).

Mr. FARR of California. Mr. Chairman, I thank the gentleman for yielding time.

I rise today to compliment the committee that is before the floor today. The Committee on Science in this House did a tremendous job of designing a bill that really meets the science needs of America on energy. This bill is being used as the carrot tied to a stick, which is tied to a very ugly vehicle behind. I want to compliment the members of the Committee on Science on both sides of the aisle for producing a real substantive bill. Unfortunately, the rest of the bill that is incorporated with is one that we cannot support.

I look at this bill and what I see in it is whoever wrote the whole big package had one thing in mind, and that is that they were looking at the price, without understanding the value. So this bill addresses the price of everything and the value of nothing.

The bill knows the price of rewards for special interests. They put those special interests in perspective by giving them a \$36.4 billion tax break in this bill. That is equivalent to what 9.7 million Americans in 1998 paid in taxes.

The cost of this bill is in the value to the environment. This bill says drill, drill, drill wherever oil may be. If we had oil under this Capitol, I am sure there would be proposals to drill for oil under the Capitol and under the Supreme Court and under the Library of Congress. This bill costs California ratepayers, who are not allowed to debate on the issue of rebates from ob-scene costs. This bill, in totality, is a bad bill.

Mr. BOEHLERT. May I ask the Chair how much time is remaining?

The CHAIRMAN pro tempore (Mr. LINDER). The gentleman from New York (Mr. BOEHLERT) has 1½ minutes remaining.

Mr. BOEHLERT. Mr. Chairman, I do not mean to challenge the umpire's call, that is cause for automatic ejection in baseball, but our scorecard says 2 minutes. Can the Chair look at those numbers again?

The CHAIRMAN pro tempore. Our scorecard does not. Ours says the gentleman from New York has 1½ minutes

remaining, and the gentleman from Texas has 2 minutes remaining.

Mr. BOEHLERT. Mr. Chairman, I do not want to be ejected, but does the gentleman from Texas have 30 seconds he could yield to me?

Mr. HALL of Texas. Mr. Chairman, I yield 30 seconds to the gentleman from New York (Mr. BOEHLERT).

The CHAIRMAN pro tempore. The gentleman is willing to do that.

Mr. BOEHLERT. So now I can say on my scorecard we have 2 minutes?

The CHAIRMAN pro tempore. The gentleman can do that.

Mr. BOEHLERT. And we still have an affection for the umpire. I thank the Chair.

Mr. Chairman, I yield 1 minute to the gentleman from Kansas (Mr. AKIN).

Mr. AKIN. Mr. Chairman, I rise to support the clean coal power initiative in division E of H.R. 4. It is an effective and important initiative because it is going to give us environmentally friendly electricity at a reasonable cost and for decades to come.

Coal comprises 85 percent of our fossil fuel resources. We have enough coal for 250 years of additional use. More than 50 percent of our current electricity comes from coal.

Burning coal is our chief source of electricity, but by making it more efficient and by making it cleaner, we can improve the air quality. That is important to me, because we have air quality problems in the St. Louis area. This bill will do that.

Already, we have made investments in coal technology over the last 30 years that have reduced pollutants by 21 percent even though coal generation has tripled. Coal provides a clean, affordable and domestic energy source for us. This bill is very positive in cleaning that up and making it more reasonable.

Mr. HALL of Texas. Mr. Chairman, I yield 1 minute to the gentleman from Guam (Mr. UNDERWOOD), the very capable delegate.

Mr. UNDERWOOD. Mr. Chairman, I thank the gentleman from Texas for yielding.

I want to draw attention to one part of this very large energy bill which draws attention to the insular areas and allows them to develop alternative sources and gives that additional emphasis.

However, I am concerned about, under section 701, assessment of renewable energy resources, and section 702, renewable energy production incentives. There is a lot of attention drawn to solar power, there is attention drawn to geothermal, but there is no attention drawn to ocean thermal energy, which is a distinct possibility, particularly for those areas that are in the tropical zones.

So I would like to ask the chairman of the Committee on Science to enter into a brief colloquy.

Would the chairman be willing to work with us to consider inserting some language about ocean thermal energy into the assessment of renewable energy resources?

Mr. BOEHLERT. Mr. Chairman, will the gentleman yield?

Mr. UNDERWOOD. I yield to the gentleman from New York.

Mr. BOEHLERT. Mr. Chairman, as my distinguished colleague knows, we are always very enthusiastic in our committee about alternative sources of energy, so the gentleman can be assured that both the gentleman from Texas (Mr. HALL) and I will work closely with the gentleman to address this.

Mr. Chairman, I am pleased to yield 1 minute to the gentlewoman from Pennsylvania (Ms. HART), a new but very valued member of the committee.

Ms. HART. Mr. Chairman, I thank the gentleman for yielding me this time.

It is with pleasure that I stand up to support this energy bill. It contains a lot of different things; it is broad, it is all-encompassing.

The problems that we are looking to solve are not new ones. In fact, people in my constituency and probably all over the country have been calling their congressional Members about these for a number of years.

But the problem of high gas prices, high electrical prices, high gasoline prices at the pump cannot be solved unless we have a comprehensive energy policy. That is what this bill does.

Vice President Cheney came to my district to launch the discussion nationwide. It was very well received. People are very happy to hear that we finally are going to have a comprehensive plan. Advancements in technology are included in here: clean coal technologies, nuclear advancements, fuel cells, investigation of renewable energy sources such as biomass, wind energy, hydro energy. But conservation is a very large part of this, and it is very important that we all understand that it is everyone's responsibility to be part of that conservation.

We all intend to work hard to get this passed. I am a big supporter of this, and I want to commend everyone who has been a part of making it happen.

Mr. HALL of Texas. Mr. Chairman, I will close by thanking the committee. I would just like to go on record, though, as saying we do need to drill ANWR. It makes sense to drill ANWR. It does not make sense not to drill ANWR, because if we do not find the resources we have here in this country, we have to send our kids overseas to fight for energy when we have it right here.

Japan was forced out into Malaysia by Franklin Roosevelt in 1939. We sent 450,000 kids to Kuwait. That was for energy. We did not need to do that. We need to take care of our children, and

this is a bill that takes care of them and takes care of the country's energy needs for this Nation.

Mr. Chairman, the U.S. will likely need to produce 45% more natural gas to meet growing demand and environmental goals in the next decade. A new, industry-led research, development and demonstration program is being established in this legislation to enhance and extend the natural gas and other petroleum resource base in areas where production is currently allowed by law and reserves are most prolific. These areas are largely in unconventional onshore gas fields, primarily in the Rocky Mountains and Southwestern United States, and the ultra-deepwater in the central and western Gulf of Mexico. Research, development and demonstration of technological capabilities in these provinces will improve the nation's capacity to meet incremental natural gas demand over the next twenty years in an economic, safe and environmentally responsible manner.

Section 2441 of the "Securing of America's Future Act of 2001" (H.R. 4), ordered reported from the Committee on July 19, directs DOE to conduct long-term supply research and to establish a new industry-led research, development and demonstration program. The Department will utilize the expertise of our nation's energy industry, institutions of higher education, public and private research institutions, large and small businesses and federal agencies to lower the cost, improve the efficiency and production of natural gas and other petroleum resources while improving safety and minimizing environmental impacts of this activity.

The industry-led activities authorized by this legislation will be managed by an established 501(c)(3), tax-exempt research organization experienced in planning and managing programs in natural gas or other petroleum research, development and demonstration. The program is designed to ensure that the requirements of meeting near-term demand for natural gas supply will be conducted in the most efficient and cost-effective manner possible. This will require flexibility, unprecedented focus and input from industry, academia, and our national laboratories, and an acceleration of R&D activities. These goals can be best accomplished through an industry-driven effort, with key oversight provided by the Department of Energy, consistent with its stewardship role in energy policy and the use of public funds.

The Department is directed to focus the industry-led activities authorized by this legislation on unconventional onshore natural gas and other petroleum resource research and development projects, individual deepwater research and development projects, and the development of new ultra-deepwater natural gas and other petroleum architectures. It will carry out programs of long-term research into new natural gas and other petroleum exploration and production technologies, such as methane hydrates; and environmental mitigation technologies for production from unconventional and ultra-deepwater resources, including carbon sequestration.

All research, development and demonstration activities authorized by this legislation will be cost-shared by participants in the program.

The deepwater and ultra-deepwater research, development and demonstration provisions of this bill shall be exercised only in the central and western Gulf of Mexico in areas that are already leased or are available for leasing. No offshore areas that are currently covered under federal leasing moratoria will be affected.

This program will be funded from loans from the Treasury to be repaid from revenues from ultra-deepwater natural gas and other petroleum leases currently available for lease that would otherwise not be sold, additional appropriations and 7.5% of federal natural gas and other petroleum lease income.

I believe that a concentrated industry effort with support from the government will enable us to produce the tremendous natural gas resources that exist in the Gulf of Mexico sooner and at lower cost than a traditional government R&D program. The model for this program is SEMATECH, the government-industry consortium that was established for the semiconductor industry in the 1980s. By combining industry R&D efforts, the semiconductor industry was able to remain competitive with the Japanese—a competitive advantage that the U.S. has maintained. This has been responsible, at least in part, for the enormous technology-drive growth that the U.S. enjoyed through the nineties—and even at a lower growth rate today.

These R&D models work and we should not be reluctant to employ them as needed. The government's interests are protected through recoupment provision in the legislation. These provisions provide for the repayment of government funds used to develop and demonstrate the successful technologies that emerge from this program. The recoupment provisions in the bill, combined with the additional royalties that will be collected on the natural gas production from these ultradeep structures will recoup the government's investment in this program many times over.

It's a win-win for the government and the taxpayers: The government funding up front makes it possible for this high-risk research to be undertaken by industry, which will generally be matching the government outlays on a dollar for dollar basis. The needed gas supplies will be produced sooner and at a time when domestic natural gas production is declining and demand is rapidly increasing.

□ 1345

The CHAIRMAN. All time for the Committee on Science has expired.

It is now in order under the rule for the Committee on Ways and Means, represented by the gentleman from California (Mr. THOMAS) and the gentlewoman from Florida (Mrs. THURMAN). Each will control 10 minutes.

The Chair recognizes the gentleman from California (Mr. THOMAS).

Mr. THOMAS. Mr. Chairman, I yield myself 1 minute.

Mr. Chairman, as we look at this tax component, it has been characterized today in a number of different ways.

Our friends on the other side of the aisle like to talk about the enormous giveaway to special interests. I would like to point out that the special inter-

ests in the bill who get the major-appliance reductions for energy efficiency are the American taxpayers. Those who invest in their home in energy-efficient ways are also the special interests involved in this bill. If they buy a more fuel-efficient car, they get significant tax credits.

I think Members will find that throughout this tax provision, individuals who seek conservation and alternate energy get rewarded for that behavior. That is one of the major special interests.

The other area that I think needs to be emphasized that people do not talk about is under the heading of reliability. That actually gets the largest percentage of money, almost 39 percent in this tax structure, because we frankly need to deal with electric transmission lines. We need to deal with natural gas transmission lines. Then, once we develop the natural gas transmission lines for clean-burning natural gas, we need distribution lines.

One of the difficulties, I think, that we forget about is that it is not just the switch on the wall. Our ability to function in a post-industrial energy-efficient world requires significant investment in infrastructure. Even a transition from the highly regulated one that we are in in the area of electricity to a more deregulated one requires attention in the Tax Code.

Mr. Chairman, I reserve the balance of my time.

Mrs. THURMAN. Mr. Chairman, I yield myself 4 minutes.

Mr. Chairman, the chairman talked about some very wonderful things that are in this piece of legislation, but I have to say that the problem and regret is that earlier this year the congressional Republican leadership decided to enact a large tax reduction and did not reserve the resources for these other priorities. I believe they are important priorities.

