

CRS Report for Congress

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Omnibus Energy Legislation, 109th Congress: Assessment of H.R. 6 as passed by the House

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Mark Holt and Carol Glover, Coordinators
Resources, Science, and Industry Division

Omnibus Energy Legislation, 109th Congress: Assessment of H.R. 6 as passed by the House

Summary

The House approved an omnibus energy bill (H.R. 6) on April 21, 2005, that would open the Arctic National Wildlife Refuge (ANWR) to oil and gas leasing, substantially change oversight of electric utilities, increase the use of alternative motor fuels, provide \$8.1 billion in energy tax incentives, extend the nuclear accident liability system, and authorize numerous energy R&D programs. The House-passed bill contains many provisions from the conference version of an omnibus energy bill (also H.R. 6) in the 108th Congress that was blocked by a Senate filibuster.

Electricity. In part, the electricity section would repeal the Public Utility Holding Company Act (PUHCA) and establish mandatory standards for interstate transmission. Standard market design (SMD) would be remanded to the Federal Energy Regulatory Commission (FERC).

Renewable Fuels and Ethanol. An increase in renewable fuel and ethanol consumption to 5 billion gallons annually by 2012 would be mandated. However, states could petition for a waiver if the mandate would have severe economic or environmental repercussions, other than loss of revenue to the highway trust fund.

MTBE. Methyl tertiary butyl ether (MTBE), a gasoline additive widely used to meet Clean Air Act requirements, has caused water contamination. The bill would ban the use of MTBE by 2015 with some possible exceptions, provide funds for MTBE cleanup, and provide protection for fuel producers and blenders of renewable fuels and MTBE from defective product lawsuits.

Energy Taxes. The bill would reduce energy taxes about \$8.1 billion over 10 years, as compared with \$23.5 billion in the H.R. 6 conference report in the 108th Congress and \$6.7 billion in President Bush's FY2006 budget request.

Nuclear Energy. H.R. 6 would provide a 20-year extension of the Price-Anderson nuclear liability system to the end of 2025 and authorize new reactors.

Energy Efficiency Standards. New statutory efficiency standards would be established for several consumer and commercial products and appliances. For certain other appliances, the Department of Energy could set new standards.

ANWR. The House-passed bill would authorize oil and gas exploration, development, and production in ANWR, with a 2,000-acre limit on production and support facilities. Supporters of the provision maintain that ANWR oil could be developed with minimal environmental harm, but opponents contend that intrusion on this ecosystem cannot be justified.

Energy Production on Federal Lands. Royalty reductions would be provided for marginal oil and gas wells on federal lands and the outer continental shelf.

This report will not be updated.

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Omnibus Energy Legislation, 109th Congress: Assessment of H.R. 6 as passed by the House

Introduction

Since the Arab oil embargo in 1973-1974, Congress has periodically taken up energy policy legislation with a comprehensive scope — often spurred by the price of oil and U.S. dependence upon imported oil. The price of crude oil began to rise in 2003 and briefly approached \$60/barrel (bbl) in the spring of 2005, setting the scene for renewed debate over omnibus energy legislation in the 109th Congress.

National and world demand for oil continues to grow. However, domestic oil production in the United States continues to decline. As a consequence, the gap between U.S. production and consumption has had to be covered by increased oil imports. These imports, roughly 6 million barrels per day (mbd) after the Arab oil embargo, now exceed 10 mbd to satisfy U.S. oil consumption of nearly 21 mbd.¹

Addressing dependence on imported oil raises a number of issues touching on both demand and consumption of fossil fuels. Chief among these are the production of additional fossil fuels, development of alternative energy sources, and conservation and energy efficiency. Energy infrastructure has also been a growing issue, including the oil refining and distribution sector, and electricity transmission, reliability, and regulation. Increased use of domestic coal and reassessment of many issues associated with nuclear energy have drawn attention as well.

Developing a comprehensive approach to energy policy that balances economic, security, and environmental issues — as well as competing regional priorities in the United States — is an enormous challenge for policymakers. Keeping a clear eye on distinguishing between short- and long-term policies is also difficult, but important in keeping expectations realistic for what comprehensive legislation can achieve.

In the 109th Congress, the House approved an omnibus energy bill (H.R. 6) on April 21, 2005, that would open the Arctic National Wildlife Refuge (ANWR) to oil and gas leasing, substantially change oversight of electric utilities, increase the use of alternative motor fuels, provide \$8.1 billion in energy tax incentives, extend the nuclear accident liability system, and authorize numerous energy R&D programs. The House-passed bill contains many provisions from the conference version of an

¹ U.S. Department of Energy, Energy Information Administration, at [http://www.eia.doe.gov/pub/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/current/pdf/tableh1.pdf].

omnibus energy bill (also H.R. 6) in the 108th Congress that was blocked by a Senate filibuster.

The bill would mandate increasing levels of ethanol production through 2012 but allow regions to opt out under certain conditions. Use of methyl tertiary butyl ether (MTBE) as a domestic gasoline additive would be banned by the end of 2014, but the President could void the ban and a state could authorize continued use. Producers of MTBE and renewable fuels would be granted protection (a “safe harbor”) from product liability lawsuits, a provision that proved highly contentious in the 108th Congress.

Royalty reductions would be provided for marginal oil and gas wells on federal lands and the outer continental shelf. Provisions are also included to increase access by energy projects to federal lands. Several new statutory efficiency standards would be established for consumer and commercial products and appliances, and other standards could be set by the Department of Energy (DOE).

Funding authorizations in the bill total about \$82 billion over 10 years. (The likely cost of the funding authorizations has not yet been estimated by the Congressional Budget Office.)

Major Provisions

Electricity Regulation. Title XII would create an electric reliability organization (ERO) that would enforce mandatory reliability standards for the bulk-power system. All ERO standards would be approved by the Federal Energy Regulatory Commission (FERC). Under this Title, the ERO could impose penalties on a user, owner, or operator of the bulk-power system that violates any FERC-approved reliability standard. This Title also addresses transmission infrastructure issues. The Secretary of Energy would be able to certify congestion on the transmission lines and issue permits to transmission owners. Permit holders would be able to petition in U.S. District Court to acquire rights-of-way for the construction of transmission lines through the exercise of the right of eminent domain. A provision that would have required FERC to approve participant funding for new transmission lines was removed in markup by the House Committee on Energy and Commerce.

FERC’s Standard Market Design notice of proposed rulemaking would be remanded. Native load service obligations would be clarified, and federal utilities would be allowed to participate in regional transmission organizations.

The electricity title would repeal the mandatory purchase requirements under the Public Utility Regulatory Policy Act. The Public Utility Holding Company Act of 1935 (PUHCA) would be repealed. The Federal Energy Regulatory Commission and state regulatory bodies would be given access to utility books and records.

FERC would be required to issue rules to establish an electronic system that provides information about the availability and price of wholesale electric energy and transmission services. For electric rates that the Federal Energy Regulatory Commission finds to be unjust, unreasonable, or unduly discriminatory, the effective

date for refunds would begin at the time of the filing of a complaint with FERC but not later than five months after filing of a complaint. Criminal and civil penalties would be increased. The Federal Power Act would be amended to give FERC review authority for transfer of assets valued in excess of \$10 million.

(For additional discussion on these issues, see CRS Report RL32728, *Electric Utility Regulatory Reform: Issues for the 109th Congress*; and CRS Report RL32133, *Federal Merger Review Authority*.)

Renewable Fuel Standard and MTBE. As passed by the House, H.R. 6 would amend the Clean Air Act to eliminate the requirement that reformulated gasoline (RFG) contain 2% oxygen to reduce automotive emissions, a requirement which prompted the widespread use of MTBE and, to a lesser degree, ethanol. Instead, the bill would establish a new requirement that an increasing amount of gasoline contain renewable fuels such as ethanol. The bill would require that 3.1 billion gallons of renewable fuel be used in 2005, increasing to 5.0 billion gallons by 2012 (as compared to 3.4 billion gallons used in 2004). However, concerns have been raised that this requirement could significantly raise the pump price for gasoline in some areas.

Because of concerns over drinking water contamination by MTBE (a major competitor with ethanol), the bill would ban the use of MTBE in motor vehicle fuel, except in states that specifically authorize its use, not later than December 31, 2014. The ban has two possible exceptions. First, EPA may allow MTBE in motor fuel up to 0.5 percent by volume, in cases that the Administrator determines to be appropriate; and second, the President may make a determination, not later than June 30, 2014, that the restrictions on the use of MTBE shall not take place. The bill would also authorize \$2.0 billion to assist the conversion of merchant MTBE production facilities to the production of other fuel additives. Further, the bill would preserve the reductions in emissions of toxic substances achieved by the RFG program.

One of the most controversial provisions in H.R. 6 is the establishment of a “safe harbor” from product liability lawsuits for producers of MTBE and renewable fuels. The safe harbor provision would protect anyone in the product chain, from manufacturers down to retailers, from liability for cleanup of MTBE and renewable fuels or for personal injury or property damage based on the product being deemed defective. (That legal approach has been used in California to require refiners to shoulder liability for MTBE cleanup.) The safe harbor would be retroactive to September 5, 2003. Prior to that date, five lawsuits had been filed. After that date, at least 150 suits were filed, on behalf of 210 communities in 15 different states.

(For additional information, see CRS Report RL32865, *Renewable Fuels and MTBE: A Comparison of Selected Legislative Initiatives*; CRS Report RL30369, *Fuel Ethanol: Background and Public Policy Issues*; and CRS Report RL32787, *MTBE in Gasoline: Clean Air and Drinking Water Issues*.)

Energy Taxes. After the failure of the conference report on H.R. 6 in the 108th Congress, several of the measure’s energy tax provisions — estimated at \$1.3 billion over 10 years — were included in the Working Families Tax Relief Act of

2004 (P.L. 108-311), enacted on October 4, 2004. About \$5 billion in additional energy tax incentives over 10 years were part of the American Jobs Creation Act of 2004 (P.L. 108-357) enacted on October 22, 2004.

Many of the energy tax incentives in H.R. 6 from the 108th Congress that were not enacted in 2004 have been repackaged into the House-passed H.R. 6 in the 109th Congress. The bill would reduce energy taxes about \$8.1 billion over 10 years as compared with \$23.5 billion in H.R. 6 in the 108th Congress. President Bush's FY2006 budget request was for \$6.7 billion in energy tax incentives. Counting the tax provisions enacted in the 108th Congress, the House-passed version of H.R. 6 excludes roughly \$9 billion in tax breaks from the H.R. 6 conference report in the 108th Congress.

H.R. 6's tax cuts are weighted primarily toward energy (oil, gas, and electricity) production and supply, particularly energy infrastructure. The most notable provisions would accelerate depreciation deductions for natural gas gathering lines and distribution lines, and significantly reduce the depreciation period for transmission assets and for oil and gas production.

(For more background, see CRS Issue Brief IB10054, *Energy Tax Policy*.)

Nuclear Energy. Reauthorization of the Price-Anderson Act nuclear liability system is one of the top nuclear items on the energy agenda. Under Price-Anderson, commercial reactor accident damages are paid through a combination of private-sector insurance and a nuclear industry self-insurance system. Liability is capped at the maximum coverage available under the system, currently about \$10.7 billion. Price-Anderson also authorizes the Department of Energy to indemnify its nuclear contractors. The limit on DOE contractor liability is the same as for commercial reactors, except when the limit for commercial reactors drops because of a decline in the number of covered reactors.

H.R. 6 would provide a 20-year extension of Price-Anderson to the end of 2025. The nuclear industry contends that the system has worked well and should be continued, but opponents charge that Price-Anderson's liability limits provide an unwarranted subsidy to nuclear power. The bill would also require the Nuclear Regulatory Commission (NRC) to assess nuclear power plant security and require additional security measures.

The bill would authorize \$1.3 billion for a nuclear-hydrogen cogeneration project at the Idaho National Laboratory, along with five projects to demonstrate hydrogen production at existing nuclear power plants. In addition to the hydrogen cogeneration projects, about \$1.3 billion would be authorized for DOE to design, build, and operate an advanced technology nuclear reactor by 2015.

Not included in the House-passed bill is a 1.8 cents per kilowatt-hour nuclear energy tax credit that would have been provided by the conference report on H.R. 6 in the 108th Congress.

(For more information, see CRS Issue Brief IB88090, *Nuclear Energy Policy*.)

Renewable Energy and Efficiency. H.R. 6 would legislate new energy efficiency standards for several consumer and commercial products and appliances. For certain other products and appliances, DOE would be empowered to set new standards. Also, the bill would provide increased funding authorizations for the DOE weatherization program and establish a voluntary program to promote energy efficiency in industry.

However, the bill does not include one of the top priorities of environmental groups: a renewable portfolio standard (RPS), which would require retail electricity suppliers to obtain a minimum percentage of their power from a portfolio of new renewable energy resources.

(For additional information, see CRS Issue Brief IB10020, *Energy Efficiency: Budget, Oil Conservation and Electricity Conservation Issues*, and CRS Issue Brief IB10041, *Renewable Energy: Tax Credit, Budget, and Electricity Production Issues*.)