But as a result of that decision, and because this bill contains no revenue offsets, I believe that there is a substantial certainty that the tax reductions contained in the energy bill will be funded, at least in part, by raiding the Medicare and possibly the Social Security Trust Funds. Therefore, I cannot support this bill, and I would oppose it.

Mr. Chairman, we are not the only ones saying this. Even a recent Republican memo on the surplus states that we are possibly already into the Medicare Trust Fund, and we are very close to touching the Social Security surplus in fiscal year 2003.

When we did the markup of the charitable tax incentive bill the week before the Committee on Ways and Means approved an energy tax cut bill, the Committee on the Budget chairman, the gentleman from Iowa (Mr. NUSSLE), produced a letter that said that using economic projections from earlier in

the year, there was enough of a surplus to support the charitable tax bill if no further tax or spending bills were ever enacted.

When the committee considered the energy tax bill, no security letter from the Committee on the Budget was ever produced. Does this mean that there will not be sufficient surpluses to support the energy bill? I think we all know the answer is yes.

Further, during the committee debate on the energy tax bill, when I asked how it is going to be paid for, I was told that there is a slush fund in the fiscal year 2002 budget resolution that is available on a first-come, first-served basis.

Well, which one of the following priorities, then, will not be funded if they succeed in their current strategy of being first in line? I might add, many of these have been promised and debated.

What about the \$300 billion for a Medicare prescription drug benefit; the \$134 billion from the Secretary of Defense, who states it is necessary just to maintain our current level of defense; the \$200 billion or \$300 billion for defense modernization; \$73 billion for agriculture; \$6 billion for higher veterans benefits; the \$14 billion that we did in reduction in the SEC fees; the \$50 billion for promised health insurance; the \$82 billion to fully fund the new educational bill, to all of which we have agreed; and \$122 billion to extend expiring tax benefits; \$119 billion for President Bush's remaining tax cuts in health insurance, long-term care, and housing; and \$200 billion to \$400 billion to address the AMT issue? There is \$138 billion to end the tax cut sunsets in the last bill, and \$13 billion for the charitable tax incentives just passed by this House.

Mr. Chairman, we could have done something differently. We heard about this in the rules debate; but the fact of the matter is, there was a Democratic amendment that could have been brought to this floor that could have in fact taken care of both of these priorities which would have been offered by the gentleman from Massachusetts (Mr. MARKEY).

He requested, but was denied by the Committee on Rules, this amendment, which would have paid for the energy tax provisions provided by the amendment and made the tax benefits contingent on a surplus outside of the Social Security and Medicare Trust Fund. By the way, that would not be the first time that we have voted on this floor to, in fact, make benefits contingent on surpluses outside of the Social Security and Medicare Trust Fund.

So what might we do today? Instead of passing a fairly good energy package, one of many things that I believe and agree with, we are going to in fact allow the use of payroll taxes to pay for corporate tax relief.

Mr. Chairman, I reserve the balance of my time.

Mr. THOMAS. Mr. Chairman, it is my privilege to yield 1 minute to the gentleman from Oklahoma (Mr. Watkins), a member of the Committee on Ways and Means.

Mr. WATKINS of Oklahoma. Mr. Chairman, I want to thank the gentleman from California (Chairman THOMAS) and the gentleman from Louisiana (Chairman MCCRERY) for putting together the most balanced and comprehensive energy legislation that has been here in 3 decades, and I speak from experience; and this has more conservation and reliability in this bill, and some production, but the emphasis is on conservation and reliability.

I was here in 1997 when President Jimmy Carter said we had an energy crisis of the moral equivalent to war. Some of us might remember that. There was a lot of conservation and also some renewable energy activity. It helped. But let me say, from that standpoint, we cannot conserve and we cannot just count on foreign sources to help us have a reliable source.

This bill today does move us in a direction in the short term and in the long term in trying to have a reliable source of energy for this country. We need this bill. We must have this bill. If not, we are doing a disservice to our children and our grandchildren.

Mrs. THURMAN. Mr. Chairman, I yield 2 minutes to the distinguished gentleman from Michigan (Mr. LEVIN).

Mr. LEVIN. Mr. Chairman, I thank the gentlewoman for yielding time to me.

Mr. Chairman, when one adds to the oversized tax cut the slowing economy and the billions of dollars of unbudgeted spending for defense, education, and other priorities, this \$33 billion grab bag of energy tax provisions, with no offsets to pay for them, four times more than the administration requested, is fiscally irresponsible.

The Bureau of National Affairs reports today, this from an internal GOP memo, "We are possibly already into the Medicare trust fund this year and every year through FY 05. We are very close to touching the Social Security surplus in FY 03." The Republicans believe that they can pull a Houdini trick, taking trust fund monies out of the lockbox without anybody seeing or catching them at the raid.

I also want to urge the House to reject the Boehlert amendment on CAFE later today. The cure would be worse than the disease. That amendment is based on a very selective reading of an NAS report which particularly warns against forcing through a CAFE increase too quickly, saying, "Technology changes require very long lead times to be introduced into the manufacturer's product line. Any policy that is implemented too aggressively has

the potential to adversely affect manufacturers, their suppliers, their employees, their consumers."

This amendment of the gentleman from New York (Mr. BOEHLERT) is fundamentally flawed. It does not give the industry enough time to comply. The only way to meet the CAFE requirements of the Boehlert amendment would be for the manufacturers to close down entire vehicle lines. The Boehlert amendment would force the dislocation of American workers and job loss.

Vote "no" on the Boehlert amendment. Because of what I have said, and others, regarding the tax provisions. Vote "no" on final passage of H.R. 4.

Mr. THOMAS. Mr. Chairman, it is my privilege to yield 1 minute to the gentleman from Arizona (Mr. HAYWORTH), a member of the Committee on Ways and Means.

Mr. HAYWORTH. Mr. Chairman, I thank the gentleman for yielding time to me.

Mr. Chairman, it is rather curious to note that if we could have converted into energy some of the fear and smear being employed here, we would have enough energy for the entire next century and well beyond.

Mr. Chairman, every dollar that comes in for Medicare is going to be used for Medicare. What we have here is a comprehensive energy bill. We concentrate here on tax relief and tax incentives to make sure we work on new technologies, on conservation, and on exploring for the energy we need.

While others want to play a game of wolf and fear, we have a comprehensive, reasonable, rational response. It is easy to be on all sides of the issue, as we often hear from our friends in the opposition.

But still, we have the invitation: join us and work together, because the stakes are too high to bury our heads in the sand or pull the fire alarm falsely.

Mrs. THURMAN. Mr. Chairman, I yield 2 minutes to the gentleman from Washington (Mr. MCDERMOTT).

Mr. MCDERMOTT. Mr. Chairman, in January when George II was appointed by the Supreme Court, the oil dynasty took this country over again. The real issue of the tax cut, that was a minor issue, but today is a big deal. We have had five sets of elves working in five different places, never talking to each other, with half-day notice when they are going to have a bill, who put together something which we gave to the Committee on Rules, and last night, in the middle of the night, they put it out here on the floor.

They were offered 143 amendments. They chose 16, of which three were from the Democrats, as though the Democrats had nothing to say about this whole thing.

Mr. Chairman, we have had an interesting crisis created in this country in

energy, so we have to have an energy policy. So we have an energy policy in process, but then the prices go down.

The Wall Street Journal yesterday told the truth: "Major oil companies struggle to spend huge hoards of cash. Shell oil is sitting on \$11 billion they do not know what to do with. Yet, in this bill, we have to give them \$12 billion more."

Bad enough as that is, we are not even paying for it. This is not a real bill; this is a PR piece for Republicans going home to their districts to say, We passed a comprehensive energy bill in the House of Representatives. They will all do it; they will each pick a piece they like. The folks back home should understand, none of this is paid for. It is all smoke and mirrors.

When we come back in the fall, I do not know what they are planning to knock out to come up with \$33 billion more. They threw a few things in for solar and a few things here and there, and they are going to stand up and tell us all about the electric cars and all this stuff. But the bulk of it, \$20 billion out of the \$33 billion, goes to the guys who have hordes of cash they do not know what to do with, and they are driving our electric prices on the west coast out of sight.

Mr. Chairman, when are we really going to have a discussion? Maybe we will have to get a new President who is not appointed.

Mr. THOMAS. Mr. Chairman, it is my pleasure to yield 1 minute to the gentlewoman from Washington (Ms. DUNN), a member of the Committee on Ways and Means, so we can get a slightly different perspective on this issue.

Ms. DUNN. Mr. Chairman, I am very happy that the bill we are debating today promotes energy conservation and efficiency. These elements are critical, especially in my home State of Washington, where many continue to suffer from the high cost of utility bills.

In times of energy supply shortages that result in retail rate increases, it is the role of the Government to empower families and businesses around America with the information that they need to make choices regarding their power usage.

□ 1400

As public servants, we can encourage efficiency by providing incentives for the use of "smart meters," in this case for the use of smart meters installed at the cost to the company in many homes throughout my district. These are high-tech devices that tell consumers what time of day is most cost effective to flip on the switch to run their washers, their dryers, their sprinkler systems.

Smart meters serve as evidence that conservation does not need to be dictated by the Federal Government, but

rather can be learned, and with the right motivation and structure, conservation can work. I want to thank the chairman, the gentleman from California (Mr. THOMAS), for including the smart meter provision I offered as part of this comprehensive bill and urge its passage.

Mrs. THURMAN. Mr. Chairman, may I inquire as to how much time remains on each side?

The CHAIRMAN pro tempore Mr. LINDER). The gentlewoman from Florida (Mrs. THURMAN) has 2 minutes remaining and the gentleman from California (Mr. THOMAS) has 5½ minutes remaining.

Mr. THOMAS. Mr. Chairman, I yield 1 minute to the gentleman from Michigan Mr. CAMP, a member of the Committee on Ways and Means.

Mr. CAMP. Mr. Chairman, I thank the chairman for yielding me this time, and I rise in support of H.R. 4 because this is a balanced and comprehensive energy strategy for our Nation.

I would just like to point out two important initiatives in this bill. The first is an initiative that would help to encourage the collection and utilization of landfill gases and energy resource. A medium-sized landfill can produce enough energy to meet the annual electrical needs of 3,000 homes. I believe our Nation should harness the energy resources that are sitting in the backyards of most of our communities rather than allow them to be wasted.

The second proposal is the CLEAR Act, which would help provide consumers tax incentives for the purchasing of advanced technology and alternative fuel vehicles. These incentives are positive steps that can be taken today to increase fuel economy of new vehicles. What is important about this provision is that it will allow the consumer to be part of the decision.

All major auto makers that sell cars in the United States have alternative and hybrid fuel vehicles available. This will make our country the winner by providing the opportunity to pull these new exciting technologies into the marketplace, and I urge support for this legislation.

Mr. THOMAS. Mr. Chairman, I yield such time as she may consume to the gentlewoman from Connecticut (Mrs. JOHNSON).

Mrs. JOHNSON of Connecticut. Mr. Chairman, I support this bill; and I particularly want to recognize its understanding of the importance of renewable, clean sources of energy for the future.

I firmly believe that a national energy policy must include promotion of alternatives to traditional energy sources. Doing so will reduce our reliance on imported oil, give consumers greater choice, stabilize energy prices, and benefit the environment at the same time. The reason our constituents find themselves faced with out-of-control heating oil and fuel prices is

because our nation has no long-term energy policy.

I am pleased that the tax portion of this package includes my legislation to promote the use of fuel cells which remove the hydrogen from fossil fuels to create energy with virtually no pollutants. They function much like a battery except fuel cells do not require recharging and are far more efficient than a combustion engine or power plant.

H.R. 4 proposes a fuel cell tax credit for five years to create a market incentive for this revolutionary technology, which is reliable and will provide economic and environmental advantages to traditional fuel sources. The bill will accelerate commercialization of this technology by providing a \$1,000 per kilowatt credit for efficient, stationary fuel cell systems.