Arctic National Wildlife Refuge. The congressional debate over whether to open ANWR to energy development has continued for more than 40 years. H.R. 6 as passed by the House would authorize oil and gas exploration, development, and production in ANWR, with a 2,000-acre limit on production and support facilities. Development advocates argue that ANWR oil would reduce U.S. energy markets' exposure to crises in the Middle East; boost North Slope oil production; lower oil prices; extend the economic life of the Trans Alaska Pipeline System; and create many jobs in Alaska and elsewhere in the United States. They maintain that ANWR oil could be developed with minimal environmental harm, and that the footprint of development could be limited to a total of 2,000 acres.

Opponents of development in ANWR argue that intrusion on this ecosystem cannot be justified on any terms; that economically recoverable oil found (if any) would provide little energy security and could be replaced by cost-effective alternatives, including conservation; and that job claims are overstated. They also maintain that the footprint of oil development, despite a provision in the measure to limit certain facilities to 2,000 acres, would still be scattered in many parcels across the landscape, and would have a greater impact than is implied by any limit on total acreage. They also argue that past proposals to limit any footprint have not been worded so as to apply clearly to the extensive Native lands in the Refuge, which could be developed if the Arctic Refuge were opened.

On April 20, 2005, the House rejected the Markey/Johnson amendment (H. Amdt 73) to strike the ANWR title (yeas 200, nays 231, Roll Call #122). (For additional information, see CRS Issue Brief IB10136, *The Arctic National Wildlife Refuge: Controversies for the 109th Congress*; and CRS Reports RL31115, *Legal Issues Related to Proposed Drilling for Oil and Gas in the Arctic National Wildlife Refuge* and CRS Report RS22143, *Oil and Gas Leasing in the Arctic National Wildlife Refuge (ANWR): the 2,000-Acre Limit*).

Domestic Energy Production. The Department of the Interior (DOI) has estimated that roughly a quarter of oil resources and less than one-fifth of gas resources on Indian lands have been developed. H.R. 6 would allow Indian tribes to enter into business agreements with energy developers without obtaining prior

approval from the Department of the Interior, but only if DOI has already approved the tribe's regulations governing such energy agreements.

To encourage production on federal lands, royalty reductions would be provided for marginal oil and gas wells on public lands and the outer continental shelf. Provisions are also included to increase access to federal lands by energy projects — such as drilling activities, electric transmission lines, and gas pipelines.

Hydrogen and Fuel Cells. H.R. 6 would authorize \$4 billion for FY2006-2010 for hydrogen and fuel cell R&D. The bill would also establish a goal of producing commercial fuel cell vehicles and developing hydrogen infrastructure by 2020. Critics of the Administration suggest that the hydrogen program is intended to forestall any attempts to significantly raise vehicle Corporate Average Fuel Economy (CAFE) standards, and that it relieves the automotive industry of assuming more initiative in pursuing technological innovations. On the other hand, some contend that it is appropriate for government to become involved in the development of technologies that could address national environmental and energy goals but are too risky to draw private-sector investment.

(For additional information, see CRS Report RS21442, *Hydrogen and Fuel Cell R&D: FreedomCAR and the President's Hydrogen Fuel Initiative*; and CRS Report RL32196, *A Hydrogen Economy and Fuel Cells: An Overview*.)

Organization of Report

The remainder of this report provides a section-by-section summary of the House-passed version of H.R. 6. Some of the most controversial sections are discussed in greater detail, while multiple sections that deal with a single program have been combined. Funding authorizations are shown in **Table 1** at the end of the report.

The following analysts in the CRS Resources, Science, and Industry Division contributed to this report:

- Amy Abel, electric utilities;
- Anthony Andrews, nuclear security, DOE management;
- Robert Bamberger, energy security;
- Carl Behrens, nuclear nonproliferation;
- Claudia Copeland, Federal Water Pollution Control Act;
- Lynne Corn, ANWR;
- Bernard Gelb, gasoline industry;
- Carol Glover, Native American energy, general authorizations;
- Mark Holt, nuclear energy;
- Marc Humphries, federal energy leasing, coal;
- Larry Kumins, oil and gas;
- Salvatore Lazzari, taxes;
- Jim McCarthy, Clean Air Act, MTBE;
- Dan Morgan, science programs;
- Kyna Powers, hydropower;
- Fred Sissine, conservation and renewable energy;
- Mary Tiemann, underground storage tanks, drinking water;
- Brent Yacobucci, motor fuels;
- Jeff Zinn, Coastal Zone Management Act.

Title I — Energy Efficiency

Subtitle A — Federal Programs

Section 101: Energy and Water Saving Measures in Congressional Buildings. The Architect of the Capitol would be required to plan and implement an energy and water conservation strategy for congressional buildings that would be consistent with that required of other federal buildings. An annual report would be required. Up to \$2 million would be authorized. Section 310 of the Legislative Branch Appropriations Act of 1999 called for the Architect of the Capitol (AOC) to develop an energy efficiency plan for congressional buildings.

Section 102: Energy Management Requirements. The baseline for federal energy savings would be updated from FY1985 to FY2003 and a new goal of 20% reduction would be set for FY2015. At that time, DOE would be directed to assess progress and set a new goal for FY2025. Section 202 of Executive Order 13123 uses FY1985 as the baseline for measuring federal building energy efficiency improvements and calls for a 35% reduction in energy use per gross square foot by FY2010. Most of the other provisions for federal agencies in this Subtitle are administrative measures that would help agencies achieve the above-described goal.

Section 103: Energy Use Measurement and Accountability. Federal buildings would be required to be metered or sub-metered by late 2010, to help reduce energy costs and promote energy savings.

Section 104: Procurement of Energy-Efficient Products. Statutory authority would be created to require federal agencies to purchase products certified as energy-efficient under the Energy Star program or energy-efficient products designated by the Federal Energy Management Program (FEMP) — provided the products are found to be “cost-effective” and “reasonably-available.” Currently, Section 403 of Executive Order 13123 directs federal agencies to purchase life-cycle cost-effective Energy Star products.

Section 105: Energy Savings Performance Contracts. This would amend the National Energy Conservation Policy Act (42 U.S.C. 8287) by limiting all federal agencies combined to a total of 100 energy savings performance contracts and payments of no more than a total of \$500,000,000. Under such contracts, energy saving measures are installed at government facilities by private-sector firms in return for a share of the resulting energy cost reductions. The Sunset and Reporting Provisions of section 801(c) of the Act would be effectively repealed October 1, 2006, and any new contract after that date would be included in the contract limits.

Section 107: Voluntary Commitments to Reduce Industrial Energy Intensity. DOE would be authorized to form voluntary agreements with industry sectors or companies to reduce energy use per unit of production by an unspecified amount. While there is no current statutory authority, industry energy efficiency programs have been in place, such as the former Climate Wise program at the Environmental Protection Agency (EPA).

Section 108: Advanced Building Efficiency Testbed. DOE would be required to create a program to develop, test, and demonstrate advanced federal and private building efficiency technologies.

Section 109: Federal Building Performance Standards. DOE would be directed to set revised energy efficiency standards for new federal buildings at a level 30% stricter than industry or international standards — provided the standards would be “life-cycle cost-effective.” Mandatory energy efficiency performance standards for federal buildings are currently set in Section 305(a) of P.L. 94-385 and implemented through 10 CFR Part 435.

Section 111: Daylight Savings. Daylight saving time would begin one month earlier (in March) and end one month later (in November). This is expected to reduce energy used for night-time electric lighting. Under current law (Uniform Time Act, P.L. 89-387, §3a), states can choose whether to participate. However, if a state chooses to participate, the duration of daylight savings is set by federal law.

Section 112: Enhancing Energy Efficiency in Management of Federal Lands. National parks, forests, and wildlife refuges would be required to employ energy efficiency measures in buildings and energy-efficient vehicles (including biodiesel and hybrid engines) “to the extent practicable.”

Subtitle B — Energy Assistance and State Programs

Section 121: Low Income Home Energy Assistance Program (LIHEAP). Increased funding would be authorized for the LIHEAP grant program for FY2005 through FY2007. Department of Health and Human Services funding for LIHEAP was authorized through FY2003 in the Human Services Authorization Act of 1998. Also, states and their designees would be allowed to use renewable fuels (including biomass) to carry out the purposes of this section.

Section 122: Weatherization Assistance. Increased funding would be authorized for the DOE weatherization grant program for FY2006 through FY2008. Funding for the program was authorized through FY2003 under 42 U.S.C. 6872.

Section 123: State Energy Programs. New requirements would be set for state energy conservation goals and plans. Also, increased funding would be authorized for FY2006 through FY2008 for DOE state energy grant programs.

Section 124: Energy-Efficient Appliance Rebate Programs. DOE would be authorized to fund rebate programs in eligible states to support residential end-user purchases of Energy Star products.

Section 125: Energy-Efficient Public Buildings. A grant program would be created for energy-efficient renovation and construction of local government buildings.

Section 126: Low Income Community Energy Efficiency Pilot Program. A pilot energy-efficiency and renewable energy grant program would be

created for local governments, private companies, community development corporations, and Native American economic development entities.

Subtitle C — Energy-Efficient Products

Section 131: Energy Star Program. DOE and EPA would be given statutory authority to carry out the Energy Star program, which identifies and promotes energy-efficient products and buildings.

Section 132: HVAC Maintenance Consumer Education Program. DOE would be required to implement a public education program for homeowners and small businesses that explained the energy-saving benefits of improved maintenance of heating, ventilating, and air conditioning equipment. Also, the Small Business Administration would be directed to assist small businesses in becoming more energy-efficient.

Section 133: Energy Conservation Standards for Additional Products. DOE would be directed to issue a rule that determined whether efficiency standards should be set for standby mode in battery chargers and external power supplies. Also, energy efficiency standards would be set by statute for exit signs, traffic signals, torchieres (floor lamps), distribution transformers (electric utility equipment), unit heaters (fan-type heaters, usually portable), and medium base compact fluorescent lamps (CFLs). Further, DOE would be directed to issue a rule that prescribed efficiency standards for ceiling fans, vending machines, commercial refrigerators and freezers and refrigerator-freezers, and residential fans.

Section 134: Energy Labeling. The Federal Trade Commission (FTC) would be required to consider improvements in the effectiveness of energy labels for consumer products. Also, DOE or FTC would be directed to consider prescribing labeling requirements for many of the products listed in Section 133 of the bill. The FTC is currently required by Section 324(a) of the Energy Policy and Conservation Act (P.L. 94-163) to issue rules for energy efficiency labels on consumer products (42 U.S.C. 6294).

Section 135: Preemption. As of January 1, 2006, the energy efficiency standard for ceiling fans set out in Section 133 shall supersede all state and local standards for ceiling fans.

Section 136: State Consumer Product Energy Efficiency Standards. If the product efficiency standards set forth in Section 133 are not implemented within three years of this law's enactment, the federal preemption of state standards will expire.

Section 137: Intermittent Escalators. With certain exceptions, all new escalators acquired for federal buildings will operate on an intermittent (on-demand) basis.

Subtitle D — Public Housing

Section 141: Capacity Building for Energy-Efficient, Affordable Housing. Activities would be required that would provide energy-efficient, affordable housing and other residential measures under the HUD Demonstration Act.

Section 142: Increase of CDBG Public Services Cap for Energy Conservation and Efficiency Activities. The amount of community development block grant (CDBG) public services funding that could be used for energy efficiency would be increased to 25%. The current limit is 15% under Section 105(a)(8) of the Housing and Community Development Act of 1974.

Section 143: FHA Mortgage Insurance Incentives for Energy-Efficient Housing. Solar energy equipment can be eligible for up to 30% of the total amount of property value that can be covered by Federal Housing Administration mortgage insurance. The current limit is 20% under Section 203(b)(2) of the National Housing Act.

Section 144: Public Housing Capital Fund. The Public Housing Capital Fund would be modified to include certain energy- and water-use efficiency improvements. Under Section 9 of the United States Housing Act, the Capital Fund is available to public housing agencies to develop, finance, and modernize public housing developments and to make management improvements to these housing facilities. There is currently no provision for energy conservation projects that involve water-conserving plumbing fixtures and fittings.

Section 145: Grants for Energy-Conserving Improvements for Assisted Housing. The Department of Housing and Urban Development (HUD) would be directed to provide grants for certain energy and water efficiency improvements to multifamily housing projects. Section 2(a)(2) of the National Housing Act, as amended by Section 251(b)(1) of the National Energy Conservation Policy Act, empowers HUD to make grants for energy conservation projects in public housing, but it has no provision for energy- and water-conserving plumbing fixtures and fittings.

Section 147: Energy-Efficient Appliances. Public housing agencies would be required to purchase cost-effective Energy Star and FEMP-designated appliances and products.

Section 148: Energy-Efficient Standards. The energy efficiency standards and codes that the federal government encourages states to use would be changed from the codes set by the Council of American Building Officials to the 2003 International Energy Conservation Code.

Section 149: Energy Strategy for HUD. The Secretary of Housing and Urban Development would be required to implement an energy conservation strategy to reduce utility expenses through cost-effective energy-efficient design and construction of public and assisted housing.