Stationary fuel cells capable of running 24 hours a day, seven days a week for five years with only routine maintenance are currently in operation today. As a distributed generation technology, fuel cells address the immediate need for secure, efficient, clean energy supplies, while reducing grid demand and increasing grid flexibility.

First used by NASA in the space program, they are now in hospitals, schools, military installations, and manufacturing facilities and may be available for homeowners by the end of this year. Although these early products have proven energy efficiency and environmental advantages, help in accelerating volume production is essential in realizing lower prices for consumers and the full benefits of fuel cells.

I am also a strong supporter of another provision included in this energy package to encourage the development of projects that capture landfill gas (LFG) and use it as an alternative energy source. LFG is produced as waste decomposes in landfills that serve our communities. LFG projects capture and use the gas to generate electricity or directly as an alternative fuel.

H.R. 4 would extend the Section 45 tax credit for wind energy, closed-loop biomass, and poultry waste to LFG projects. It is estimated that an additional 700 landfill gas-to-energy projects could be made economically feasible with such an incentive. Helping to bring these projects online would help the nation save more than 40 million barrels of oil annually. With that kind of potential, we must ensure that we are tapping into LFG, which is available in nearly every community in America.

It is technologies like fuel cells and landfill gas projects that will help us decrease our dependence on foreign oil, conserve existing oil supplies, and reduce air pollution.

Mr. THOMAS. Mr. Chairman, I yield 3 minutes to the gentleman from Louisiana (Mr. MCCRERY), the chairman of the Subcommittee on Select Revenue Measures, one of the significant hands and minds that allowed us to put this package together.

Mr. MCCRERY. Mr. Chairman, I thank the chairman for yielding me this time and for the role he played in putting this excellent package together.

Mr. Chairman, first of all, let me just say that any speaker here on the floor

today who says that this bill or any other bill that the Congress passes raids the Social Security trust fund is either intentionally misleading the public or is exhibiting a lack of understanding of the Social Security trust fund, the Medicare trust fund. The fact is that is not true, and I hope that we will get off of that.

But with respect to the bill before us, Mr. Chairman, it is clear that our country continues to struggle with the fact that our domestic energy production does not meet our demand. The time is now for Congress to pass an energy policy that will address present needs and secure a stable supply of power for the future, and this bill accomplishes those goals.

As chairman of the House Committee on Ways and Means Subcommittee on Select Revenue Measures, I had the opportunity to help find energy solutions through our Tax Code. My subcommittee held three hearings on the issue, giving us an opportunity to hear from the administration, Members of Congress, and many other interested parties.

At our second hearing, I outlined several principles which should be adhered to in formulating a national energy tax policy. First and foremost, our complex problems require a balanced solution. We have heard that here today: we need balance. We have it in this bill, in the tax portion of the bill. Conservation, renewable, and alternative fuels, and expanded production of traditional fuels, such as oil and gas and coal, must all be part of the solution. The portion of the energy bill passed through the Committee on Ways and Means is faithful to that goal of a balanced solution.

Conservation plays a key role, with expanded incentives for solar power, fuel cells and clean cars. Alternative fuels receive a boost, with new incentives to produce electricity from biomass and landfill gases. This legislation also encourages production through modifications to the existing section 29 program, which has been very successful in stimulating the production of oil and gas from tight sands and other difficult areas of production.

At our hearings, the committee heard how bottlenecks in distribution were a significant problem. A stable supply of energy is only of use if we can get it to where it is needed when it is needed. Accordingly, the bill before us today helps utilities spin off their transmission assets to ensure they are used as efficiently as possible. In addition, we provide faster depreciation for oil refining properties and for gas distribution lines. Commonsense things to get the power to the people.

Our energy tax policy should be sensitive to the environment also. Several provisions of the Ways and Means energy legislation reflect that. It assists refiners in coping with the cost of producing low-sulfur fuel. It reduces taxes

on diesel water emulsions, which have substantially lowered emissions than traditional diesel fuel. And it helps cover the cost of installing new technologies which will dramatically reduce the emissions from coal-fired plants.

For too long Congress has viewed energy policy as a dilemma: produce or conserve; the economy or the environment. We do not have to have it one way or the other. We can do both. This bill does that. Vote for it.

Mrs. THURMAN. Mr. Chairman, I yield the balance of my time to the gentleman from Texas (Mr. DOGGETT).

Mr. DOGGETT. Mr. Chairman, this bill represents another partisan Republican failure. It offers no balance either for our energy policy or our federal budget. The only balance involved in this plan is the balance sheets of big oil, dirty coal, and dangerous nuclear industries. They receive substantial boons and largesse from the bounty of this bill.

The balance here is the balance of sweet words about conservation and the environment, like those we just heard, with the harsh reality of huge subsidies for these industries at the expense of all the rest of us.

Yesterday, we learned that the Treasury is having to borrow more money, incurring more public debt, increasing the amount of red ink in order to fund the already unwieldy tax cut upon which the President has insisted. What solution do the Republicans offer us today? Well, they are going to increase the flow of red ink. Today, they are drilling. They are drilling for red ink.

And as we would say in Texas, they have hit a real "gusher" of red ink in this bill, because they have over \$30 billion of mostly special interest tax breaks to be paid for directly out of the Medicare trust fund. And it is not my word, but a recent Republican memo, as reported in the July 27th BNA Daily Tax Report, that says they are already into the Medicare trust fund, and the Social Security trust fund is next. Those hard-earned payroll taxes going right back to these special interests that have been so generous with their campaign money and their special interest lobbying.

This is not an energy policy, it is a collection of unjustified tax breaks, loopholes, and dodges masquerading as an energy policy. The only energy it reflects is the energy of campaign fund-raising and high-powered lobbying. Little wonder this plan was concocted in secret by Vice President CHENEY and that he is afraid to disclose the participants and contents of his various conclaves with special interests, even to the nonpartisan General Accounting Office.

Each year, Taxpayers for Common Sense, Friends of the Earth, and the U.S. Public Interest Research Group,

identify subsidies that both waste taxpayer money and harm the environment. It is called the "Green Scissors Report." And if this hodgepodge of a bill is approved, there will be plenty more to cut. Indeed it is the American people that are really getting cut by this bad bill, which should be rejected.

We need a conservative national energy policy that emphasizes conserving our precious natural resources, increasing energy efficiency, and providing reasonable production incentives. This bill fails to achieve any of these goals.

Mr. THOMAS. Mr. Chairman, I yield myself the remainder of my time.

Volume will not stop the truth from getting out. At my request, the Democrats wrote me letters indicating what they would like to see in this energy package. In fact, the ranking member of the committee, the gentleman from New York (Mr. RANGEL), wrote me a letter indicating there were 17 provisions that they requested. Twelve of them were included in their entirety and several in part.

I found it ironic that the gentleman from Michigan took the very scant few minutes the Committee on Ways and Means has to talk about the tax package to, in fact, urge people to vote against an amendment to be offered by the chairman of the Committee on Science. So much for the real concern about this tax provision.

Now, I am not going to answer in kind the comments that were made in terms of who is getting the money, except to say I cannot believe anyone out there listening really believes that the \$12 billion identified by the gentleman from Washington was going to big oil. As a matter of fact, the largest energy production structure in the United States gets the smallest amount in this bill.

It is a balanced bill. It contains many of the provisions the Democrats wanted. And if we will listen to their rhetoric, take a look at their vote, I think we will find a significant difference between what they are saying and how they are voting.

The CHAIRMAN. All time for the Committee on Ways and Means portion has expired.

It is now in order under the rule to provide time for the Committee on Resources. The gentleman from Utah (Mr. HANSEN) and the gentleman from West Virginia (Mr. RAHALL) each will control 10 minutes.

The Chair recognizes the gentleman from Utah (Mr. HANSEN).

Mr. HANSEN. Mr. Chairman, I yield myself 4 minutes.

Mr. Chairman, America needs more energy. During months of national discussion over energy, I have not heard anyone challenge the fact that our Nation needs more energy. Our Nation's demand for natural gas alone has risen by 45 percent over the past 15 years, 45 percent. Our National need for ore oil

is on the rise. Our need for electricity has jumped sharply since the advent of the high-tech age and continues to rise. Most of the electricity in this country still comes from coal. That means our Nation's need for coal is rising.

These are indisputable facts. What is in dispute is what we do about it. I say let us use a little common sense. We need a little old-fashioned American integrity. We look for ways to curb our energy appetite. We look for ways to increase our production. We look for ways to be more efficient in the way we use energy, and we invent new technology and new kinds of energy.

This bill, the Securing America's Future Energy Act of 2001, does every one of those things. It follows the dictates of reason and common sense. With this bill, we get by with less, we produce more, and we figure out ways to do things better.

If we take out any part of this equation, we invite failure. If we take out increased production, we fail faster and faster. We cannot conserve our way out of the energy challenge that faces us today. We cannot research or design our way out of it. We cannot get through this with windmills and solar panels. Increased production has to be a part of our national energy policy. Without increased production, this entire Nation will be the next California.

California is the Nation's leader in conservation, and we compliment them for that.

□ 1415

California is also the Nation's leader in the use of alternative fuels. Almost all of our best alternative fuel projects, solar, wind turbine farms, biomass plants, are in California.

Where did California go wrong? California refused to increase production. California looked at its rising energy demands and said, We can conserve our way out of this. Apparently they cannot. They were wrong. I could have told them that. Whoever drives up to a pump that is marked alternative energy sources? There is not such a thing.

As for conservation, may I just observe, when it comes to oil, at least Americans do not seem to have jumped on the conservation bandwagon. Look at what people are driving today here, both here within the Beltway and outside of the Beltway. Conservation is something that does not come to mind.

The problem we have now with the bill that will be very controversial is going to be ANWR. But what people do not realize is that section 1002 is one very small, small part and was never in the Arctic Refuge. This was left out when Congress did it with the idea that basically we someday can come and drill with the new technology we have in this particular area. So on the coastal plains it makes a lot of sense to look at it.

This big, huge area, the size of South Carolina, 19 million acres, and we are

using an infinitesimal fraction of it. I am amazed the people opposed to it have not taken the time to go and look at it.

We are talking about a Congress and President who have come through the energy crisis of 1977. Look what happened then. We made a few mistakes. We were not ready to go. We cannot get behind the power curve of this particular issue.

Mr. Chairman, I reserve the balance of my time.

Mr. RAHALL. Mr. Chairman, I yield myself such time as I may consume.

Mr. Chairman, I am among these who believe this country does need a new national energy policy, and we need to stick to it through times of energy scarcity as well as abundance. But not this energy policy, not what is in the pending legislation.

The bill has nothing to do with providing Americans with energy security. Instead, it is a multibillion dollar giveaway of America's resources and America's taxpayer dollars to big oil, already awash in record profits. The headline, as we see here and has already been referred to in today's debate, from a Wall Street Journal article of this week: Major Oil Companies Struggle to Spend Huge Hoards of Cash.

Imagine that. They have profited so mightily from the American public that they now cannot figure out what to do with all of their hoards of cash. Yet the Republican leadership of this body wants to reward big oil even further. Tax credits and tax cuts with no offsets. At least we have paid for ours in our version of an energy bill. Relief from compensating the American public from drilling on our Federal lands and waters.

Make no mistake about it, these giveaways will come at the expense of our elderly. There are no more surpluses. There is no reserve into which we can dip. The \$33.5 billion tax cuts in this bill, largely for energy companies, will come out of Medicare.

Rob the elderly to pay Exxon, Shell and the rest of them? This is an energy policy? I think not.

The Committee on Resources provision in this bill, in particular, provides unnecessary, uncalled for and unjust giveaways that are part and parcel of this legislation. One of these provisions, for example, would provide companies that want to drill for oil and gas in the Gulf of Mexico relief from having to pay royalties to the American people, a royalty holiday.

Under this bill, a company drilling in Federal waters between 400 and 800 meters deep can receive, for free, 5 million barrels of oil or gas equivalent. The owners of these resources are the American people. The American people get nothing, zero, zilch.

Wait a minute, it gets even sweeter.

Nine million barrels of oil or gas equivalent for drilling in waters be-

tween 800 to 1,600 meters for free, and if they drill deeper, a whopping 23 million barrels of oil or gas equivalent for free. This stuff is the makings of Ripley's "Believe It or Not."

At a time when there is widespread public concern that collusion of gasoline price fixing has taken place, when there is widespread concern, such as in the Wall Street Journal, that these companies are already awash in cash, we are providing a royalty holiday in this legislation and that is a message that is simply wrong, plain wrong.

Even Secretary Norton has expressed concern with the extent of the generosity to the gas companies offered by the royalty holiday language. When I brought the issue up with the President personally at the White House, the Vice President chipped in, We are not going to be offering these royalties to oil companies.

The same goes to the royalty in-kind proposal which is nothing more than a thinly disguised ruse to reduce royalty payments. This bill would have the Federal Government receive oil and gas royalties, not in cash but in the form of actual crude oil and natural gas. Federal bureaucrats would then be in the business of marketing oil and gas, joining the ranks of Exxon, the Shells and the rest of them. It does not make any sense.

I have never heard of it. This surprises me when it comes from the majority that rules this body. At a time when Russia and China are shedding themselves of state-run industries, why is the effort being made by this body to toss the Communist Manifesto into our national energy policy?

To be clear, in their effort to award big oil, Republican leadership has not forgotten about big coal as well, certain coal, that is, coal produced on Federal lands, mostly in the West.

The pending legislation would eliminate current law requirements providing for the diligent development of Federal coal leases. What does this do for America's energy security? Again, absolutely nothing, zero, zilch. But it will give rise to the rank speculation in Federal coal leasing to the detriment of consumers and coal field jobs. Members need to be aware of this provision, not considered by our committee, but slipped into this massive bill without even being publicly reviewed or debated after full committee action.

Mr. Chairman, Democrats do not believe we have to shortchange the American taxpayer and short shrift the economy and the environment by doling out a royalty holiday to big oil. We do not believe we should be providing this unfettered access to drilling rigs into environmentally sensitive lands.

We recognize the contributions certain Federal lands can make to our Nation's energy mix, already one-quarter of America's oil consumption and over

one-third of our natural gas and coal use. But at the same time we recognize, as responsible public stewards of our land, that there are environmental and social costs to energy development which also need to be addressed in any national energy policy. This concern and this public responsibility is noticeably absent in this legislation.

Mr. Chairman, I reserve the balance of my time.

Mr. HANSEN. Mr. Chairman, I yield 2 minutes to the gentlewoman from Wyoming (Mrs. CUBIN), chairman of the Subcommittee on Energy and Mineral Resources of the Committee on Resources.

Mrs. CUBIN. Mr. Chairman, I rise in strong support of H.R. 4. Division F of this bill is a product of the Committee on Resources. The previous speaker should know very well that he has spent his precious time misleading Members and misrepresenting what is actually in this bill. He should be ashamed.

We have held many hearings on issues involving the role of the public lands on our domestic energy supplies. Our work has led us to include provisions in H.R. 4 which require studies and analyses of impediments to environmentally sound development of potential energy resources on and under public lands. Section 6102 requires an inventory of public lands for solar, wind and geothermal energy potential and for coal resources. The SAFE Act expands current law to cover renewable energy supplies and coal resources. We need to know exactly what is in our energy bank, what energy is available to us as a country.

Subtitle A of title II mandates a 2-year extension of the Deep Water Royalty Relief Act of 1995, which has been extremely successful. The previous speaker said, What does the United States get out of this, zero, zilch, nada, when the gentleman knows from just the Deep Water Royalty Relief Act of 1995, we have over \$5 billion in the bank as a result of only bonuses that were bid in the Gulf of Mexico. That does not count any royalties. \$5 billion is far from zero, nada, zilch.

If we continue the program started by President Clinton, which is a much smaller program than was signed into law by President Clinton, we will get \$5, \$10, \$15, \$20 billion in bonuses that we otherwise will not get because it is simply too expensive to risk that kind of money to drill in the deep water.

This is a good bill. I will refer to the other complaints about the bill later.

Mr. RAHALL. Mr. Chairman, I yield 2 minutes to the gentleman from Oregon (Mr. DEFAZIO), a valuable member of the Committee on Resources.

Mr. DEFAZIO. Mr. Chairman, gouge them at the gas pump, and stick it to them in their home heating or cooling bill. Seniors have been particularly hard hit, but that is not enough for the

energy conglomerates in this country. Now they want to dip into the taxpayers' pockets.

The same group that yesterday in the Wall Street Journal was revealed to have tens of billions of dollars sitting around that they cannot figure out what to do with because of the obscene profits they made in the last year by manipulating the West Coast electricity markets, the gas market, and the gasoline market, they need more. They want more. They want it all. And the Republican Party and the President want to deliver because they helped them get elected.

Royalty exemption, \$7 billion, right from the taxpayers to the oil and gas companies. Tax deductions for nonproducing wells, \$1.2 billion, right from the taxpayers to the oil and gas companies.

Income averaging. Average Americans, salespersons, people who sell cars for a living, for instance, they cannot do income averaging because that would cost the Treasury too much money. But guess what, this bill provides income averaging for the oil and gas industry. Since they made a \$10 or \$12 billion profit last year, maybe next year they will only make \$6 billion, they should be able to average, unlike normal Americans.

Guess what, they cannot afford to pay for the environmental analyses for the drilling that they want to do on our sensitive lands. The taxpayers should pay for that analysis. Absolutely unprecedented.

Mr. Chairman, we are opening the Medicare lockbox, and we are taking the trust funds out and we are handing them to the oil and gas industry. They already have billions that they cannot spend. This is not going to get us one more well, one more gallon, one more cubic foot of gas, but it is going to enrich the coffers of these obscenely wealthy companies that are ripping off Americans.

Mr. Chairman, we should be ashamed of the thrust of this bill. This is a 1950s energy policy. The only thing that is worthwhile to produce energy here is to send every American a copy and let them burn it in their fireplace next winter because they will not be able to afford their home heating bill.

Mr. HANSEN. Mr. Chairman, I yield 1 minute to the gentleman from New York (Mr. GILMAN).

Mr. GILMAN. Mr. Chairman, a comprehensive national energy policy is in our Nation's best interest, and I am gratified that the President and the Congress are making our Nation's energy needs a national priority. There are many provisions of H.R. 4, Securing America's Future Energy Act of 2001, that I support.

However, I have some reservations about allowing drilling in the Arctic, as well as the need to fully address a meaningful increase in the corporate

average fuel economy, CAFE, standards.

Mr. Chairman, as we consider this measure, let us bear in mind that we cannot drill our way to energy security, and we cannot out-pump OPEC. OPEC has cut production this year by 13 percent, some 3.5 million barrels a day. For every barrel we pump, OPEC cuts its production further to maintain their high prices of oil.

Mr. Chairman, by approving the CAFE standards, we would be conserving some 40 percent of the consumption of oil used in our cars and light trucks by some 8 million barrels a day. I hope we can do that. Our advanced technology for meeting CAFE standards has lagged behind.

I urge my colleagues to support this measure. It is a sound measure.

□ 1430

Mr. HANSEN. Mr. Chairman, I yield 1 minute to the gentleman from Oklahoma (Mr. CARSON).

Mr. CARSON of Oklahoma. Mr. Chairman, I rise today in strong support of legislation that would establish a national energy policy and to suggest as a Democrat that populist rhetoric against energy conglomerates is in fact not only misconceived but entirely counterproductive.

America's economic prosperity and national security depend on the availability of reliable, affordable energy. The United States has an overwhelming demand for energy which is ever increasing due to our population growth. Fortunately, we have an incredible wealth of varied energy resources. Conservation and production, far from being competing policies, are in fact complementary solutions to our Nation's problems.

Today this energy legislation has a tax credit for oil and gas production for marginal wells that will provide an incentive to keep them producing when oil prices drop and provide economic stability to States such as Oklahoma which have many marginal wells. It has royalty relief to encourage energy companies to go and invest in the deep-water drilling that is so essential if we are going to have more production in this country to meet our energy needs.

Mr. Chairman, for these and many other reasons, I strongly encourage my colleagues to support this bill and to vote "aye" on final passage.

Mr. HANSEN. Mr. Chairman, I yield 1 minute to the gentleman from Louisiana (Mr. JOHN).

Mr. JOHN. Mr. Chairman, I rise today in support of H.R. 4. Our Nation's future economic prosperity, our national security and our quality of life is all in the hands of what we do today in Congress as it relates to an energy policy.

Americans have been on a roller coaster ride for the last 2 years with historically low prices for oil and nat-

ural gas being followed up with price spikes all over the country. We should not have to wait until the next crisis to put a long-term energy policy in place.

H.R. 4 is a good starting point to start this debate. It represents a balanced effort of expanding our energy supplies while creating incentives to reduce our reliance on fossil fuels. I personally would support a stronger production side in this piece of legislation because it troubles me that over 60 percent of our oil is imported from foreign countries. But I understand and I expect lively debate on some of the issues that we have to deal with.

I will oppose efforts at striking the language dealing with ANWR. I have visited ANWR. I believe we can develop ANWR with the technology that leaves just a small, temporary footprint on the Alaskan north slope.

For the sake of our national economy and security, we cannot continue to deny access to oil exploration on Federal lands.

Mr. RAHALL. Mr. Chairman, I yield the balance of my time to the gentleman from California (Mr. GEORGE MILLER), the former chairman of the Committee on Resources, now the Democratic leader on the Committee on Education and the Workforce.

Mr. GEORGE MILLER of California. Mr. Chairman, I rise in opposition to this legislation.

Mr. Chairman, this legislation is really not about increasing America's energy independence. This legislation is about whether or not the automobile companies can continue to fail to meet their obligations to American society to improve the mileage standards in our automobiles. It is about whether or not the oil companies can find more money by drilling the American Treasury than they can find for drilling oil.

This legislation in the heart of it has a terrible trade-off. It suggests that we go to the Arctic and that we drill in ANWR, in the Arctic National Wildlife Refuge, and then we take that oil and we put it into automobiles in this country to continue to waste it. Seventy percent of our energy in this country, our oil in this country, is used for transportation. Yet the Republicans have continued to put riders on appropriations bills so that we can continue to refuse to improve those automobile CAFE standards, the mileage per gallon standards that can save the American consumer, the American family billions of dollars over the coming years.

Yet at the same time this bill is a raid on the Treasury. We are going to have a royalty holiday for those who drill in the deepwater on the theory that this will get them to drill. Ladies and gentlemen, read the oil and gas journals, read Forbes, read Fortune magazine, read the business journals, read the Wall Street Journal. The Gulf

of Mexico is the hottest oil play in the world today. Yet you are going to give them an incentive to go there. You are going to give them an incentive to go there. And you are going to rave about the \$5 billion in bonus royalties and bonus bids that you got as a result of this. Yet CBO tells us it is going to cost us \$7 billion to get \$5 billion. And the losses continue over time.

Keep doing that and you end up with a deficit. Keep doing that and you end up socializing an industry from doing what it is already supposed to be doing and what it is already doing in the marketplace.

This is a very bad bill.

Mr. HANSEN. Mr. Chairman, I yield myself the balance of my time.

Mr. Chairman, it is time to take a long, hard look at what must be done to help our Nation meet its energy needs. It is time to look past the special interest groups, the people who feel they run this Nation, their letter campaigns and political partisanship. This bill is right for the country. ANWR is right for the country. Producing more energy on existing energy sites is right for the country. It is right for American workers who look forward to 735,000 new, high-paying jobs.