Title II — Renewable Energy

Subtitle A — General Provisions

Section 201: Assessment of Renewable Energy Resources. DOE would be required to report annually on resource potential, including solar, wind, biomass, ocean (tidal, wave, current, and thermal), geothermal, and hydroelectric energy resources. DOE would be required to review available assessments and undertake new assessments as necessary, accounting for changes in market conditions, available technologies, and other relevant factors. The resource potential for renewables has not been assessed as thoroughly as that for conventional energy resources, and the potential may be altered somewhat by climate change.

Section 202: Renewable Energy Production Incentive. Eligibility for the existing incentive would be extended through 2025 and expanded to include electric cooperatives and tribal governments. Qualifying resources would be expanded to include landfill gas, livestock methane, and ocean (tidal, wave, current, and thermal) energy. Federal law currently provides a 1.5 cent/kwh incentive for power produced from wind and biomass by state and local governments and non-profit electrical cooperatives.² The incentive is funded by appropriations to DOE and was created to encourage public agencies, which are not eligible for tax incentives, in a fashion parallel to the renewable energy production tax credit for private sector businesses. This incentive has played a major role in wind energy development and is viewed by the wind industry as the single-most important provision in the bill.

Section 203: Federal Purchase Requirement. Federal agencies would be required, to the extent “economically feasible and technically practicable,” to purchase power produced from renewable sources. The collective total percentage of renewables use, as a share of total federal electric energy use, would start at 3% in FY2007, rise to 5% in FY2010, and then reach 7.5% in 2013 and all subsequent years. Renewable energy produced at a federal site, on federal lands, or on Indian lands would be eligible for double credit toward the purchase requirement. This provision aims to help develop the market for renewables. A report to Congress would be required every two years.

Section 204: Insular Areas Energy Security. This section includes congressional findings that electric power transmission and distribution lines in insular areas are not adequate to withstand hurricane and typhoon damage, and that an assessment is needed of energy production, consumption, infrastructure, reliance on imported energy, and indigenous sources of energy in insular areas. Federal law currently requires comprehensive energy plans for insular areas that describe the potential for renewable energy resources.³ This section would require the Secretary of the Interior, in consultation with the Secretary of Energy and the head of government of each insular area, to update insular area plans by 2007 to reflect these findings, and to seek to reduce energy imports by increasing energy conservation and

² Energy Policy Act, Sec. 1212 (42 U.S.C. 13317)

³ 42 U.S.C. 1492 .

energy efficiency and by attempting to maximize the use of indigenous resources. Annual appropriations would be authorized that would, in part, be used for matching grants (federal share maximum is 75%) for projects designed to protect electric power transmission distribution lines in one or more of the territories of the United States from damage caused by hurricanes and typhoons.

Section 205: Use of Photovoltaic Energy in Public Buildings. The General Services Administration (GSA) would be authorized to encourage use of solar photovoltaic energy systems in new and existing buildings. This provision aims to help reduce federal fossil fuel use. Further, it seeks to reduce costs and, thereby, stimulate the market for photovoltaic equipment.

Section 206: Federal Procurement of Biobased Products. This provision amends the existing requirement⁴ that federal agencies give procurement preference to items composed of the highest percentage of biobased products practicable by adding a specific reference to degradable six-pack rings.⁵

Section 207: Renewable Energy Security. For the DOE Weatherization grant program, Section 207(a) increases the limit on support for renewable energy equipment from \$2,500 to \$3,000 per dwelling unit. Also, Section 207(d) creates a consumer rebate for renewable energy equipment installed in a dwelling or small business. The maximum rebate is the lesser of 25% of equipment cost or \$3,000.

Section 208: Installation of Photovoltaic System. This provision authorizes \$20 million for the Administrator of GSA to proceed with the Sun Wall Design Project, the winning entry in a national design competition sponsored jointly by DOE and the National Renewable Energy Laboratory, to install a photovoltaic solar electric system on the headquarters building of DOE.

Section 209: Sugar Cane Ethanol Pilot Program. This provision authorizes a three-year demonstration program for the production of ethanol in Hawaii to parallel the existing program for corn to show that the process can be applicable to cane sugar and can be replicated on a larger scale once the sugar cane industry has located a site and constructed ethanol production facilities.

Subtitle C — Hydroelectric

Section 231: Alternative Conditions and Fishways. Under the Federal Power Act (FPA, 16 U.S.C. 797 et. seq.) the Federal Energy Regulatory Commission has primary responsibility for balancing multiple water uses and evaluating hydropower relicensing applications. However, the FPA also creates a role in the licensing process for federal agencies that are responsible for managing fisheries or federal reservations (e.g. national forests, etc.). Specifically, sections 4(e) and 18 of

⁴ 7 U.S.C. 8201(c)(1) gives preference to procurement of items made with the highest percentage of biobased products.

⁵ 42 U.S.C. 6914b-1 provides for use of naturally degradable material in plastic ring carriers to help reduce litter and to protect fish and wildlife.

the FPA give certain federal agencies the authority to attach conditions to FERC licenses. For example, federal agencies may require applicants to build passageways through which fish can travel around the dam, schedule periodic water releases for recreation, ensure minimum flows of water for fish migration, control water release rates to reduce erosion, or limit reservoir fluctuations to protect the reservoir's shoreline habitat. Once an agency issues such conditions, FERC must include them in its license. While these conditions often generate environmental or recreational benefits, they may also require construction expenditures and may increase costs by reducing operational flexibility.

This provision in H.R. 6 would allow license applicants to propose alternative license conditions, and would require federal agencies to consider alternatives proposed by license applicants. It would also require an agency to accept an applicant's proposed alternative if it found that the alternative (1) provides for the adequate protection and utilization of the federal reservation, or is no less protective of the fish resource than the fishway initially prescribed, and (2) costs less to implement, and/or will improve operation of the project for electricity production. H.R. 6 also requires agencies that are issuing conditions to provide FERC with a written statement demonstrating that the relevant Secretary gave "equal consideration" to the effects of the conditions on factors such as energy supply, flood control, navigation, water supply, and air quality. This equal consideration clause may be a topic of debate during further consideration of H.R. 6. Opponents of the provision are concerned that it would hamper agencies' ability to protect the resources under their jurisdiction; proponents argue that conditioning agencies, like FERC, should be required to balance competing water uses.

Section 241: Hydroelectric Production Incentives. The Secretary of Energy would make incentive payments to non-federal owners or operators of hydroelectric facilities for power that is first produced within 10 years of the date of enactment by generating equipment added to existing facilities. Payments of 1.8 cents per kilowatt-hour (kWh), up to a total of \$750,000/year, may be made for up to 10 years from the first year after the facility begins operating.

Section 242: Hydroelectric Efficiency Improvement. The Secretary of Energy would make incentive payments to the owners or operators of hydroelectric facilities who make capital improvements on existing facilities that improve efficiency by at least 3%. Payments would not exceed 10% of the improvement cost and would not exceed \$750,000 at any single facility.

Section 243: Small Hydroelectric Power Projects. This provision would amend the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2078), to change the date on or before which a dam must be constructed to qualify as an existing dam, from April 20, 1977, to March 4, 2003.

Title III — Oil and Gas

Subtitle A — Petroleum Reserve and Home Heating Oil

Section 301: Permanent Authority to Operate the Strategic Petroleum Reserve. Congress authorized the Strategic Petroleum Reserve (SPR) in the Energy Policy and Conservation Act (EPCA, P.L. 94-163) to help prevent a repetition of the economic dislocation caused by the 1973-74 Arab oil embargo. Physically, the SPR comprises five underground storage facilities, hollowed out from naturally occurring salt domes, located in Texas and Louisiana. In 2000, Congress also authorized establishment of a Northeast Heating Oil Reserve (NHOR) where two million barrels of home heating oil is kept in leased, above-ground storage, to be released if the price of heating oil exceeds a calculated historic average. The authorities governing the SPR and NHOR are included in the Energy Policy and Conservation Act (EPCA, P.L. 94-163) and are currently authorized through FY2008 by P.L. 108-7. These authorities also provide for U.S. participation in emergency activities of the International Energy Agency (IEA) without risking violation of antitrust law and regulation.

The House bill would permanently reauthorize both programs, avoiding awkward periods such as occurred in 2000 when differences between the House and Senate over certain issues resulted in a period of several months when the authorities were not in force.

Section 302: National Oilheat Research Alliance. The National Oilheat Research Alliance (NORA) was established by the Energy Policy Act of 2000 (P.L. 106-469), and assesses a fee of \$.002 per gallon on home heating oil sold by retail distributors. The proceeds, among other purposes, are dedicated to research on improving the efficiency of furnaces and boilers, and providing education and training resources to professionals in the industry. The House bill would extend the authorization for NORA until nine years (2010) after the date on which the Alliance was established.

Section 303: Site Selection. Pursuant to Section 310(d), the Secretary of Energy would be required, within one year of the enactment of the legislation, to select sites — from among those that have been previously studied — for expansion of the SPR to its fully authorized volume of one billion barrels.

Section 304: Suspension of Strategic Petroleum Reserve Deliveries. Producers of offshore leases in the Gulf of Mexico pay a royalty to the U.S. Treasury based upon production at their sites. Since 1999, most new fill of the SPR has been accomplished by the acceptance of royalty-in-kind (RIK) oil from these producers in lieu of cash paid to the Treasury. Some policymakers have objected to RIK deliveries, arguing that diverting any oil from the markets was contributing to rising crude prices. The Administration argued that the volumes involved, never more than 200,000 b/d and often less, was not large enough to have the effect on prices that some alleged. The SPR holds roughly 700 million barrels. Current capacity is estimated at 727 million barrels. It is not apparent whether the Administration plans to continue RIK fill after current contracts end during the

summer of 2005. Should the Administration do so, this provision of H.R. 6 would permit accepting deliveries of RIK oil only when crude prices were below \$40/barrel.

Subtitle B — Production Incentives

Section 320: Liquefied Natural Gas. This section would expand the scope of the Natural Gas Act (15 U.S.C. 717b) to include importing and exporting natural gas as well as the construction of liquefaction and re-gasification facilities. Building and operating such facilities would require authorization by the Federal Energy Regulatory Commission. FERC would be designated as lead agency for the purpose of coordinating all applicable federal authorizations, and for coordinating compliance with the National Environmental Policy Act of 1969 (42 U.S.C.4312). FERC would set a schedule ensuring expeditious administrative proceedings, and compile the consolidated record of all state and federal proceedings.

The section would limit the criteria upon which FERC could reject a proposed liquefied natural gas (LNG) project or a facility expansion. FERC could deny an application only by finding the project not in the public interest, or that the project sponsor was not capable of constructing and operating an LNG facility. FERC would be barred from imposing certain conditions on an applicant — such as the provision of additional services. Additionally, FERC could not deny a “certificate of convenience and necessity” prior to January 1, 2011, solely because a facility would be at least partly dedicated to importing the project sponsor’s own natural gas.

FERC would be tasked to issue a construction certificate within one year of application. Judicial review would be exclusively delegated to the U.S. Court of Appeals for the District of Columbia Circuit, which must provide expedited consideration.

Current Law. Under the Natural Gas Act, FERC reviews jurisdictional project proposals (including those for natural gas importation) to determine if a public need would be met. A wide variety of criteria are applied in making such a determination. The Commission can reject a project for a range of reasons, including impact on the competitive nature of U.S. natural gas markets.

Section 327: Hydraulic Fracturing. This section would amend the Safe Drinking Water Act (SDWA), Section 1421(d), to specify that the definition of “underground injection” excludes the injection of fluids or propping agents used in hydraulic fracturing operations related to oil or gas production activities. Responding to a 1997 court ruling that directed EPA to regulate hydraulic fracturing as underground injection, this section would expressly preclude EPA from regulating the underground injection of fluids used in hydraulic fracturing for oil and gas production. This provision is unchanged from the conference report for H.R. 6 in the 108th Congress.

Current Law. The SDWA required EPA to promulgate regulations for state underground injection control (UIC) programs that included minimum requirements for programs to prevent underground injection that endangers sources of drinking water. The Act specifies that UIC program regulations may not prescribe requirements that interfere with “any underground injection for the secondary or

tertiary recovery of oil or natural gas, unless such requirements are essential to assure that underground sources of drinking water will not be endangered by such injection” (§1421(b)(2)).

Policy Context. Before 1997, EPA had not considered regulating hydraulic fracturing for oil and gas development, because it did not view this well-production process as an activity subject to regulation under SDWA’s UIC program. In 1997, the 11th Circuit Court of Appeals ruled that the injection of fluids for the purpose of hydraulic fracturing constituted underground injection, that all underground injection must be regulated, and that hydraulic fracturing of coalbed methane (CBM) wells in Alabama must be regulated under the state’s UIC program (*LEAF v. EPA*, 118 F. 3d 1467).

Hydraulic fracturing involves the high-pressure injection of fluids into coal beds to enhance the recovery of oil and natural gas from underground formations. Water-based fluids are typically used as fracturing fluids; however, diesel fuel often is used instead of water, and various chemicals are added to fracturing fluids.⁶ While hydraulic fracturing has been used in the recovery of conventional oil and gas since the 1950s, this practice has been used for CBM recovery mainly since the 1990s.

A growing concern is that, in many CBM-producing regions, the target coalbeds occur within underground sources of drinking water, and the fracturing process injects fluids directly into the drinking water sources; EPA has determined that the use of diesel fuel as a fracturing fluid introduces benzene and other toxic substances directly into underground sources of drinking water.⁷ Also, because the process fractures rock, fracturing can create new pathways for natural gas (primarily methane) to enter drinking water aquifers. As the number of coalbed methane (CBM) wells and the use of hydraulic fracturing have increased rapidly in recent years, so has concern over the potential impact on water resources, particularly in the water-scarce West, and very few studies have been done to evaluate these impacts.

In 2003, EPA’s National Drinking Water Advisory Council recommended that EPA (1) work to eliminate the use of diesel fuel and related additives in fracturing fluids that are injected into formations containing drinking water sources; (2) continue to study the problems that could occur from hydraulic fracturing for CBM production; and (3) defend its discretion to implement the UIC program in a way that advances protection of groundwater resources from contamination.

⁶ Environmental Protection Agency, *Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs*, Washington, D.C., June 2004, pp. 4-3 - 4-4.

⁷ Environmental Protection Agency, *Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs*, pp. 1-6. According to EPA, hydraulic fracturing of oil and gas found in conventional geologic traps is well established; however, hydraulic fracturing of coal beds is relatively new. Conventional sites are usually very deep and involve saline ground water that is unsuitable for drinking water. In contrast, formations that contain coal bed methane can be near the surface where ground water may be used as a source of drinking water supplies. pp. 4-9 - 4-10.

In late 2003, EPA entered into an agreement with three companies that provide most hydraulic fracturing services.⁸ Under this voluntary agreement, the firms agree to remove diesel fuel from CBM fluids injected directly into drinking water sources, if cost-effective alternatives are available.

In 2004, EPA issued a final report that concluded that the injection of hydraulic fracturing fluids into CBM wells poses little or no threat to underground sources of drinking water and requires no further study; however, EPA noted that very little documented research has been done on the environmental impacts of injecting fracturing fluids.⁹ The report has been criticized by some, and the EPA Inspector General has been asked to review a whistle-blower's assertions that EPA's findings are scientifically unfounded.¹⁰ (For more information, see CRS Report RL32262, *Selected Legal and Policy Issues Related to Coalbed Methane Development*, by Aaron M. Flynn.)

Section 328: Oil and Gas Exploration and Production Defined. This section would give a permanent exemption from Clean Water Act (CWA) stormwater runoff rules for the construction of exploration and production facilities by oil and gas companies and the roads that service those sites. Currently under the CWA, the *operation* of facilities involved in oil and gas exploration, production, processing, transmission, or treatment generally is exempt from stormwater runoff regulations, but the *construction* of these facilities is not. The amendment would modify the act to specifically include construction activities in the types of oil and gas facilities that are covered by the law's statutory exemption from stormwater rules.

The issue arises from stormwater permitting rules for small construction sites and municipal separate storm sewer systems that were issued by EPA in 1999 and became effective March 10, 2003. Those rules, known as Phase II of the CWA stormwater program, require most small construction sites disturbing one to five acres and municipal separate storm sewer systems serving populations of up to 100,000 people to have a CWA discharge permit. The permits require pollution-prevention plans describing practices for curbing sediment and other pollutants from being washed by stormwater runoff into local water bodies. Phase I of the stormwater program required construction sites larger than five acres (including oil and gas facilities) and larger municipal separate storm sewer systems to obtain discharge permits beginning in 1991.

As the March 2003 compliance deadline approached, EPA authorized a two-year extension of the Phase II rules for small oil and gas construction sites to allow the agency to assess the economic impact of the rule on that industry. In March

⁸ Memorandum of Agreement Between the United States Environmental Protection Agency and BJ Services Company, Halliburton Energy Services, Inc., and Schlumberger Technology Corporation, December 12, 2003.

⁹ EPA, *Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs*, 2004. p. 4-1.

¹⁰ Letter to Senators Wayne Allard and Ben Nighthorse Campbell and Representative Diana DeGette from Weston Wilson, U.S. Environmental Protection Agency, October 8, 2004.

2005 EPA extended the exemption until June 2006 and said it would propose a specific rule for small oil and gas construction sites by September 11, 2005. EPA had initially assumed that most oil and gas facilities would be smaller than one acre in size and thus excluded from the Phase II rules, but recent Department of Energy data indicate that several thousand new sites per year would be of sizes subject to the rule.

The provision in H.R. 6 is identical to one in H.R. 6/S. 2095 in the 108th Congress, making EPA's delay permanent and making it applicable to construction activities at all oil and gas development and production sites, regardless of size, including those covered by Phase I rules. Industry has argued that the stormwater rule creates costly permitting requirements, even though the short construction period for drilling sites carries little potential for stormwater runoff pollution. Supporters say the amendment is intended to clarify existing CWA language. Opponents argue that the provision does not belong in the energy legislation, and that there is no evidence that construction at oil and gas sites causes less pollution than other construction activities, which are regulated under EPA's stormwater program.

Section 329: Outer Continental Shelf Provisions. For applications to build deepwater ports, the Secretary of Transportation could use environmental impact statements or other studies prepared by other federal agencies instead of conducting separate studies. Information from state and local governments and private-sector sources could also be used.

Section 330: Appeals Relating to Pipeline Construction or Offshore Mineral Development Projects. Appeals of decisions under the Coastal Zone Management Act on natural gas pipelines and offshore energy projects would be based exclusively on the record compiled by FERC or the relevant permitting agency. It would be the sense of Congress that appeals relating to natural gas pipeline construction would be coordinated within FERC's established timeframes under sections 3 and 7 of the Natural Gas Act (15 U.S.C. 717 b 717 (f)).

Sections 332 — 333: Natural Gas Market Reform. These sections would address natural gas price reporting issues in the wake of the Enron scandal. During extremely volatile market episodes in 2000-2001 — when gas prices briefly soared to unprecedented levels — it was alleged that market participants reported false trading information to price-reporting services. Beyond creating higher prices for the market participants involved, these price-reporting schemes arguably resulted in higher transactions prices for unrelated gas deals whose prices were derived from published price indices artificially escalated by the allegedly false reports.

Section 332, entitled “Natural Gas Market Reform,” would modify the Commodity Exchange Act (CEA, 7 U.S.C. 13), banning “knowingly false or knowingly misleading or knowingly inaccurate reports.” It also would increase the penalties for false reporting.

Section 333, entitled “Natural Gas Market Transparency,” would direct FERC to issue rules calling for the timely reporting of natural gas prices and availability and to evaluate the data for accuracy. The language specifies that FERC not impinge on the role of commercial publishers of natural gas prices.

Current Law. The Commodity Futures Trading Commission regulates public trading in gas under a variety of securities laws, including the CEA. FERC also has existing authority to prevent market manipulation and issued Order 644 on November 13, 2003, to prevent market abuse, set “rules of the road,” and provide a more stable marketplace for both electricity and natural gas. It establishes rules relating to market manipulation, data reporting, and record retention. It also makes sellers subject to disgorgement of unjust profits and revocation of FERC authorities to operate under market-based rules (i.e. without direct regulatory supervision) and to do business.

Section 334: Oil, Gas, and Mineral Industry Workers. Within a year after enactment, the secretaries of Energy, Labor, and the Interior must submit a report to Congress with recommendations on meeting future labor requirements for the domestic oil, gas, and mining industries. This section was not in the H.R. 6 conference report in the 108th Congress.

Subtitle C — Access to Federal Land

Sections 344 and 346: Leasing and Permitting Processes. These sections would address concerns over delays in the permitting process for oil and gas development after leases are granted. Some lease stipulations are considered by the Administration to be impediments to domestic oil and gas development. However, concerns have also been raised that faster permitting could bypass important environmental protections.

Current Law. The federal oil and gas leasing program is governed under the Mineral Leasing Act of 1920, as amended (30 U.S.C. 181 et. seq.). Bureau of Land Management (BLM) procedures for an application for a permit to drill (APD) are contained in 43 CFR 3162.3-1. The APD is posted for 30 days. Within 5 working days after the 30-day period, the BLM consults with surface-managing agencies whose consent is also required, then notifies the applicant of the results. The BLM is also required to process the application within the 35-day period. The Bush Administration has taken some action on this issue, including processing and conducting environmental analyses on multiple permit applications with similar characteristics, implementing geographic area development planning for oil and gas fields or areas within a field, and allowing for block surveys of cultural resources.

H.R. 6. The Secretaries of the Interior and Agriculture would be required to sign a memorandum of understanding (MOU) on the “timely processing” of oil and gas lease applications, surface use plans and drilling applications, the elimination of duplication, and ensuring consistency in applying lease stipulations (**Sec. 344**). Compliance with Executive Order No. 13211 (42 U.S.C. 12301 note), requiring energy impact studies, would be required before taking action on regulations having an effect on domestic energy supply (**Sec. 346**).

Section 355: Encouraging Prohibition of Drilling in the Great Lakes. Congress would urge that no federal or state permits be issued for oil and gas drilling in or under the Great Lakes.

Section 358: Federal Coalbed Methane Regulation. States on the list of “affected states” under section 1339(b) of the Energy Policy Act of 1992 (42 U.S.C. 13368(b)) would be removed if they took specified actions within three years after enactment of H.R. 6 or had previously taken action under section 1339(b). The list of “affected states” established under the Energy Policy Act of 1992 (42 U.S.C. 13368 (b)) includes: West Virginia, Pennsylvania, Kentucky, Ohio, Tennessee, Indiana, and Illinois. These states are on the list as a result of coalbed methane (CBM) ownership disputes, impediments to development, lack of a regulatory framework to encourage CBM development in the state, and no current extensive development of CBM. A state may be removed from the list through a petitioning process initiated by the governor of that state.

Subtitle D — Refining Revitalization

Sections 371- 379: Refining Revitalization. This subtitle is designated as the “United States Refinery Revitalization Act of 2005.” Based on the finding that fuel demand exceeds the production capacity of domestic refineries, it is in the national interest to increase capacity to refine fuels within the United States. The findings in **Sec. 372** note that no new refinery has been built in the country since 1976, and there has been a reduction in the number of operating facilities. It also notes that gasoline demand is expected to increase 45% between 2005 and 2025.

Closure of refineries since 1981 has resulted in the shuttering of nearly 500,000 barrels per day of capacity. While the number of operating facilities has fallen from 324 to 149, the total amount of capacity has risen, the result of expansion of existing plants. But the investment climate for expansion of old plants and construction of new remains clouded, in part due to regulatory uncertainty at the federal, state, and local levels. The findings make note of the planned Yuma, AZ, refinery, which just received its federal air quality permit after five years under the current regulatory process.

The Act’s purpose, as stated in **Sec. 373**, is to provide an accelerated review and approval process for idled refineries, and to lend legal and technical support to states needing help to meet such permit demands.

Refinery Revitalization Zones are designated in **Sec. 374**, and the Secretary of Energy is directed to identify areas (within 90 days after enactment) that have experienced mass layoffs in manufacturing, contain an idle refinery, and have an unemployment rate that exceeds the national average by 10%.

Sec. 375 calls for a memorandum of understanding between the Secretary of Energy and the EPA Administrator that designates appropriate agency officials and staff to implement the purposes of the Act and administer any regulations issued thereunder. State Governors and Indian Tribe representatives may enter into this MOU. Once a qualifying state enters into the MOU, **Sec. 376** calls on the Secretary of Energy to delegate agency staff to provide assistance to the state. The EPA Administrator is similarly charged, and specifically directed to provide expertise regarding the laws the agency administers as they relate to refineries.

DOE is designated lead agency in **Sec. 377**. Upon written request of an applicant, the Department will coordinate all applicable authorizations and environmental reviews, including those at the state and local level. It would be required to set a prompt and binding schedule for federal reviews and authorizations, such that the whole federal process would be completed within six months. The Department would maintain a complete consolidated record of the proceedings, and act as the arbiter in the case of appeals. Decisions on appeals would be required within 60 days.

The Secretary would establish a 60-day pre-application process to help establish likelihood of approval and identify potential issues. In its lead agency role, the Department would coordinate all federal actions for NEPA compliance, as well as consolidation of the impact statement into one document covering all environmental impacts.

Sec. 378 calls for the compliance with all applicable laws and regulations.

Sec. 379 contains definitions for a number of significant items, including:

- Federal authorizations means those required under the Clean Air Act, the Federal Water Pollution Control Act, the Safe Drinking Water Act, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, the Solid Waste Disposal Act, the National Historic Preservation Act, and the National Environmental Policy Act of 1969.
- An idle refinery is real property used as a refinery since December 31, 1979, and not operational before April 1, 2005.
- A refinery means any facility designed and operated to store or ship oil, as well as to operate as a refinery or a refinery component. This includes places where fuel blending took place.
- A qualifying state is a state or Indian tribe which has entered into a MOU with the Secretary of Energy, and has a refining infrastructure coordination office.