Why are these people against American workers? American workers are the greatest people on earth. They work hard, they get their money, they are patriotic Americans. Yet we hear from the other side that they are against these workers. I would hope that every person who looks at this takes care of the American workers.

It is right for American consumers discouraged by wildly fluctuating prices. Look what they paid in their energy bills this year. Every time they drive up to the gas pump, they do not know whether it is 15 cents higher or lower. That should not happen.

It is right for the national security of America because we cannot rely on those we can hardly rely on. That is what we are doing now.

This bill is a bill whose time has come. This is a bill that is necessary for America, so we can stabilize the prices that we have, we can take care of our energy needs, we can take care of our elderly people, and we can take care of the American workers.

That is the point I want to make. What do those folks voting against this have against the American workers? That to me is a critical issue. I would hope they would take that into consideration.

The CHAIRMAN pro tempore (Mr. LINDER). All time for general debate has expired.

Pursuant to the rule, the amendment printed in part A of House Report 107-178 is adopted and the bill, as amended, is considered as the original bill for the purpose of further amendment under the 5-minute rule and is considered read.

The text of H.R. 4, as amended, is as follows:

H.R. 4

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

SECTION 1. SHORT TITLE AND TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “Securing America’s Future Energy Act of 2001” or the “SAFE Act of 2001”.

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

Sec. 1. Short title and table of contents.

DIVISION A

Sec. 100. Short title.

TITLE I—ENERGY CONSERVATION

Subtitle A—Reauthorization of Federal Energy Conservation Programs

Sec. 101. Authorization of appropriations.

Subtitle B—Federal Leadership in Energy Conservation

Sec. 121. Federal facilities and national energy security.

Sec. 122. Enhancement and extension of authority relating to Federal energy savings performance contracts.

Sec. 123. Clarification and enhancement of authority to enter utility incentive programs for energy savings.

Sec. 124. Federal central air conditioner and heat pump efficiency.

Sec. 125. Advanced building efficiency testbed.

Sec. 126. Use of interval data in Federal buildings.

Sec. 127. Review of Energy Savings Performance Contract program.

Sec. 128. Capitol complex.

Subtitle C—State Programs

Sec. 131. Amendments to State energy programs.

Sec. 132. Reauthorization of energy conservation program for schools and hospitals.

Sec. 133. Amendments to Weatherization Assistance Program.

Sec. 134. LIHEAP.

Sec. 135. High performance public buildings.

Subtitle D—Energy Efficiency for Consumer Products

Sec. 141. Energy Star program.

Sec. 142. Labeling of energy efficient appliances.

Sec. 143. Appliance standards.

Subtitle E—Energy Efficient Vehicles

Sec. 151. High occupancy vehicle exception.

Sec. 152. Railroad efficiency.

Sec. 153. Biodiesel fuel use credits.

Sec. 154. Mobile to stationary source trading.

Subtitle F—Other Provisions

Sec. 161. Review of regulations to eliminate barriers to emerging energy technology.

Sec. 162. Advanced idle elimination systems.

Sec. 163. Study of benefits and feasibility of oil bypass filtration technology.

Sec. 164. Gas flare study.

Sec. 165. Telecommuting study.

TITLE II—AUTOMOBILE FUEL ECONOMY

Sec. 201. Average fuel economy standards for nonpassenger automobiles.

Sec. 202. Consideration of prescribing different average fuel economy standards for nonpassenger automobiles.

Sec. 203. Dual fueled automobiles.

Sec. 204. Fuel economy of the Federal fleet of automobiles.

Sec. 205. Hybrid vehicles and alternative vehicles.

Sec. 206. Federal fleet petroleum-based non-alternative fuels.

Sec. 207. Study of feasibility and effects of reducing use of fuel for automobiles.

TITLE III—NUCLEAR ENERGY

Sec. 301. License period.

Sec. 302. Cost recovery from Government agencies.

Sec. 303. Depleted uranium hexafluoride.

Sec. 304. Nuclear Regulatory Commission meetings.

Sec. 305. Cooperative research and development and special demonstration projects for the uranium mining industry.

Sec. 306. Maintenance of a viable domestic uranium conversion industry.

Sec. 307. Paducah decontamination and decommissioning plan.

TITLE IV—HYDROELECTRIC ENERGY

Sec. 401. Alternative conditions and fishways.

Sec. 402. FERC data on hydroelectric licensing.

TITLE V—FUELS

Sec. 601. Tank draining during transition to summertime RFG.

Sec. 602. Gasoline blendstock requirements.

Sec. 603. Boutique fuels.

Sec. 604. Funding for MTBE contamination.

TITLE VI—RENEWABLE ENERGY

Sec. 701. Assessment of renewable energy resources.

Sec. 702. Renewable energy production incentive.

TITLE VII—PIPELINES

Sec. 801. Prohibition on certain pipeline route.

Sec. 802. Historic pipelines.

TITLE VIII—MISCELLANEOUS PROVISIONS

Sec. 901. Waste reduction and use of alternatives.

Sec. 902. Annual report on United States energy independence.

Sec. 903. Study of aircraft emissions.

DIVISION B

Sec. 2001. Short title.

Sec. 2002. Findings.

Sec. 2003. Purposes.

Sec. 2004. Goals.

Sec. 2005. Definitions.

Sec. 2006. Authorizations.

Sec. 2007. Balance of funding priorities.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle A—Alternative Fuel Vehicles

Sec. 2101. Short title.

Sec. 2102. Definitions.

Sec. 2103. Pilot program.

Sec. 2104. Reports to Congress.

Sec. 2105. Authorization of appropriations.

Subtitle B—Distributed Power Hybrid Energy Systems

Sec. 2121. Findings.

Sec. 2122. Definitions.

Sec. 2123. Strategy.

Sec. 2124. High power density industry program.

Sec. 2125. Micro-cogeneration energy technology.

Sec. 2126. Program plan.

Sec. 2127. Report.

Sec. 2128. Voluntary consensus standards.

- Subtitle C—Secondary Electric Vehicle Battery Use
- Sec. 2131. Definitions.
- Sec. 2132. Establishment of secondary electric vehicle battery use program.
- Sec. 2133. Authorization of appropriations.
- Subtitle D—Green School Buses
- Sec. 2141. Short title.
- Sec. 2142. Establishment of pilot program.
- Sec. 2143. Fuel cell bus development and demonstration program.
- Sec. 2144. Authorization of appropriations.
- Subtitle E—Next Generation Lighting Initiative
- Sec. 2151. Short title.
- Sec. 2152. Definition.
- Sec. 2153. Next Generation Lighting Initiative.
- Sec. 2154. Study.
- Sec. 2155. Grant program.
- Subtitle F—Department of Energy Authorization of Appropriations
- Sec. 2161. Authorization of appropriations.
- Subtitle G—Environmental Protection Agency Office of Air and Radiation Authorization of Appropriations
- Sec. 2171. Short title.
- Sec. 2172. Authorization of appropriations.
- Sec. 2173. Limits on use of funds.
- Sec. 2174. Cost sharing.
- Sec. 2175. Limitation on demonstration and commercial applications of energy technology.
- Sec. 2176. Reprogramming.
- Sec. 2177. Budget request format.
- Sec. 2178. Other provisions.
- Subtitle H—National Building Performance Initiative
- Sec. 2181. National Building Performance Initiative.
- TITLE II—RENEWABLE ENERGY**
- Subtitle A—Hydrogen
- Sec. 2201. Short title.
- Sec. 2202. Purposes.
- Sec. 2203. Definitions.
- Sec. 2204. Reports to Congress.
- Sec. 2205. Hydrogen research and development.
- Sec. 2206. Demonstrations.
- Sec. 2207. Technology transfer.
- Sec. 2208. Coordination and consultation.
- Sec. 2209. Advisory Committee.
- Sec. 2210. Authorization of appropriations.
- Sec. 2211. Repeal.
- Subtitle B—Bioenergy
- Sec. 2221. Short title.
- Sec. 2222. Findings.
- Sec. 2223. Definitions.
- Sec. 2224. Authorization.
- Sec. 2225. Authorization of appropriations.
- Subtitle C—Transmission Infrastructure Systems
- Sec. 2241. Transmission infrastructure systems research, development, demonstration, and commercial application.
- Sec. 2242. Program plan.
- Sec. 2243. Report.
- Subtitle D—Department of Energy Authorization of Appropriations
- Sec. 2261. Authorization of appropriations.
- TITLE III—NUCLEAR ENERGY**
- Subtitle A—University Nuclear Science and Engineering
- Sec. 2301. Short title.
- Sec. 2302. Findings.
- Sec. 2303. Department of Energy program.
- Sec. 2304. Authorization of appropriations.
- Subtitle B—Advanced Fuel Recycling Technology Research and Development Program
- Sec. 2321. Program.
- Subtitle C—Department of Energy Authorization of Appropriations
- Sec. 2341. Nuclear Energy Research Initiative.
- Sec. 2342. Nuclear Energy Plant Optimization program.
- Sec. 2343. Nuclear energy technologies.
- Sec. 2344. Authorization of appropriations.
- TITLE IV—FOSSIL ENERGY**
- Subtitle A—Coal
- Sec. 2401. Coal and related technologies programs.
- Subtitle B—Oil and Gas
- Sec. 2421. Petroleum-oil technology.
- Sec. 2422. Gas.
- Subtitle C—Ultra-Deepwater and Unconventional Drilling
- Sec. 2441. Short title.
- Sec. 2442. Definitions.
- Sec. 2443. Ultra-deepwater program.
- Sec. 2444. National Energy Technology Laboratory.
- Sec. 2445. Advisory Committee.
- Sec. 2446. Research Organization.
- Sec. 2447. Grants.
- Sec. 2448. Plan and funding.
- Sec. 2449. Audit.
- Sec. 2450. Fund.
- Sec. 2451. Sunset.
- Subtitle D—Fuel Cells
- Sec. 2461. Fuel cells.
- Subtitle E—Department of Energy Authorization of Appropriations
- Sec. 2481. Authorization of appropriations.
- TITLE V—SCIENCE**
- Subtitle A—Fusion Energy Sciences
- Sec. 2501. Short title.
- Sec. 2502. Findings.
- Sec. 2503. Plan for fusion experiment.
- Sec. 2504. Plan for fusion energy sciences program.
- Sec. 2505. Authorization of appropriations.
- Subtitle B—Spallation Neutron Source
- Sec. 2521. Definition.
- Sec. 2522. Authorization of appropriations.
- Sec. 2523. Report.
- Sec. 2524. Limitations.
- Subtitle C—Facilities, Infrastructure, and User Facilities
- Sec. 2541. Definition.
- Sec. 2542. Facility and infrastructure support for nonmilitary energy laboratories.
- Sec. 2543. User facilities.
- Subtitle D—Advisory Panel on Office of Science
- Sec. 2561. Establishment.
- Sec. 2562. Report.
- Subtitle E—Department of Energy Authorization of Appropriations
- Sec. 2581. Authorization of appropriations.
- TITLE VI—MISCELLANEOUS**
- Subtitle A—General Provisions for the Department of Energy
- Sec. 2601. Research, development, demonstration, and commercial application of energy technology programs, projects, and activities.
- Sec. 2602. Limits on use of funds.
- Sec. 2603. Cost sharing.
- Sec. 2604. Limitation on demonstration and commercial application of energy technology.
- Sec. 2605. Reprogramming.
- Subtitle B—Other Miscellaneous Provisions
- Sec. 2611. Notice of reorganization.
- Sec. 2612. Limits on general plant projects.
- Sec. 2613. Limits on construction projects.
- Sec. 2614. Authority for conceptual and construction design.
- Sec. 2615. National Energy Policy Development Group mandated reports.
- Sec. 2616. Periodic reviews and assessments.
- DIVISION C**
- Sec. 3001. Short title.
- TITLE I—CONSERVATION**
- Sec. 3101. Credit for residential solar energy property.
- Sec. 3102. Extension and expansion of credit for electricity produced from renewable resources.
- Sec. 3103. Credit for qualified stationary fuel cell powerplants.
- Sec. 3104. Alternative motor vehicle credit.
- Sec. 3105. Extension of deduction for certain refueling property.
- Sec. 3106. Modification of credit for qualified electric vehicles.
- Sec. 3107. Tax credit for energy efficient appliances.
- Sec. 3108. Credit for energy efficiency improvements to existing homes.
- Sec. 3109. Business credit for construction of new energy efficient home.
- Sec. 3110. Allowance of deduction for energy efficient commercial building property.
- Sec. 3111. Allowance of deduction for qualified energy management devices and retrofitted qualified meters.
- Sec. 3112. 3-year applicable recovery period for depreciation of qualified energy management devices.
- Sec. 3113. Energy credit for combined heat and power system property.
- Sec. 3114. New nonrefundable personal credits allowed against regular and minimum taxes.
- Sec. 3115. Phaseout of 4.3-cent motor fuel excise taxes on railroads and inland waterway transportation which remain in general fund.
- Sec. 3116. Reduced motor fuel excise tax on certain mixtures of diesel fuel.
- Sec. 3117. Credit for investment in qualifying advanced clean coal technology.
- Sec. 3118. Credit for production from qualifying advanced clean coal technology.
- TITLE II—RELIABILITY**
- Sec. 3201. Natural gas gathering lines treated as 7-year property.
- Sec. 3202. Natural gas distribution lines treated as 10-year property.
- Sec. 3203. Petroleum refining property treated as 7-year property.
- Sec. 3204. Expensing of capital costs incurred in complying with environmental protection agency sulfur regulations.
- Sec. 3205. Environmental tax credit.
- Sec. 3206. Determination of small refiner exception to oil depletion deduction.
- Sec. 3207. Tax-exempt bond financing of certain electric facilities.
- Sec. 3208. Sales or dispositions to implement Federal Energy Regulatory Commission or State electric restructuring policy.
- Sec. 3209. Distributions of stock to implement Federal Energy Regulatory Commission or State electric restructuring policy.
- Sec. 3210. Modifications to special rules for nuclear decommissioning costs.