Title IV — Coal

Subtitle A — Clean Coal Power Initiative

Sections 401- 404: Clean Coal Power Initiative. The Clean Coal Power Initiative (CCPI) is in its third year of funding under a 10-year, \$2 billion program outlined by the Bush Administration. According to DOE, the program supports cost-shared projects with the private sector to demonstrate new technologies that could boost the efficiency and reduce emissions from coal-fired power plants.

Current Law. CCPI does not currently have a specific authorization, although it has been funded through FY2005 in the annual Interior and Related Agencies Appropriations bill. The program supersedes the Clean Coal Technology Program, which has completed most of its projects and has been subject to rescissions and deferrals since the mid-1990s.

H.R. 6. Funding for CCPI would be authorized for \$200 million for each year from FY2006-FY2014 (**Sec. 401**). The technical criteria would be established for coal-based gasification and other projects. The federal share of financing for each clean coal project would not exceed 50% (**Sec. 402**). A report on the projects' status and technical milestones would be submitted after the first year and every two years by the Secretary of Energy to various congressional committees (**Sec. 403**). The program would include grants to universities to establish Centers of Excellence for energy systems of the future (**Sec. 404**).

Policy Context. A key ingredient of President Bush's May 2001 National Energy Policy is to bolster U.S. energy supply. One of its goals is to use coal more efficiently, as coal is an abundant national resource. The Administration contends that new technologies could cost-effectively reduce emissions from coal-fired power plants and overcome barriers to expanded coal use.

Subtitle B — Clean Power Projects

Sections 411- 416: Clean Power Projects. The Secretary of Energy would be authorized to provide a \$125 million loan to an experimental clean coal power plant in Healy, Alaska (**Sec. 411**). Loan guarantees would be authorized for a power plant of at least 400MW capacity using integrated combined-cycle (IGCC) technology in a deregulated market and receiving no ratepayer subsidy (**Sec. 412**). Loan guarantees would be available for at least five petro-coke gasification polygeneration projects, involving co-production of electricity and fuels (**Sec. 414**). The Secretary of Energy would be directed to use \$5 million of appropriated funds to begin a project managed by the DOE Chicago Operations Office to demonstrate high-energy electron scrubbing technology for high-sulfur coal emissions (**Sec. 416**).

Subtitle D — Coal and Related Programs

Section 441: Clean Air Coal Program. This section would amend the Energy Policy Act of 1992 with the addition of a clean air coal program to promote increased use of coal, acceptance of new clean coal technologies, and advance deployment of pollution control equipment to meet the Clean Air Act (42 U.S.C. 7402 et seq.).

A total of \$500 million over FY2006-FY2010 would be authorized for pollution control projects to control mercury, nitrogen dioxide, sulfur dioxide emissions, particulate matter, or more than one pollutant; and allow use of the waste byproducts. Additional authorizations totaling \$2.5 billion over FY2007-FY2013 would be provided for projects using coal-based electrical generation equipment and processes, and associated environmental control equipment.

Project selection criteria would be based on significantly improving air quality, replacing less efficient units, and improving thermal efficiency. Up to 25% of projects would be cogeneration or other gasification projects. At least 25% of the projects would be solely for electrical generation, with priority for those generating less than 600 MW. Federal loans or loan guarantees would not exceed 30% of the total funds obligated during any fiscal year. The federal share of projects funded would not exceed 50%.

No technology funded by the program, or level of emissions reduction achieved by funded projects, would be considered adequately demonstrated for purposes of Sections 111, 169, or 171 of the Clean Air Act.

Title V — Indian Energy

Section 501: Short Title. This title would be cited as the “Indian Tribal Energy Development and Self-Determination Act of 2005.”

Section 502: Office of Indian Energy Policy and Programs. Title II of the Department of Energy Organization Act (42 U.S.C. 7131 et. seq.) would be amended to create the Office of Indian Energy Policy and Programs at the Department of Energy.

Section 503: Indian Energy. Title 26 the Energy Policy Act of 1992 (25 U.S.C. 3501) would be replaced by this section, which outlines procedures whereby Indian tribes would be able to develop and manage the energy resources located on, and rights-of-way through, tribal land. Within a year of enactment of the bill, the Department of the Interior (DOI) would issue regulations on the requirements for approval of tribal energy resource agreements. Under their own tribal energy resource agreements as approved by DOI, Indian tribes would be able to enter into leases or business agreements for energy development and grant rights-of-way over tribal land for pipelines or electric lines.

Assistance for tribal energy development would be provided through DOI by grants and low-interest loans and through DOE by grants and loan guarantees. Federal agencies could give preference to Indian energy when purchasing energy products and byproducts.

DOI would be required to undertake a review and make recommendations regarding tribal opportunities under the Indian Mineral Development Act of 1982 (25 U.S.C. 2101 et. seq.). The Bonneville Power Administration and Western Area Power Administration would be authorized to assist in developing distribution systems that provide power to Indian tribes using the federal transmission system.

Section 504: Consultation with Indian Tribes. The Secretaries of Energy and of the Interior would be required to consult with Indian tribes in carrying out this title.

Section 505. Four Corners Transmission Line Project. The Dine Power Authority, an enterprise of the Navajo nation, would be eligible to receive grants and other assistance to develop a transmission line from the Four Corners Area to southern Nevada, including related generation facilities.

Title VI — Nuclear Matters

Subtitle A — Price-Anderson Act Amendments

Sections 601- 612: Price-Anderson Nuclear Liability Coverage. The Price-Anderson Act,¹¹ which addresses liability for damages to the general public from nuclear incidents, would be extended through 2025. The Price-Anderson liability system was up for reauthorization on August 1, 2002, and was extended for commercial nuclear reactors through December 31, 2003, by the FY2003 consolidated appropriations resolution (P.L. 108-7). Even without further extension, existing reactors will continue to operate under the current Price-Anderson liability system, but any new reactors would not be covered. Price-Anderson coverage for DOE nuclear contractors was extended through December 31, 2004, by the National Defense Authorization Act for FY2003 (P.L. 107-314). A further two-year extension for DOE contractors was approved by Congress on October 9, 2004, as part of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (P.L. 108-375).

Current Law. Under Price-Anderson, the owners of commercial reactors must assume all liability for nuclear damages awarded to the public by the court system, and they must waive most of their legal defenses following a severe radioactive release (“extraordinary nuclear occurrence”). To pay any such damages, each licensed reactor must carry financial protection in the amount of the maximum liability insurance available, which was increased by the insurance industry from \$200 million to \$300 million on January 1, 2003. Any damages exceeding that amount are to be assessed equally against all covered commercial reactors, up to \$95.8 million per reactor (most recently adjusted for inflation on August 20, 2003). Those assessments — called “retrospective premiums” — would be paid at an annual rate of no more than \$10 million per reactor, to limit the potential financial burden on reactor owners following a major accident. According to the Nuclear Regulatory Commission (NRC), 103 commercial reactors are currently covered by the Price-Anderson retrospective premium requirement.

Funding for public compensation following a major nuclear incident, therefore, would include the \$300 million in insurance coverage carried by the reactor that suffered the incident, plus the \$95.8 million in retrospective premiums from each of the 103 currently covered reactors, totaling \$10.2 billion. On top of those payments, a 5% surcharge may also be imposed, raising the total per-reactor retrospective premium to \$100.6 million and the total potential compensation for each incident to about \$10.7 billion. Under Price-Anderson, the nuclear industry’s liability for an

¹¹ Primarily Sec. 170 of the Atomic Energy Act of 1954, 42 U.S.C. 2210.

incident is capped at that amount, which varies depending on the number of covered reactors, the amount of available insurance, and an inflation adjustment that is made every five years. Payment of any damages above that liability limit would require congressional approval under special procedures in the act.

The Price-Anderson Act also covers contractors who operate hazardous DOE nuclear facilities. The liability limit for DOE contractors is the same as for commercial reactors, excluding the 5% surcharge, except when the limit for commercial reactors drops because of a decline in the number of covered reactors. Because two closed reactors had been covered until recently (for a total of 105), the liability limit for commercial reactors, minus the surcharge, had been \$10.4 billion, which remains the liability limit for DOE contractors. Price-Anderson authorizes DOE to indemnify its contractors for the entire amount, so any damage payments for nuclear incidents at DOE facilities would ultimately come from the U.S. Treasury. However, the law also allows DOE to fine its contractors for safety violations, and contractor employees and directors can face criminal penalties for “knowingly and willfully” violating nuclear safety rules. However, Section 234A of the Atomic Energy Act specifically exempts seven non-profit DOE contractors and their subcontractors. Under the same section, DOE automatically remits any civil penalties imposed on non-profit educational institutions serving as DOE contractors.

House Bill. Price-Anderson liability coverage for commercial reactors and for DOE contractors would be extended through December 31, 2025 (**Sec. 602**). The total retrospective premium for each reactor would be set at the current level of \$95.8 million and the limit on per-reactor annual payments raised to \$15 million (**Sec. 603**), with both to be adjusted for inflation every five years (**Sec. 607**). For the purposes of those payment limits, a nuclear plant consisting of multiple small reactors (100-300 megawatts, up to a total of 1,300 megawatts) would be considered a single reactor (**Sec. 608**). Therefore, a power plant with six 120-megawatt modular reactors would be liable for retrospective premiums of up to \$95.8 million, rather than \$574.8 million. The liability limit on DOE contractors would be set at \$10 billion per accident, also to be adjusted for inflation (**Sec. 604**).

The liability limit and maximum indemnification for DOE contractors for nuclear incidents outside the United States would be raised from \$100 million to \$500 million (**Sec. 605**). However, Price-Anderson indemnification would be prohibited for contracts related to nuclear facilities in countries found to sponsor terrorism (**Sec. 610**). None of the increased liability limits would apply to nuclear incidents taking place before the amendments are enacted (**Sec. 609**). NRC and DOE would have to report to Congress by the end of 2021 on the need for further Price-Anderson extensions and modifications (**Sec. 606**).

For future contracts, the House-passed bill would eliminate the civil penalty exemption for nuclear safety violations by the seven non-profit contractors listed in current law. DOE’s authority to automatically remit penalties imposed on all non-profit educational institutions serving as contractors would also be repealed. However, the bill would limit the civil penalties against a non-profit contractor to the amount of management fees received under that contract (**Sec. 611**).

The House-passed version of H.R. 6 would also authorize the federal government to sue DOE contractors to recover at least some of the compensation that the government had paid for any accident caused by intentional DOE contractor management misconduct. Such cost recovery would be limited to the amount of the contractor's profit under the contract involved, and no recovery would be allowed from nonprofit contractors (**Sec. 612**). This section was also in H.R. 6 as passed by the House in the 108th Congress but not in the conference report.

Policy Context. The Price-Anderson Act's limits on liability were crucial in establishing the commercial nuclear power industry in the 1950s. Supporters of the Price-Anderson system contend that it has worked well since that time in ensuring that nuclear accident victims would have a secure source of compensation, at little cost to the taxpayer. However, opponents contend that Price-Anderson subsidizes the nuclear power industry by protecting it from some or most of the financial consequences of the worst conceivable accidents.

Because no new U.S. reactors are currently planned, missing the deadline for extension has had little immediate effect on the nuclear power industry, as existing reactors continue to be covered. For the first time in more than 20 years, however, several U.S. utilities have announced that they are considering whether to build new reactors. It is unlikely that any such projects would move forward without Price-Anderson coverage. A lapse in Price-Anderson would also affect all subsequently signed DOE nuclear facility contracts, which would have to use alternate indemnification authority.

Subtitle B — General Nuclear Matters

Section 621: Commercial Reactor License Period. The initial 40-year period for a commercial nuclear reactor license would begin when NRC authorized the reactor to commence operation after construction had been completed. Currently, under Atomic Energy Act Section 185 b. (added by the Energy Policy Act of 1992, P.L. 102-486), the 40-year initial license period may begin when a "combined construction and operating license" is issued several years before the reactor is to start operating. Before Section 185 was added in 1992, reactor operating licenses had been issued only after construction was complete, but any future licenses are expected to use the combined license option.

Section 622: NRC Training and Fellowship Program. Funding of \$1 million per year would be authorized from FY2005-FY2009 for NRC to conduct a training and fellowship program to develop critical nuclear safety regulatory skills.

Section 623: Cost Recovery From Government Agencies. NRC would be authorized to charge cost-based fees for all services rendered to other federal agencies. Such authority is limited under current law (Atomic Energy Act, Section 161 w.).

Section 624: Elimination of Pension Offset for Key NRC Personnel. When NRC has a critical need for the skills of a retired employee, NRC could hire the retiree as a contractor and exempt him or her from the annuity reductions that would otherwise apply.

Section 625: Antitrust Review Suspension. NRC would no longer have to submit nuclear reactor license applications to the Attorney General for antitrust reviews, as currently required by Atomic Energy Act Section 105 c.

Section 626: Decommissioning Fund Protection. NRC would be explicitly authorized to issue regulations ensuring that funds collected to decommission nuclear power plants would not be used for other purposes. This provision is particularly aimed at cases in which an original nuclear power plant owner has sold the plant but retained control over decommissioning funds collected before the ownership transfer.