- Sec. 3211. Treatment of certain income of cooperatives.
 Sec. 3212. Repeal of requirement of certain approved terminals to offer dyed diesel fuel and kerosene for nontaxable purposes.
 Sec. 3213. Arbitrage rules not to apply to prepayments for natural gas.

TITLE III—PRODUCTION

- Sec. 3301. Oil and gas from marginal wells.
 Sec. 3302. Temporary suspension of limitation based on 65 percent of taxable income and extension of suspension of taxable income limit with respect to marginal production.
 Sec. 3303. Deduction for delay rental payments.
 Sec. 3304. Election to expense geological and geophysical expenditures.
 Sec. 3305. 5-year net operating loss carryback for losses attributable to operating mineral interests of oil and gas producers.
 Sec. 3306. Extension and modification of credit for producing fuel from a nonconventional source.
 Sec. 3307. Business related energy credits allowed against regular and minimum tax.
 Sec. 3308. Temporary repeal of alternative minimum tax preference for intangible drilling costs.
 Sec. 3309. Allowance of enhanced recovery credit against the alternative minimum tax.
 Sec. 3310. Extension of certain benefits for energy-related businesses on Indian reservations.

DIVISION D

- Sec. 4101. Capacity building for energy-efficient, affordable housing.
 Sec. 4102. Increase of CDBG public services cap for energy conservation and efficiency activities.
 Sec. 4103. FHA mortgage insurance incentives for energy efficient housing.
 Sec. 4104. Public housing capital fund.
 Sec. 4105. Grants for energy-conserving improvements for assisted housing.
 Sec. 4106. North American Development Bank.

DIVISION E

- Sec. 5000. Short title.
 Sec. 5001. Findings.
 Sec. 5002. Definitions.
 Sec. 5003. Clean coal power initiative.
 Sec. 5004. Cost and performance goals.
 Sec. 5005. Authorization of appropriations.
 Sec. 5006. Project criteria.
 Sec. 5007. Study.

DIVISION F

- Sec. 6000. Short title.
TITLE I—GENERAL PROTECTIONS FOR ENERGY SUPPLY AND SECURITY
 Sec. 6101. Study of existing rights-of-way on Federal lands to determine capability to support new pipelines or other transmission facilities.
 Sec. 6102. Inventory of energy production potential of all Federal public lands.
 Sec. 6103. Review of regulations to eliminate barriers to emerging energy technology.
 Sec. 6104. Interagency agreement on environmental review of interstate natural gas pipeline projects.
 Sec. 6105. Enhancing energy efficiency in management of Federal lands.

TITLE II—OIL AND GAS DEVELOPMENT

Subtitle A—Offshore Oil and Gas

- Sec. 6201. Short title.
 Sec. 6202. Lease sales in Western and Central Planning Area of the Gulf of Mexico.
 Sec. 6203. Savings clause.
 Sec. 6204. Analysis of Gulf of Mexico field size distribution, international competitiveness, and incentives for development.

Subtitle B—Improvements to Federal Oil and Gas Management

- Sec. 6221. Short title.
 Sec. 6222. Study of impediments to efficient lease operations.
 Sec. 6223. Elimination of unwarranted denials and stays.
 Sec. 6224. Limitations on cost recovery for applications.
 Sec. 6225. Consultation with Secretary of Agriculture.

Subtitle C—Miscellaneous

- Sec. 6231. Offshore subsalt development.
 Sec. 6232. Program on oil and gas royalties in kind.
 Sec. 6233. Marginal well production incentives.
 Sec. 6234. Reimbursement for costs of NEPA analyses, documentation, and studies.

TITLE III—GEOTHERMAL ENERGY DEVELOPMENT

- Sec. 6301. Royalty reduction and relief.
 Sec. 6302. Exemption from royalties for direct use of low temperature geothermal energy resources.
 Sec. 6303. Amendments relating to leasing on Forest Service lands.
 Sec. 6304. Deadline for determination on pending noncompetitive lease applications.
 Sec. 6305. Opening of public lands under military jurisdiction.
 Sec. 6306. Application of amendments.
 Sec. 6307. Review and report to Congress.
 Sec. 6308. Reimbursement for costs of NEPA analyses, documentation, and studies.

TITLE IV—HYDROPOWER

- Sec. 6401. Study and report on increasing electric power production capability of existing facilities.
 Sec. 6402. Installation of powerformer at Folsom power plant, California.
 Sec. 6403. Study and implementation of increased operational efficiencies in hydroelectric power projects.
 Sec. 6404. Shift of project loads to off-peak periods.

TITLE V—ARCTIC COASTAL PLAIN DOMESTIC ENERGY

- Sec. 6501. Short title.
 Sec. 6502. Definitions.
 Sec. 6503. Leasing program for lands within the Coastal Plain.
 Sec. 6504. Lease sales.
 Sec. 6505. Grant of leases by the Secretary.
 Sec. 6506. Lease terms and conditions.
 Sec. 6507. Coastal Plain environmental protection.
 Sec. 6508. Expedited judicial review.
 Sec. 6509. Rights-of-way across the Coastal Plain.
 Sec. 6510. Conveyance.
 Sec. 6511. Local government impact aid and community service assistance.
 Sec. 6512. Revenue allocation.

- TITLE VI—CONSERVATION OF ENERGY BY THE DEPARTMENT OF THE INTERIOR**
 Sec. 6601. Energy conservation by the Department of the Interior.

TITLE VII—COAL

- Sec. 6701. Limitation on fees with respect to coal lease applications and documents.
 Sec. 6702. Mining plans.
 Sec. 6703. Payment of advance royalties under coal leases.
 Sec. 6704. Elimination of deadline for submission of coal lease operation and reclamation plan.

TITLE VIII—INSULAR AREAS ENERGY SECURITY

- Sec. 6801. Insular areas energy security.

DIVISION A

SEC. 100. SHORT TITLE.

This division may be cited as the “Energy Advancement and Conservation Act of 2001”.

TITLE I—ENERGY CONSERVATION

Subtitle A—Reauthorization of Federal Energy Conservation Programs

SEC. 101. AUTHORIZATION OF APPROPRIATIONS.

Section 660 of the Department of Energy Organization Act (42 U.S.C. 7270) is amended as follows:

(1) By inserting “(a)” before “Appropriations”.

(2) By inserting at the end the following new subsection:

“(b) There are hereby authorized to be appropriated to the Department of Energy for fiscal year 2002, \$950,000,000; for fiscal year 2003, \$1,000,000,000; for fiscal year 2004, \$1,050,000,000; for fiscal year 2005, \$1,100,000,000; and for fiscal year 2006, \$1,150,000,000, to carry out energy efficiency activities under the following laws, such sums to remain available until expended:

“(1) Energy Policy and Conservation Act, including section 256(d)(42 U.S.C. 6276(d)) (promote export of energy efficient products), sections 321 through 346 (42 U.S.C. 6291–6317) (appliances program).

“(2) Energy Conservation and Production Act, including sections 301 through 308 (42 U.S.C. 6831–6837) (energy conservation standards for new buildings).

“(3) National Energy Conservation Policy Act, including sections 541–551 (42 U.S.C. 8251–8259) (Federal Energy Management Program).

“(4) Energy Policy Act of 1992, including sections 103 (42 U.S.C. 13458) (energy efficient lighting and building centers), 121 (42 U.S.C. 6292 note) (energy efficiency labeling for windows and window systems), 125 (42 U.S.C. 6292 note) (energy efficiency information for commercial office equipment), 126 (42 U.S.C. 6292 note) (energy efficiency information for luminaires), 131 (42 U.S.C. 6348) (energy efficiency in industrial facilities), and 132 (42 U.S.C. 6349) (process-oriented industrial energy efficiency).”.

Subtitle B—Federal Leadership in Energy Conservation

SEC. 121. FEDERAL FACILITIES AND NATIONAL ENERGY SECURITY.

(a) PURPOSE.—Section 542 of the National Energy Conservation Policy Act (42 U.S.C. 8252) is amended by inserting “, and generally to promote the production, supply, and marketing of energy efficiency products and services and the production, supply, and marketing of unconventional and renewable energy resources” after “by the Federal Government”.

(b) ENERGY MANAGEMENT REQUIREMENTS.—Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended as follows:

(1) In subsection (a)(1), by striking “during the fiscal year 1995” and all that follows through the end and inserting “during—

“(1) fiscal year 1995 is at least 10 percent;
 “(2) fiscal year 2000 is at least 20 percent;
 “(3) fiscal year 2005 is at least 30 percent;
 “(4) fiscal year 2010 is at least 35 percent;
 “(5) fiscal year 2015 is at least 40 percent;
 and

“(6) fiscal year 2020 is at least 45 percent, less than the energy consumption per gross square foot of its Federal buildings in use during fiscal year 1985. To achieve the reductions required by this paragraph, an agency shall make maximum practicable use of energy efficiency products and services and unconventional and renewable energy resources, using guidelines issued by the Secretary under subsection (d) of this section.”.

(2) In subsection (d), by inserting “Such guidelines shall include appropriate model technical standards for energy efficiency and unconventional and renewable energy resources products and services. Such standards shall reflect, to the extent practicable, evaluation of both currently marketed and potentially marketable products and services that could be used by agencies to improve energy efficiency and increase unconventional and renewable energy resources.” after “implementation of this part.”.

(3) By adding at the end the following new subsection:

“(e) STUDIES.—To assist in developing the guidelines issued by the Secretary under subsection (d) and in furtherance of the purposes of this section, the Secretary shall conduct studies to identify and encourage the production and marketing of energy efficiency products and services and unconventional and renewable energy resources. To conduct such studies, and to provide grants to accelerate the use of unconventional and renewable energy, there are authorized to be appropriated to the Secretary \$20,000,000 for each of the fiscal years 2003 through 2010.”.

(c) DEFINITION.—Section 551 of the National Energy Conservation Policy Act (42 U.S.C. 8259) is amended as follows:

(1) By striking “and” at the end of paragraph (8).

(2) By striking the period at the end of paragraph (9) and inserting “; and”.

(3) By adding at the end the following new paragraph:

“(10) the term ‘unconventional and renewable energy resources’ includes renewable energy sources, hydrogen, fuel cells, cogeneration, combined heat and power, heat recovery (including by use of a Stirling heat engine), and distributed generation.”.

(d) EXCLUSIONS FROM REQUIREMENT.—The National Energy Conservation Policy Act (42 U.S.C. 7201 and following) is amended as follows:

(1) In section 543(a)—

(A) by striking “(1) Subject to paragraph (2)” and inserting “Subject to subsection (c)”;

(B) by striking “(2) An agency” and all that follows through “such exclusion.”.

(2) By amending subsection (c) of such section 543 to read as follows:

“(c) EXCLUSIONS.—(1) A Federal building may be excluded from the requirements of subsections (a) and (b) only if—

“(A) the President declares the building to require exclusion for national security reasons; and

“(B) the agency responsible for the building has—

“(i) completed and submitted all federally required energy management reports; and

“(ii) achieved compliance with the energy efficiency requirements of this Act, the Energy Policy Act of 1992, Executive Orders, and other Federal law;

“(iii) implemented all practical, life cycle cost-effective projects in the excluded building.”.

“(2) The President shall only declare buildings described in paragraph (1)(A) to be excluded, not ancillary or nearby facilities that are not in themselves national security facilities.”.

(3) In section 548(b)(1)(A)—

(A) by striking “copy of the”; and

(B) by striking “sections 543(a)(2) and 543(c)(3)” and inserting “section 543(c)”.

(e) ACQUISITION REQUIREMENT.—Section 543(b) of such Act is amended—

(1) in paragraph (1), by striking “(1) Not” and inserting “(1) Except as provided in paragraph (5), not”; and

(2) by adding at the end the following new paragraph:

“(5)(A)(i) Agencies shall select only Energy Star products when available when acquiring energy-using products. For product groups where Energy Star labels are not yet available, agencies shall select products that are in the upper 25 percent of energy efficiency as designated by FEMP. In the case of electric motors of 1 to 500 horsepower, agencies shall select only premium efficiency motors that meet a standard designated by the Secretary, and shall replace (not rewind) failed motors with motors meeting such standard. The Secretary shall designate such standard within 90 days of enactment of paragraph, after considering recommendations by the National Electrical Manufacturers Association. The Secretary of Energy shall develop guidelines within 180 days after the enactment of this paragraph for exemptions to this section when equivalent products do not exist, are impractical, or do not meet the agency mission requirements.

“(ii) The Administrator of the General Services Administration and the Secretary of Defense (acting through the Defense Logistics Agency), with assistance from the Administrator of the Environmental Protection Agency and the Secretary of Energy, shall create clear catalogue listings that designate Energy Star products in both print and electronic formats. After any existing federal inventories are exhausted, Administrator of the General Services Administration and the Secretary of Defense (acting through the Defense Logistics Agency) shall only replace inventories with energy-using products that are Energy Star, products that are rated in the top 25 percent of energy efficiency, or products that are exempted as designated by FEMP and defined in clause (i).

“(iii) Agencies shall incorporate energy-efficient criteria consistent with Energy Star and other FEMP designated energy efficiency levels into all guide specifications and project specifications developed for new construction and renovation, as well as into product specification language developed for Basic Ordering Agreements, Blanket Purchasing Agreements, Government Wide Acquisition Contracts, and all other purchasing procedures.

“(iv) The legislative branch shall be subject to this subparagraph to the same extent and in the same manner as are the Federal agencies referred to in section 521(1).

“(B) Not later than 6 months after the date of the enactment of this paragraph, the Secretary of Energy shall establish guidelines defining the circumstances under which an agency shall not be required to comply with subparagraph (A). Such circumstances may include the absence of Energy Star products, systems, or designs that serve the purpose of the agency, issues relating to the compatibility of a product, system, or design with

existing buildings or equipment, and excessive cost compared to other available and appropriate products, systems, or designs.

“(C) Subparagraph (A) shall apply to agency acquisitions occurring on or after October 1, 2002.”.

(f) METERING.—Section 543 of such Act (42 U.S.C. 8254) is amended by adding at the end the following new subsection:

“(f) METERING.—(1) By October 1, 2004, all Federal buildings including buildings owned by the legislative branch and the Federal court system and other energy-using structures shall be metered or submetered in accordance with guidelines established by the Secretary under paragraph (2).

“(2) Not later than 6 months after the date of the enactment of this subsection, the Secretary, in consultation with the General Services Administration and representatives from the metering industry, energy services industry, national laboratories, colleges of higher education, and federal facilities energy managers, shall establish guidelines for agencies to carry out paragraph (1). Such guidelines shall take into consideration each of the following:

“(A) Cost.

“(B) Resources, including personnel, required to maintain, interpret, and report on data so that the meters are continually reviewed.

“(C) Energy management potential.

“(D) Energy savings.

“(E) Utility contract aggregation.

“(F) Savings from operations and maintenance.

“(3) A building shall be exempt from the requirement of this section to the extent that compliance is deemed impractical by the Secretary. A finding of impracticability shall be based on the same factors as identified in subsection (c) of this section.”.

(g) RETENTION OF ENERGY SAVINGS.—Section 546 of such Act (42 U.S.C. 8256) is amended by adding at the end the following new subsection:

“(e) RETENTION OF ENERGY SAVINGS.—An agency may retain any funds appropriated to that agency for energy expenditures, at buildings subject to the requirements of section 543(a) and (b), that are not made because of energy savings. Except as otherwise provided by law, such funds may be used only for energy efficiency or unconventional and renewable energy resources projects.”.

(h) REPORTS.—Section 548 of such Act (42 U.S.C. 8258) is amended as follows:

(1) In subsection (a)—

(A) by inserting “in accordance with guidelines established by and” after “to the Secretary.”;

(B) by striking “and” at the end of paragraph (1);

(C) by striking the period at the end of paragraph (2) and inserting a semicolon; and

(D) by adding at the end the following new paragraph:

“(3) an energy emergency response plan developed by the agency.”.

(2) In subsection (b)—

(A) by striking “and” at the end of paragraph (3);

(B) by striking the period at the end of paragraph (4) and inserting “; and”; and

(C) by adding at the end the following new paragraph:

“(5) all information transmitted to the Secretary under subsection (a).”.

(3) By amending subsection (c) to read as follows:

“(c) AGENCY REPORTS TO CONGRESS.—Each agency shall annually report to the Congress, as part of the agency’s annual budget

request, on all of the agency's activities implementing any Federal energy management requirement."

(i) INSPECTOR GENERAL ENERGY AUDITS.—Section 160(c) of the Energy Policy Act of 1992 (42 U.S.C. 8262f(c)) is amended by striking "is encouraged to conduct periodic" and inserting "shall conduct periodic".

(j) FEDERAL ENERGY MANAGEMENT REVIEWS.—Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended by adding at the end the following:

"(g) PRIORITY RESPONSE REVIEWS.—Each agency shall—

"(1) not later than 9 months after the date of the enactment of this subsection, undertake a comprehensive review of all practicable measures for—

"(A) increasing energy and water conservation, and

"(B) using renewable energy sources; and
 "(2) not later than 180 days after completing the review, develop plans to achieve not less than 50 percent of the potential efficiency and renewable savings identified in the review.

The agency shall implement such measures as soon thereafter as is practicable, consistent with compliance with the requirements of this section."

SEC. 122. ENHANCEMENT AND EXTENSION OF AUTHORITY RELATING TO FEDERAL ENERGY SAVINGS PERFORMANCE CONTRACTS.

(a) COST SAVINGS FROM OPERATION AND MAINTENANCE EFFICIENCIES IN REPLACEMENT FACILITIES.—Section 801(a) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)) is amended by adding at the end the following new paragraph:

"(3)(A) In the case of an energy savings contract or energy savings performance contract providing for energy savings through the construction and operation of one or more buildings or facilities to replace one or more existing buildings or facilities, benefits ancillary to the purpose of such contract under paragraph (1) may include savings resulting from reduced costs of operation and maintenance at such replacement buildings or facilities when compared with costs of operation and maintenance at the buildings or facilities being replaced, established through a methodology set forth in the contract.

"(B) Notwithstanding paragraph (2)(B), aggregate annual payments by an agency under an energy savings contract or energy savings performance contract referred to in subparagraph (A) may take into account (through the procedures developed pursuant to this section) savings resulting from reduced costs of operation and maintenance as described in that subparagraph."

(b) EXPANSION OF DEFINITION OF ENERGY SAVINGS TO INCLUDE WATER AND REPLACEMENT FACILITIES.—

(1) ENERGY SAVINGS.—Section 804(2) of the National Energy Conservation Policy Act (42 U.S.C. 8287c(2)) is amended to read as follows:

"(2)(A) The term 'energy savings' means a reduction in the cost of energy or water, from a base cost established through a methodology set forth in the contract, used in an existing federally owned building or buildings or other federally owned facilities as a result of—

"(i) the lease or purchase of operating equipment, improvements, altered operation and maintenance, or technical services;

"(ii) the increased efficient use of existing energy sources by solar and ground source geothermal resources, cogeneration or heat recovery (including by the use of a Stirling heat engine), excluding any cogeneration

process for other than a federally owned building or buildings or other federally owned facilities; or

"(iii) the increased efficient use of existing water sources.

"(B) The term 'energy savings' also means, in the case of a replacement building or facility described in section 801(a)(3), a reduction in the cost of energy, from a base cost established through a methodology set forth in the contract, that would otherwise be utilized in one or more existing federally owned buildings or other federally owned facilities by reason of the construction and operation of the replacement building or facility."

(2) ENERGY SAVINGS CONTRACT.—Section 804(3) of the National Energy Conservation Policy Act (42 U.S.C. 8287c(3)) is amended to read as follows:

"(3) The terms 'energy savings contract' and 'energy savings performance contract' mean a contract which provides for—

"(A) the performance of services for the design, acquisition, installation, testing, operation, and, where appropriate, maintenance and repair, of an identified energy or water conservation measure or series of measures at one or more locations; or

"(B) energy savings through the construction and operation of one or more buildings or facilities to replace one or more existing buildings or facilities."

(3) ENERGY OR WATER CONSERVATION MEASURE.—Section 804(4) of the National Energy Conservation Policy Act (42 U.S.C. 8287c(4)) is amended to read as follows:

"(4) The term 'energy or water conservation measure' means—

"(A) an energy conservation measure, as defined in section 551(4) (42 U.S.C. 8259(4)); or

"(B) a water conservation measure that improves water efficiency, is life cycle cost effective, and involves water conservation, water recycling or reuse, improvements in operation or maintenance efficiencies, retrofit activities, or other related activities, not at a Federal hydroelectric facility."

(4) CONFORMING AMENDMENT.—Section 801(a)(2)(C) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)(2)(C)) is amended by inserting "or water" after "financing energy".

(c) EXTENSION OF AUTHORITY.—Section 801(c) of the National Energy Conservation Policy Act (42 U.S.C. 8287(c)) is repealed.