Section 627: Limitation on DOE Legal Fee Reimbursement. Except as required by existing contracts, DOE would be prohibited from reimbursing its contractors for legal expenses incurred in defending against “whistleblower” complaints that are ultimately upheld.

Section 629: Feasibility Study for Commercial Reactors at DOE Sites. The Secretary of Energy would be required to submit a study to Congress on the feasibility of developing commercial nuclear power plants at existing DOE sites.

Section 630: Government Uranium Sales. With certain exceptions, DOE uranium sales would be restricted to 3 million pounds per year from FY2005-FY2009, 5 million pounds per year in FY2010-FY2011, 7 million pounds per year in FY2012, and 10 million pounds per year thereafter. DOE must report to Congress within three years on the impact of such sales on the domestic uranium industry.

Section 631: Uranium Mining Research and Development. Funding of \$10 million per year would be authorized during FY2006-FY2008 for a cost-shared research and development program by DOE and domestic uranium producers on in-situ leaching mining technologies and related environmental restoration technologies, except that “no activities funded under this section may be carried out in the State of New Mexico.”

Section 632: Whistleblower Protection. Existing whistleblower protections for employees of nuclear power plants and other NRC licensees and employees of DOE contractors would be extended to employees of NRC contractors. An employee whose whistleblower retaliation complaint did not receive a final decision by the Secretary of Labor within 540 days could take the case to federal court.

Section 633: Uranium Exports for Medical Isotope Production. Highly enriched uranium (HEU) could be exported to Canada, Belgium, France, Germany, and the Netherlands for production of medical isotopes in nuclear reactors. Those countries would be exempt from existing requirements (under Section 134 of the Atomic Energy Act) that they agree to switch to low-enriched uranium (LEU) as soon as possible and that LEU fuel for their reactors be under active development. Instead, those countries would have to agree to convert to suitable LEU fuel when it became available. NRC would have to review current security requirements for HEU used for medical isotope production and impose additional requirements if necessary. The National Academy of Sciences would study the potential availability and cost of

medical isotopes produced in LEU reactors; that study would be used by DOE to help determine whether U.S. medical isotope demand could be reliably and economically met with production facilities that do not use HEU. If the Secretary of Energy certifies that such demand can be met, the export exemption in the House bill would terminate. The current HEU export restrictions are intended to spur foreign cooperation with U.S. efforts to convert all HEU reactors to LEU, but supporters of the exemption contend that the restrictions could disrupt the supply of medical isotopes produced in foreign HEU reactors.

Section 634: Fernald Byproduct Material. DOE-managed material in the concrete silos at the Fernald uranium processing facility would be considered byproduct material (as defined by section 11 e.(2) of the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)). DOE would dispose of the material in an NRC- or state-regulated facility.

Section 635: Safe Disposal of Greater-than-Class-C Radioactive Waste. DOE would designate an office with the responsibility for developing a comprehensive plan for permanent disposal of all low-level radioactive waste with concentrations of radionuclides that exceed the limits established by the NRC for Class C radioactive waste. The plan would include developing a new facility or use of an existing facility for disposal.

Section 636: Prohibition on Nuclear Exports to Terrorism Sponsors. Exports of nuclear materials, equipment, and sensitive technology would be prohibited to any country identified by the Secretary of State as a sponsor of terrorism. The President could waive the export restriction under certain conditions. It is intended to block implementation of a 1994 agreement under which North Korea was to receive a U.S.-designed nuclear power plant in return for abandoning its nuclear weapons program. The agreement has been suspended in light of North Korea's continuing weapons activities.

Section 638: National Uranium Stockpile. The Secretary of Energy would be authorized to create a national low-enriched uranium stockpile.

Section 639: Nuclear Regulatory Commission Meetings. Whenever a quorum of the Nuclear Regulatory Commission gathers to discuss official business, other than at formal Commission meetings, the discussions would have to be recorded and the public notified within 15 days. A transcript of the recording would be available to the public upon request except for information that is exempted or prohibited from disclosure by law.

Section 640: Employee Benefits. Subject to the availability of funds, workers at DOE's uranium enrichment plants at Portsmouth, Ohio, and Paducah, Kentucky, who were eligible for certain pension and health care benefits on April 1, 2005, shall continue such eligibility.

Subtitle C — Advanced Reactor Hydrogen Production

Sections 651-652: Hydrogen Cogeneration Production Programs.

DOE would be authorized to develop, design, construct, and operate an advanced nuclear reactor to produce hydrogen and electricity. The project would be managed by the DOE Office of Nuclear Energy, Science, and Technology, and the reactor would be located at the Idaho National Laboratory. Among other requirements, the project should begin producing hydrogen or electricity by 2011 unless the Secretary of Energy finds that goal infeasible. The reactor would be licensed and regulated by NRC. Five projects to demonstrate hydrogen production at existing nuclear power plants would also be authorized. Funding for the program would be authorized at \$1.3 billion through FY2015.

Subtitle D — Nuclear Security

Section 661: Nuclear Facility Threats. In consultation with NRC and other appropriate agencies, the President would be required to identify types of security threats at nuclear facilities. The President would have to issue reports on the identified threats and on actions taken or to be taken to address the threats. NRC would be authorized to revise its regulations based on the President's threat-identification report. NRC would be required to conduct periodic force-on-force exercises to test nuclear facility security. NRC would be authorized to issue regulations to protect information about nuclear facility security, and would be required to assign a security coordinator to each NRC region.

Section 662: Fingerprinting for Criminal Background Checks. The existing requirement that individuals be fingerprinted for criminal background checks before receiving unescorted access to nuclear power plants (Atomic Energy Act, Section 149) would be extended to individuals with unescorted access to any radioactive material or property that could pose a health or security threat. Other biometric methods could be used instead of fingerprinting.

Section 663: Use of Firearms by Nuclear Licensees. NRC would be authorized to allow the use of firearms by security personnel at nuclear power plants and other facilities licensed or regulated by NRC. Federal law currently authorizes NRC employees and contractors to use firearms, but not employees or contractors of nuclear licensees (Atomic Energy Act, Section 161 k.). This provision would counter some state laws that preclude private guard forces from utilizing some weapons.

Section 664: Unauthorized Introduction of Dangerous Weapons. Existing NRC controls on the entry of dangerous weapons or materials into Commission facilities (Atomic Energy Act, Section 229a) would be extended to commercial nuclear power plants and other NRC-regulated facilities.

Section 665: Sabotage of Nuclear Facilities or Fuel. Maximum penalties for sabotage of licensed nuclear facilities or materials (Atomic Energy Act, Section 236 a.) would be increased from \$10,000 and 10 years in prison to \$1 million and life imprisonment without parole. The language would clarify that the penalties

could apply to facilities “certified” as well as “licensed” by NRC, and also to sabotage of facilities under construction.

Section 666: Secure Transfer of Nuclear Materials. Nuclear materials transferred or received in the United States pursuant to an import or export license would have to be accompanied by a detailed manifest. Every worker involved in such shipments would have to undergo a federal security background check.

Section 667: Department of Homeland Security Consultation. Before issuing a license for a nuclear power plant, NRC would have to consult with the Department of Homeland Security about the vulnerability of the proposed plant location to terrorist attack.

Section 668: Authorization of Appropriations. Appropriation of such sums as necessary to carry out this subtitle would be authorized. A statutory requirement that the Nuclear Regulatory Commission recover 90% of its costs (minus certain exceptions) through licensee fees would be made permanent. The current fee requirement, imposed by the Omnibus Budget Reconciliation Act of 1990 (42 U.S.C. 2214), is set to expire September 20, 2005. NRC’s costs in regulating residual defense radioactive waste under Section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (50 U.S.C. 2601 note) would be excluded from costs subject to the 90% cost recovery requirement.

Title VII — Vehicles and Fuels

Subtitle A — Existing Programs

The sections of this subtitle refer to alternative fuel and vehicle purchase requirements under the Energy Policy and Conservation Act (EPCA) (P.L. 94-163) and the Energy Policy Act of 1992 (EPAct, P.L. 102-486). Various requirements apply to federal vehicle fleets, as well as state fleets and fleets operated by alternative fuel providers.

Section 701: Use of Alternative Fuels by Dual-Fueled Vehicles. Section 400AA of EPCA would be amended to require that all federal agencies operate dual-fueled vehicles on alternative fuels or petition the Secretary of Energy for a waiver from the requirement. Under current law, agencies are not required to file a petition to be exempted from the requirement. A dual-fuel vehicle is one that can be operated on either an alternative fuel (e.g., ethanol or natural gas) or a conventional fuel (e.g., gasoline). Currently, most federally owned dual-fuel vehicles are operated on gasoline as opposed to alternative fuel.

Section 704: Incremental Cost Allocation. Section 303(c) of EPAct allows federal agencies to allocate the incremental cost of required alternative-fuel vehicles across the whole vehicle fleet. H.R. 6 would require agencies to do so.

Section 705: Lease Condensates. Section 705 would amend the definition of alternative fuel to include lease condensate (liquids recovered from natural gas

separation) and fuels derived from lease condensate. Fleets could generate one vehicle purchase credit for the use of a certain volume (to be determined by the Secretary of Energy) of lease condensate fuel in medium- and heavy-duty vehicles. This provision is similar to the existing credit structure for the use of biodiesel.

Section 706: Review of Energy Policy Act of 1992 Programs. The Secretary of Energy would be required to conduct a study on the effectiveness of the alternative fuel vehicle programs under EPCA. Specifically, the Secretary would be required to assess the effects on vehicle technology, availability, and cost.

Section 707: Report Concerning Compliance with Alternative Fuel Vehicle Purchasing Requirements. Each federal agency is required to report annually (through 2012) to Congress on its compliance with EPCA vehicle purchase requirements. The conference report would extend the requirement through 2020.

Subtitle B — Hybrid Vehicles, Advanced Vehicles, and Fuel Cell Buses

Section 711: Hybrid Vehicles. Section 711 would require the Secretary of Energy to accelerate research on technologies for hybrid vehicles. No new funds would be authorized.

Section 712: Hybrid Retrofit and Electric Conversion Program. The Administrator of the Environmental Protection Agency (EPA) would be required to establish a grant program for the installation of technologies to retrofit existing combustion engines with electric or hybrid systems. Retrofitted vehicles must achieve federal Low Emission Vehicle standards. Section 712 authorizes a total of \$100 million between FY2005 and FY2007 for the program.

Section 713: Efficient Hybrid and Advanced Diesel Vehicles. The EPA Administrator would be required to establish a program to encourage the domestic production and sales of efficient hybrid and advanced diesel vehicles. The program must include grants to domestic vehicle manufacturers to encourage production and provide consumer purchase incentives. A total of \$3 billion is authorized between FY2006 and FY2015.

Sections 721-724: Advanced Vehicles. The Secretary of Energy would be authorized to provide grants to state governments, local governments, and metropolitan transit authorities for the purchase of alternative fuel, hybrid, fuel cell, and ultra-low sulfur diesel vehicles (defined in **Sec. 721**), and the infrastructure to support them. The program would be administered through the Clean Cities Program. Grants would be capped at \$20 million per applicant. Between 20% and 25% of all grant funds would be used for ultra-low sulfur diesel vehicles (**Sec. 722**). The Secretary would be required to submit reports to Congress identifying grant recipients and evaluating the program's effectiveness (**Sec. 723**). \$200 million total would be authorized for the grant program (**Sec. 724**).

Section 731: Fuel Cell Transit Bus Demonstration. The Secretary of Energy would be required to establish a program to demonstrate up to 25 fuel cell

transit buses in various localities. \$10 million annually would be authorized for FY2006 through FY2010.

Subtitle C — Clean School Buses

Sections 741-744: Clean School Buses. A pilot program administered by the Environmental Protection Agency would be established to provide grants to local governments and contractors that provide school bus service for public school systems. Grants would be provided to aid in the purchase of alternative fuel and advanced diesel buses (as defined in **Sec. 741**), and the infrastructure necessary to support them. A total of \$200 million would be authorized for FY2005 through FY2007, and a maximum of 30% of the grant funds could be used to purchase advanced diesel buses (**Sec. 742**). A pilot program would also be established to provide grants for the development and application of retrofit technologies for diesel school buses. A total of \$100 million would be authorized for FY2005 through FY2007 (**Sec. 743**). In addition, a pilot program would be established for the development and demonstration of fuel cell school buses. A total of \$25 million would be authorized for FY2005 through FY2007 (**Sec. 744**).

Section 743A: Diesel Truck Retrofit and Fleet Modernization Program. The EPA Administrator would be required to establish a program to provide grants (administered by state or local governments) to modernize cargo truck operations. Grants would be used to retrofit pre-1999 vehicles with advanced emissions control devices. A total of \$100 million would be authorized between FY2005 and FY2007.

Subtitle D — Miscellaneous

Section 751: Railroad Efficiency. A public-private research partnership would be established for the development and demonstration of locomotive engines that increase fuel economy, reduce emissions, and lower costs. A total of \$110 million would be authorized for FY2006 through FY2008.

Section 752: Mobile Emission Reductions Trading. Within 180 days of enactment, the EPA Administrator would be required to submit a report to Congress on EPA's experience with the trading of mobile source emission reduction credits to stationary sources to meet emission offset requirements within Clean Air Act nonattainment areas.

Section 753: Aviation Fuel Conservation and Emissions. This section would require the Federal Aviation Administration and EPA to initiate a joint study of the impact of aircraft emissions on air quality in Clean Air Act nonattainment areas, ways to promote fuel conservation measures and reduce emissions, and opportunities to reduce air traffic inefficiencies that increase fuel burn and emissions within 60 days of the date of enactment, and to report the results to Congress within one year of initiating the study.

Section 754: Diesel Fueled Vehicles. The Secretary of Energy would be required to accelerate research on emissions control technologies for diesel motor

vehicles. The objective of the research would be to enable diesel technology to meet Tier 2 emission standards not later than 2010. (These standards would apply to cars and light trucks after the 2003 model year.) No new funding would be authorized.

Section 755: Conserve by Bicycling Program. This provision was added as a floor amendment (H.Amdt. 88). The Department of Transportation (DOT) would be directed to conduct up to 10 pilot bicycling projects to conserve energy. A minimum of 20% of each project's costs would have to be provided by state or local sources. Also, DOT would be directed to engage the National Academy of Sciences to conduct a research study on the feasibility of converting motor vehicle trips to bicycle trips. Some local governments have experimented with police bicycle patrols and other bicycling programs. This provision may help expand such uses of bicycling.

Section 756: Reduction of Engine Idling of Heavy-Duty Vehicles. EPA would be required to study whether existing air emission models accurately reflect emissions from idling vehicles. Further, EPA would be required to establish a program to support the deployment of idle-reduction technologies. A total of \$95 million would be authorized for FY2006 through FY2008 for the deployment program.

Section 757: Biodiesel Engine Testing Program. The Secretary of Energy would be required to study the effects of biodiesel and biodiesel blends on current and future emissions control technologies. \$5 million would be authorized annually for FY2006 through FY2010.

Section 758: High Occupancy Vehicle Exception. The Transportation Equity Act for the 21st Century (TEA-21, P.L. 105-178) would be amended to allow states to exempt hybrid and dedicated alternative fuel vehicles from high occupancy vehicle (HOV) restrictions. Through September 30, 2003, states had the authority to exempt certain types of alternative fuel vehicles from the restrictions. However, hybrid vehicles and some alternative fuel vehicles did not qualify. As the existing authorization has expired, states do not currently have the authority to exempt any type of alternative fuel vehicle from HOV restrictions.

Section 759: Ultra-Efficient Engine Technology for Aircraft. The Secretary of Energy, in cooperation with the National Aeronautics and Space Administration, would be required to develop new engine technology for aircraft with a goal of a 10% increase in fuel efficiency and a 70% decrease in nitrogen oxide emissions during takeoff and landing. A total of \$225 million would be authorized between FY2006 and FY2010.

Subtitle E — Automobile Efficiency

Sections 771-775: Fuel Economy Standards. The bill would authorize \$2 million annually during FY2006-FY2010 for the National Highway Traffic Safety Administration (NHTSA) to carry out fuel economy rulemakings (**Sec. 771**). It would expand the criteria that the agency would be required to take into account in setting maximum feasible fuel economy for cars and light trucks, including the

effects of prospective standards on vehicle safety and automotive industry employment. In many instances, these additional factors may add specificity to broader considerations that are already taken into account by NHTSA in developing its rules (**Sec. 772**).

The legislation would also extend corporate average fuel economy (CAFE) credits that accrue to manufacturers of dual-fueled vehicles. The cap to the credit of 1.2 miles per gallon (mpg) earned by any individual manufacturer would be extended to model year (MY) 2010. It was otherwise scheduled to drop to a cap of 0.9 mpg beginning in MY2005. The bill would postpone institution of the 0.9 cap until MY2011 and authorize it through MY2014 (**Sec. 773**). It also would require a study to explore the feasibility and effects of reducing automobile fuel consumption “a significant percentage” by MY2012 (**Sec. 774**). A new provision to the Energy Policy Act of 2005, not a part of H.R. 6 in the 108th Congress, would require a revision to the adjustment made to tested fuel economy levels so that the in-use fuel economy estimates posted on new vehicles would be more in conformance with the fuel economy that purchasers of new vehicles experience in actual use. The adjustment would have to take into account current use of air conditioning, currently higher speed limits, and faster acceleration rates (**Sec. 775**).

Title VIII — Hydrogen

Sections 801-809: Hydrogen Research and Development. Sections 801 through 809 would reauthorize hydrogen fuel research and development at the Department of Energy (**Sec. 803**). The title would establish an Interagency Task Force to coordinate federal research (**Sec. 804**). Further, the title would require the Secretary of Energy to develop a plan for the development of hydrogen fuel and fuel cells (**Sec. 802**), and would establish a Hydrogen Technical and Fuel Cell Advisory Committee to advise the Secretary and review the development plan (**Sec. 805**). DOE’s plans for the hydrogen program would be reviewed by the National Academy of Sciences (**Sec. 806**), and the Secretary of Energy would represent U.S. interests related to hydrogen programs in consultation with relevant agencies (**Sec. 807**). Specified authorities of the Secretary of Transportation would not be affected (**Sec. 808**). A total of \$4 billion would be authorized for FY2006 through FY2010 (**Sec. 809**). Definitions are provided in **Sec. 801**.

Section 810: Solar and Wind Technologies. A program of five pilot projects is created to demonstrate the use of solar energy to produce hydrogen. Further, a program of five pilot projects is created to demonstrate the use of wind energy to produce hydrogen. Also, DOE is directed to support research programs at universities that study the use of solar and wind energy technologies to produce hydrogen.

Section 811: Hydrogen Fuel Cell Buses. The Secretary of Energy, through the Advanced Vehicle Technologies Program, would be required to establish four fuel cell bus demonstration sites.

Title IX — Research and Development

Section 900: Short Title; Definitions. This title would be referred to as the “Energy Research, Development, Demonstration, and Commercial Application Act of 2005.” Defines, for the purposes of this title, the terms *applied programs*, *biomass*, *Department*, *departmental mission*, *institution of higher education*, *National Laboratory*, *renewable energy*, *Secretary*, *State*, *university*, and *user facility*.

Subtitle A — Science Programs

Section 901: Office of Science Programs. The programs of the Office of Science would be authorized in general, and DOE would be directed to commence construction of the Rare Isotope Accelerator no later than September 30, 2008. Expenditures on the Rare Isotope Accelerator prior to operation would be limited to \$1.1 billion.

Section 902: Systems Biology Program. DOE would be directed to establish a research, development, and demonstration program in genetics, protein science, and computational biology, with specified goals. DOE would have to submit a research plan for this program to Congress within one year and contract with the National Academy of Sciences to review the plan within an additional 18 months. Biomedical research and research related to humans would not be permitted as part of the program.

Section 903: Catalysis Research and Development Program. DOE would be directed to conduct a program of R&D in catalysis science.

Section 904: Hydrogen. DOE would be directed to conduct a program of fundamental R&D in support of the hydrogen programs authorized in Title VIII.

Section 905: Advanced Scientific Computing Research. DOE would be directed to conduct a program of R&D in advanced scientific computing, including applied mathematics and the activities authorized by the Department of Energy High-End Computing Revitalization Act of 2004 (P.L. 108-423).

Section 906: Fusion Energy Sciences Program. Research, development, demonstration, and commercial application directed at competitiveness in fusion energy, including a demonstration of the utilization of fusion energy to produce electric power or hydrogen, would be declared to be U.S. policy. DOE would be directed to submit a plan to carry out that policy. Authority would be given for the United States to participate in the international fusion energy experiment known as ITER (International Thermonuclear Experimental Reactor). DOE would be directed to develop a plan for ITER participation and have it reviewed by the National Academy of Sciences. Funds could not be expended for ITER construction until the plan and other reports were provided to Congress. If construction of ITER appeared unlikely, DOE would be directed to submit a plan for a domestic burning plasma experiment.

The United States withdrew from the design phase of ITER in 1998 at congressional direction, largely because of concerns about cost and scope. The project has since been restructured, and in January 2003, the Administration announced its intention to reenter the project. Other international partners include the European Union, Japan, Russia, China, and South Korea. A decision on whether to build ITER in France or in Japan was supposed to be made in November 2003, but negotiations were still under way when the House passed H.R. 6 in April 2005.

Section 907: Science and Technology Scholarship Program. DOE would be authorized to establish a scholarship program to help recruit and prepare students for careers in DOE. Scholarship recipients would be required to work for DOE for 24 months per academic year of scholarship received.

Section 908: Office of Scientific and Technical Information. DOE would be directed to maintain the Office of Scientific and Technical Information.

Section 909: Science and Engineering Pilot Program. DOE would be directed to award a grant to Oak Ridge Associated Universities to establish a regional pilot program to enhance scientific, technological, engineering, and mathematical literacy, creativity, and decisionmaking. The program would involve research universities, universities that train elementary and secondary school teachers, and DOE national laboratories. A report would be required on lessons learned from the pilot program, including a plan for expanding the program nationwide.

Section 910: Authorization of Appropriations. Appropriations would be authorized for the Office of Science for FY2006 through FY2010, with increases of 10%-15% per year. Within these totals, appropriations would be authorized for the individual programs described in Sections 902, 905, 906 (except ITER), 907, 908, and 909. Appropriations for construction of ITER would be authorized separately, as would appropriations for integrated bioenergy R&D for FY2005 through FY2009.

Subtitle B — Research Administration and Operations

Section 911: Cost Sharing. Cost sharing would be required for programs carried out under this title. The minimum non-federal share would be 20% for R&D programs and 50% for demonstration and commercial application programs, but DOE could lower or waive these requirements in certain circumstances.

Section 912: Reprogramming. Within 60 days after any appropriation authorized under this title, DOE would be required to report to Congress on how the appropriated amounts would be distributed. Subsequent reprogramming would be limited to the lesser of 2% or \$2 million unless reported to Congress with at least 30 days' notice.

Section 913: Merit-Based Competition. Awards of funds authorized under this title would be permitted only through open competitions following an impartial review of scientific and technical merit.

Section 914: External Technical Review of Departmental Programs.

Advisory committees would be established for DOE programs in energy efficiency, renewable energy, nuclear energy, and fossil energy. The requirement could be met by existing DOE committees. Existing advisory committees would continue for the programs of the Office of Science, and the chairs of the Office of Science committees would constitute a Science Advisory Committee for the Director of the Office. DOE would be directed to arrange with the National Academy of Sciences to review and assess the programs authorized by this title, and reports on the results of these reviews and assessments would be due to Congress within two years of enactment.

Section 915: Competitive Award of Management Contracts.

Management and operating contracts for DOE national laboratories (except Livermore, Los Alamos, Sandia, and Savannah River) would have to be awarded competitively unless the Secretary of Energy granted a waiver on a case-by-case basis. The Secretary would not be permitted to delegate his waiver authority and would have to notify Congress at least 60 days before awarding a non-competitive contract.

In the past, management contracts at most DOE laboratories have been extended without competition. In some cases, laboratories have been managed by the same contractor for 60 years or more. In November 2003, DOE released the report of a blue-ribbon commission that it established to examine this issue. The commission's report is available online at [<http://www.seab.doe.gov/publications/brcDraftRpt.pdf>]. It states that "the issue of whether competition should be routinely used for research and development laboratories is subject to wide and varied opinions."

Section 916: National Laboratory Designation. DOE would be prohibited from designating additional facilities as national laboratories, beyond those defined in **Sec. 900**.

Section 917: Report on Equal Employment Opportunity Practices.

DOE would be required to report to Congress with one year and every two years thereafter on equal employment opportunity practices at the national laboratories.

Section 918: User Facility Best Practices Plan. No DOE facility would be permitted to begin operating as a user facility unless DOE had developed and transmitted to Congress a plan for staffing the facility, allocating time fairly to its users, and operating it in a safe and fiscally prudent manner.

Section 919: Support for Science and Energy Infrastructure and Facilities. DOE would be directed to develop and implement a strategy for maintaining existing facilities and infrastructure, closing unnecessary facilities, modifying facilities, and building new facilities. A report to Congress would be required by June 1, 2007, summarizing the strategy.

Section 920: Coordination Plan. DOE would be directed to develop a plan to improve coordination and collaboration in research, development, demonstration, and commercial application activities across DOE organizational boundaries. A conference of program managers from the Office of Science and the applied programs would be convened as part of the process of developing this plan. DOE

would be required to transmit the plan to Congress within nine months and transmit a revised version every two years thereafter.

Section 921: Availability of Funds. Funds authorized under this title would remain available for three years.

Subtitle C — Energy Efficiency

Chapter 1 — Vehicles, Buildings, and Industries

Section 922: Programs. General objectives would be set for DOE energy efficiency programs in terms of energy security, reduced costs, and environmental impacts. A report would be required to provide cost and performance baselines and set quantitative targets for energy and cost savings over five fiscal years.