(d) CONTRACTING AND AUDITING.—Section 801(a)(2) of the National Energy Conservation Policy Act (42 U.S.C. 8287(a)(2)) is amended by adding at the end the following new subparagraph:

"(E) A Federal agency shall engage in contracting and auditing to implement energy savings performance contracts as necessary and appropriate to ensure compliance with the requirements of this Act, particularly the energy efficiency requirements of section 543."

SEC. 123. CLARIFICATION AND ENHANCEMENT OF AUTHORITY TO ENTER UTILITY INCENTIVE PROGRAMS FOR ENERGY SAVINGS.

Section 546(c) of the National Energy Conservation Policy Act (42 U.S.C. 8256(c)) is amended as follows:

(1) In paragraph (3) by adding at the end the following: "Such a utility incentive program may include a contract or contract term designed to provide for cost-effective electricity demand management, energy efficiency, or water conservation."

(2) By adding at the end of the following new paragraphs:

"(6) A utility incentive program may include a contract or contract term for a reduction in the energy, from a base cost es-

tablished through a methodology set forth in such a contract, that would otherwise be utilized in one or more federally owned buildings or other federally owned facilities by reason of the construction or operation of one or more replacement buildings or facilities, as well as benefits ancillary to the purpose of such contract or contract term, including savings resulting from reduced costs of operation and maintenance at new or additional buildings or facilities when compared with the costs of operation and maintenance at existing buildings or facilities.

"(7) Federal agencies are encouraged to participate in State or regional demand side reduction programs, including those operated by wholesale market institutions such as independent system operators, regional transmission organizations and other entities. The availability of such programs, and the savings resulting from such participation, should be included in the evaluation of energy options for Federal facilities."

SEC. 124. FEDERAL CENTRAL AIR CONDITIONER AND HEAT PUMP EFFICIENCY.

(a) REQUIREMENT.—Federal agencies shall be required to acquire central air conditioners and heat pumps that meet or exceed the standards established under subsection (b) or (c) in the case of all central air conditioners and heat pumps acquired after the date of enactment of this Act.

(b) STANDARDS.—The standards referred to in subsection (a) are the following:

(1) For air-cooled air conditioners with cooling capacities of less than 65,000 Btu/hour, a Seasonal Energy Efficiency Ratio of 12.0.

(2) For air-source heat pumps with cooling capacities less than 65,000 Btu/hour, a Seasonal Energy Efficiency Ratio of 12 SEER, and a Heating Seasonal Performance Factor of 7.4.

(c) MODIFIED STANDARDS.—The Secretary of Energy may establish, after appropriate notice and comment, revised standards providing for reduced energy consumption or increased energy efficiency of central air conditioners and heat pumps acquired by the Federal Government, but may not establish standards less rigorous than those established by subsection (b).

(d) DEFINITIONS.—For purposes of this section, the terms "Energy Efficiency Ratio", "Seasonal Energy Efficiency Ratio", "Heating Seasonal Performance Factor", and "Coefficient of Performance" have the meanings used for those terms in Appendix M to Subpart B of Part 430 of title 10 of the Code of Federal Regulations, as in effect on May 24, 2001.

(e) EXEMPTIONS.—An agency shall be exempt from the requirements of this section with respect to air conditioner or heat pump purchases for particular uses where the agency head determines that purchase of a air conditioner or heat pump for such use would be impractical. A finding of impracticability shall be based on whether—

(1) the energy savings pay-back period for such purchase would be less than 10 years;

(2) space constraints or other technical factors would make compliance with this section cost-prohibitive; or

(3) in the case of the Departments of Defense and Energy, compliance with this section would be inconsistent with the proper discharge of national security functions.

SEC. 125. ADVANCED BUILDING EFFICIENCY TESTBED.

(a) ESTABLISHMENT.—The Secretary of Energy shall establish an Advanced Building Efficiency Testbed program for the development, testing, and demonstration of advanced engineering systems, components,

and materials to enable innovations in building technologies. The program shall evaluate government and industry building efficiency concepts, and demonstrate the ability of next generation buildings to support individual and organizational productivity and health as well as flexibility and technological change to improve environmental sustainability.

(b) PARTICIPANTS.—The program established under subsection (a) shall be led by a university having demonstrated experience with the application of intelligent workplaces and advanced building systems in improving the quality of built environments. Such university shall also have the ability to combine the expertise from more than 12 academic fields, including electrical and computer engineering, computer science, architecture, urban design, and environmental and mechanical engineering. Such university shall partner with other universities and entities who have established programs and the capability of advancing innovative building efficiency technologies.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy to carry out this section \$18,000,000 for fiscal year 2002, to remain available until expended, of which \$6,000,000 shall be provided to the lead university described in subsection (b), and the remainder shall be provided equally to each of the other participants referred to in subsection (b).

SEC. 126. USE OF INTERVAL DATA IN FEDERAL BUILDINGS.

Section 543 of the National Energy Conservation Policy Act (42 U.S.C. 8253) is amended by adding at the end the following new subsection:

“(h) USE OF INTERVAL DATA IN FEDERAL BUILDINGS.—Not later than January 1, 2003, each agency shall utilize, to the maximum extent practicable, for the purposes of efficient use of energy and reduction in the cost of electricity consumed in its Federal buildings, interval consumption data that measure on a real time or daily basis consumption of electricity in its Federal buildings. To meet the requirements of this subsection each agency shall prepare and submit at the earliest opportunity pursuant to section 548(a) to the Secretary, a plan describing how the agency intends to meet such requirements, including how it will designate personnel primarily responsible for achieving such requirements, and otherwise implement this subsection.”

SEC. 127. REVIEW OF ENERGY SAVINGS PERFORMANCE CONTRACT PROGRAM.

Within 180 days after the date of the enactment of this Act, the Secretary of Energy shall complete a review of the Energy Savings Performance Contract program to identify statutory, regulatory, and administrative obstacles that prevent Federal agencies from fully utilizing the program. In addition, this review shall identify all areas for increasing program flexibility and effectiveness, including audit and measurement verification requirements, accounting for energy use in determining savings, contracting requirements, and energy efficiency services covered. The Secretary shall report these findings to the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate, and shall implement identified administrative and regulatory changes to increase program flexibility and effectiveness to the extent that such changes are consistent with statutory authority.

SEC. 128. CAPITOL COMPLEX.

(a) ENERGY INFRASTRUCTURE.—The Architect of the Capitol, building on the Master Plan Study completed in July 2000, shall commission a study to evaluate the energy infrastructure of the Capitol Complex to determine how the infrastructure could be augmented to become more energy efficient, using unconventional and renewable energy resources, in a way that would enable the Complex to have reliable utility service in the event of power fluctuations, shortages, or outages.

(b) AUTHORIZATION.—There is authorized to be appropriated to the Architect of the Capitol to carry out this section, not more than \$2,000,000 for fiscal years after the enactment of this Act.

Subtitle C—State Programs

SEC. 131. AMENDMENTS TO STATE ENERGY PROGRAMS.

(a) STATE ENERGY CONSERVATION PLANS.—Section 362 of the Energy Policy and Conservation Act (42 U.S.C. 6322) is amended by inserting at the end the following new subsection:

“(g) The Secretary shall, at least once every three years, invite the Governor of each State to review and, if necessary, revise the energy conservation plan of such State submitted under subsection (b) or (e). Such reviews should consider the energy conservation plans of other States within the region, and identify opportunities and actions carried out in pursuit of common energy conservation goals.”

(b) STATE ENERGY EFFICIENCY GOALS.—Section 364 of the Energy Policy and Conservation Act (42 U.S.C. 6324) is amended by inserting “Each State energy conservation plan with respect to which assistance is made available under this part on or after the date of the enactment of Energy Advancement and Conservation Act of 2001, shall contain a goal, consisting of an improvement of 25 percent or more in the efficiency of use of energy in the State concerned in the calendar year 2010 as compared to the calendar year 1990, and may contain interim goals.” after “contain interim goals.”

(c) AUTHORIZATION OF APPROPRIATIONS.—Section 365(f) of the Energy Policy and Conservation Act (42 U.S.C. 6325(f)) is amended by striking “for fiscal years 1999 through 2003 such sums as may be necessary” and inserting “\$75,000,000 for fiscal year 2002, \$100,000,000 for fiscal years 2003 and 2004, \$125,000,000 for fiscal year 2005”.

SEC. 132. REAUTHORIZATION OF ENERGY CONSERVATION PROGRAM FOR SCHOOLS AND HOSPITALS.

Section 397 of the Energy Policy and Conservation Act (42 U.S.C. 6371f) is amended by striking “2003” and inserting “2010”.

SEC. 133. AMENDMENTS TO WEATHERIZATION ASSISTANCE PROGRAM.

Section 422 of the Energy Conservation and Production Act (42 U.S.C. 6872) is amended by striking “for fiscal years 1999 through 2003 such sums as may be necessary” and inserting “\$273,000,000 for fiscal year 2002, \$325,000,000 for fiscal year 2003, \$400,000,000 for fiscal year 2004, and \$500,000,000 for fiscal year 2005”.

SEC. 134. LIHEAP.

(a) AUTHORIZATION OF APPROPRIATIONS.—Section 2602(b) of the Low-Income Home Energy Assistance Act of 1981 (42 U.S.C. 8621(b)) is amended by striking the first sentence and inserting the following: “There are authorized to be appropriated to carry out the provisions of this title (other than section 2607A), \$3,400,000,000 for each of fiscal years 2001 through 2005.”

(b) GAO STUDY.—The Comptroller General of the United States shall conduct a study to determine—

(1) the extent to which Low-Income Home Energy Assistance (LIHEAP) and other government energy subsidies paid to consumers discourage energy conservation and energy efficiency investments; and

(2) the extent to which the goals of conservation and assistance for low income households could be simultaneously achieved through cash income supplements that do not specifically target energy, thereby maintaining incentives for wise use of expensive forms of energy, or through other means.

SEC. 135. HIGH PERFORMANCE PUBLIC BUILDINGS.

(a) PROGRAM ESTABLISHMENT AND ADMINISTRATION.—

(1) ESTABLISHMENT.—There is established in the Department of Energy the High Performance Public Buildings Program (in this section referred to as the “Program”).

(2) IN GENERAL.—The Secretary of Energy may, through the Program, make grants—

(A) to assist units of local government in the production, through construction or renovation of buildings and facilities they own and operate, of high performance public buildings and facilities that are healthful, productive, energy efficient, and environmentally sound;

(B) to State energy offices to administer the program of assistance to units of local government pursuant to this section; and

(C) to State energy offices to promote participation by units of local government in the Program.

(3) GRANTS TO ASSIST UNITS OF LOCAL GOVERNMENT.—Grants under paragraph (2)(A) for new public buildings shall be used to achieve energy efficiency performance that reduces energy use at least 30 percent below that of a public building constructed in compliance with standards prescribed in Chapter 8 of the 2000 International Energy Conservation Code, or a similar State code intended to achieve substantially equivalent results. Grants under paragraph (2)(A) for existing public buildings shall be used to achieve energy efficiency performance that reduces energy use below the public building baseline consumption, assuming a 3-year, weather-normalized average for calculating such baseline. Grants under paragraph (2)(A) shall be made to units of local government that have—

(A) demonstrated a need for such grants in order to respond appropriately to increasing population or to make major investments in renovation of public buildings; and

(B) made a commitment to use the grant funds to develop high performance public buildings in accordance with a plan developed and approved pursuant to paragraph (5)(A).

(4) OTHER GRANTS.—

(A) GRANTS FOR ADMINISTRATION.—Grants under paragraph (2)(B) shall be used to evaluate compliance by units of local government with the requirements of this section, and in addition may be used for—

(i) distributing information and materials to clearly define and promote the development of high performance public buildings for both new and existing facilities;

(ii) organizing and conducting programs for local government personnel, architects, engineers, and others to advance the concepts of high performance public buildings;

(iii) obtaining technical services and assistance in planning and designing high performance public buildings; and