Section 923: Vehicles. DOE would be directed to conduct a research, development, demonstration, and commercial application (RDD&C) program for hybrid and electric vehicles, advanced engines, advanced materials, and advanced drivetrains. Also, a hydrogen propulsion and infrastructure RDD&C program would be established.

Section 924: Buildings. This provision would direct DOE to conduct an RDD&C program to improve the energy efficiency and environmental performance of commercial, industrial, institutional, and residential buildings. This program is to include advanced controls, building envelope, building components (e.g. lighting, appliances), and onsite renewable energy use. Also, a pilot grant program would be created to help businesses and organizations demonstrate energy efficiency technologies for buildings. It would provide up to 50% of design and energy modeling costs, with a maximum of \$50,000. Further, DOE would be directed to work with the National Institute of Building Sciences to assess voluntary building energy performance standards.

Section 925: Industries. This provision would direct DOE to conduct an RDD&C program to improve the energy efficiency, environmental performance, and process efficiency of energy-intensive and waste-intensive industries. This program would include RDD&C on advanced control devices to improve the efficiency of electric motors, including those used in industrial settings.

Section 926: Demonstration and Commercial Application. DOE would be directed to consider applying more efficient technologies to improve the energy efficiency of equipment and test procedures used to measure appliance energy efficiency. Further, DOE would be required to coordinate with public and private organizations to study means of updating building energy codes. Also, a DOE grant program (50% federal match) would be established to support state and local governments, universities, and nonprofit organizations to create a network of Advanced Energy Technology Transfer Centers. Additionally, this section would require that a periodic report to Congress be prepared on activities generated by the foregoing provisions.

Section 927: Secondary Electric Vehicle Battery Use Program. A program would be established at DOE for RDD&C on applications of used electric vehicle batteries for utility and commercial power storage and power quality.

Section 928: Next Generation Lighting Initiative. A DOE program would be created that aims to develop advanced white light-emitting diodes (LEDs) for high efficiency lighting. These LEDs are expected to be more efficient than incandescent and fluorescent lights. Also, DOE would be directed to arrange for the National Academy of Sciences to conduct periodic reviews of the initiative.

Section 929: Definitions. This section would define the phrase “cost-effective” in terms of simple payback within 10 years and define “whole-buildings approach” in terms of a life-cycle basis for energy use and costs.

Section 930: Authorization of Appropriations. For the preceding sections of Subtitle C, this provision sets out authorization figures for FY2006 through FY2010.

Section 931: Limitation on Use of Funds. This section would prohibit the use of funds authorized by **Sec. 930** for energy efficiency regulations and for DOE’s Weatherization, State Energy, and Federal Energy Management Programs.

Chapter 2 — Distributed Energy and Electric Energy Systems

Section 932: Distributed Energy. This provision would authorize a DOE RDD&C program for a variety of technologies that includes the integration of renewable energy, fuel cells, combined heat and power (CHP), microturbines, and other equipment. Also, DOE would be directed to make competitive grants to consortia to develop micro-cogeneration technology, including systems that could be used for residential heating, and to report to Congress on outcome measures that cover five-year cost and energy-saving performance baselines.

Section 933: Electricity Transmission and Distribution and Energy Assurance. This provision would authorize a DOE RDD&C program aimed at improving the energy efficiency and reliability of the nation’s electric transmission and distribution system. Also, the program would focus on ways to protect against severe energy supply disruptions. The program would include a focus on technologies for delivery and storage, grid reliability, load reduction, high temperature superconductivity, and others. Further, a report to Congress would be required, which covers outcome measures with five-year cost and energy-saving performance baselines.

Section 933A: Advanced Portable Power Devices. DOE would be directed to establish an RDD&C program for small-scale mechanical and electromechanical devices that can be used for communications, mobility enhancement, medical needs, and other purposes. Further, the provision would direct DOE to utilize the resources of universities that have demonstrated capability to develop these devices for civilian or military use.

Section 934: Authorization of Appropriations. For the programs in Sections 932, 933, and 933A, this provision would authorize appropriations for FY2006 through FY2010.

Subtitle D — Renewable Energy

Section 935: Findings. One finding would be that renewable energy is a growth industry in which the United States is losing market share. Specifically, the U.S. share of the global solar equipment market has dropped from 44% in 1996 to 13% in 2003. Also, in 2003, the U.S. government spent considerably less than Germany and Japan on solar RDD&C, and the U.S. solar industry employed less than one-fifth as many people as the industries in Germany and Japan. Two other key findings would be that the United States is increasingly dependent on imported energy and that the high cost of fossil fuels hurts the economy. Further findings would include that renewable energy can reduce demand for imported energy and small reductions in demand can yield large reductions in price.

Section 936: Definitions. “Biobased product” would be defined as a commercial or industrial product (other than food or feed) that is composed mainly of agricultural or forestry materials. “Cellulosic biomass” would be defined as a crop grown to produce lignocellulose or hemicellulose as a feedstock. This could include barley grain, rice matter, soybean matter, bagasse, forest thinnings, or other materials.

Section 937: Programs. DOE would be directed to conduct a renewable energy RDD&C program with goals that include improving energy security, reducing costs, decreasing environmental impacts, and increasing equipment exports. Further, a report to Congress would be required, which covers outcome measures with five-year cost and energy-saving performance baselines.

Section 938: Solar. DOE would be required to conduct an RDD&C program for solar energy, including photovoltaics, solar hot water, solar space heating, and concentrating solar power. Also, DOE would be required to include efforts to develop products that could be easily integrated into new and existing buildings and manufacturing techniques that could produce low-cost, high quality equipment.

Section 939: Bioenergy Programs. DOE would be directed to conduct programs on cellulosic biomass, biofuels, bio-based products, integrated biorefineries, and university biodiesel fuel use for electric power. Also, grants would be established to support these programs at Historically Black Colleges and Universities, Tribal Colleges, and Hispanic-Serving Institutions.

Section 940: Wind. This provision would authorize the wind energy RDD&C program at DOE. Covered activities would include low-speed wind, offshore wind, testing and verification, and distributed wind energy generation.

Section 939: Geothermal. This provision would authorize the geothermal energy RDD&C program at DOE. The program would focus on resource detection, decreasing drilling and maintenance costs, mineral production, and reservoir management.

Section 942: Photovoltaic Demonstration Program. DOE would be required to make grants to states to support solar photovoltaic demonstration projects, providing up to 40% of a project's costs (maximum \$1 million). Also, DOE would be required to report to Congress on program costs and the amount of capacity installed.

Section 943: Additional Programs. DOE would be empowered to conduct programs on ocean and wave energy, and combinations of renewable energy technologies with one another and with other energy technologies. Also, DOE would be required to arrange with the National Academy of Sciences to conduct a study on renewable energy generation from the ocean, including energy from waves, tides, and currents, and from the variation in water temperature with ocean depth (ocean thermal energy). Additionally, DOE would be required to conduct an innovative program to put renewable energy equipment in state and local buildings, providing up to 40% of a project's incremental costs.

Section 944: Analysis and Evaluation. DOE would be required to conduct analysis and evaluation in support of the programs under this subtitle. Up to 1% of the funds for this subtitle could be designated for these activities, including economic and technical analysis of renewable energy resources and potential and analysis of past performance in terms of technical advances and market penetration.

Section 945: Authorization of Appropriations. Funding for DOE renewable energy programs would be authorized for five fiscal years. Also, specific authorizations would be provided for bioenergy, concentrating solar power, and public buildings. Funding for Renewable Support and Implementation would be excluded.

Subtitle E — Nuclear Energy

Section 946: Definition of Junior Faculty. For the purpose of receiving grants under Section 949, junior faculty members would be defined as having held doctorates less than 10 years.

Section 947: Nuclear Energy Programs. DOE would be required to conduct nuclear energy research, development, demonstration, and commercial application programs, including DOE nuclear R&D infrastructure support. Annual performance reports on the programs must be submitted to Congress.

Section 948: Advanced Fuel Recycling Program. DOE would be required to conduct a program on advanced technologies for the reprocessing of spent nuclear fuel. The technologies should be resistant to nuclear weapons proliferation and support alternative spent fuel disposal strategies and advanced reactor concepts. DOE is currently implementing the Advanced Fuel Cycle Initiative without a specific funding authorization. Spent fuel recycling or reprocessing involves the extraction of plutonium and uranium from spent nuclear fuel for use in new fuel. Supporters contend that it could extend domestic energy supplies and reduce the hazard posed by nuclear waste, while opponents are concerned that the extracted plutonium could be used for weapons.

Section 949: University Nuclear Science and Engineering Support.

DOE would be required to support human resources and infrastructure in nuclear science and engineering and related fields. The program would include fellowship and faculty assistance programs and support for fundamental and collaborative research. The program would also be authorized to help convert research reactors to low-enriched fuels, support training in reactor relicensing and upgrading, and provide funding for research reactor improvements. DOE funding for research projects could be used for some of the operating costs of research reactors used in those projects. This section would add new statutory requirements to the existing DOE University Reactor Fuel Assistance and Support Program.

Section 950: University-National Laboratory Interactions.

DOE would be required to conduct a nuclear science and technology fellowship program for university professors to spend sabbaticals at National Laboratories and a visiting scientist program to allow National Laboratory staff to spend time in university nuclear departments.

Section 951: Nuclear Power 2010 Program.

DOE would be required to carry out the existing Nuclear Power 2010 Program to encourage deployment of new commercial reactors as soon as feasible.

Section 952: Generation IV Nuclear Energy Systems Initiative.

DOE would be required to carry out the existing Generation IV Nuclear Energy Systems Initiative, which supports development of advanced concepts that could replace existing commercial reactor technology. The program would have to include proliferation-resistant advanced reactor designs that, in comparison with existing reactors, would have higher efficiency, lower cost, improved safety, and lower rates of high-level waste production.

Section 953-955: Infrastructure and Facilities.

DOE would be required to operate and maintain infrastructure and facilities for nuclear energy programs (**Sec. 953**). DOE would have to develop an inventory of nuclear energy infrastructure and a priority list of needed improvements (**Sec. 954**). A comprehensive plan would be required for the facilities at Idaho National Laboratory, which DOE has designated as its lead laboratory for nuclear energy programs (**Sec. 955**).

Section 956: Authorization of Appropriations.

Funding for DOE nuclear energy programs in Sections 948-955 are authorized for FY2006-2010.

Sections 957-961: Next Generation Nuclear Plant.

DOE would be required to design, build, and operate an advanced technology nuclear reactor by 2015. For development and design of the reactor, \$150 million per year would be authorized for FY2006-FY2010. For construction, \$500 million would be authorized, and such sums as necessary would be authorized for operation. This program could demonstrate Generation IV reactor technology authorized under **Sec. 952**. Generation IV technology could also be demonstrated by the hydrogen production reactor to be constructed at Idaho National Laboratory under **Sec. 651**.

Subtitle F — Fossil Energy

Chapter 1 — Research Programs

Section 962: Enhanced Fossil Energy Research and Development Programs. Specified priority programs are spelled out to improve the efficiency, effectiveness and environmental performance of fossil energy production, upgrading, conversion, and consumption.

Section 963: Fossil Research and Development. The objective of the Fossil R&D program would be to reduce emissions from fossil fuel use such as mercury, fine particles, smog, and carbon dioxide using technologies including pre-combustion technologies.

Section 964: Oil and Gas Research and Development. Research programs would be focused on assisting small domestic producers of oil and gas, the extraction of methane hydrates, improving other extraction technologies, and reducing the costs of acquiring unconventional fuels.

Section 965: Transportation Fuels. The Secretary would conduct R&D projects on the commercialization of coal and natural gas to transportation fuel and indirect liquefaction of coal and biomass.

Section 966: Fuel Cells. The Secretary would conduct R&D on fuel cell commercialization including fuel cell proton exchange membrane technology.

Section 967: Carbon Dioxide Capture Research and Development. The Secretary would support a 10-year R&D program aimed at developing carbon dioxide capture technologies for pulverized coal combustion units. The program would focus on developing add-on carbon dioxide capture technologies, combustion technologies and increasing the efficiency of the overall combustion system. In addition, the Secretary would support a carbon sequestration program with the private sector through regional partnerships.

Section 968: Authorization of Appropriations. Funds are authorized in general and for programs described in **Sec. 967** for years FY2006- FY2010.

Section 968A: Western Michigan Demonstration Project. The EPA in consultation with the State of Michigan would conduct demonstration projects to assess the effect of transported ozone and ozone precursors in southwest Michigan.

Section 968B: Western Hemisphere Energy Cooperation. The Secretary would carry out a program to promote cooperation on energy issues among Western Hemisphere countries including, to the extent practicable, universities. Authorized funding would be for years FY2006-FY2010.

Section 968C: Arctic Engineering Research Center. The Secretary of Energy in consultation with the Secretary of Transportation would establish the Arctic Engineering Research Center in Fairbanks, AK, to conduct R&D on improving the infrastructure in the Arctic region. A sum of \$3 million would

authorized and made available in a grant to a specified university each year for years FY2006-FY2011.

Section 968D: Barrow Geophysical Research Facility. The Secretary of Commerce in consultation with the Secretaries of Energy and the Interior and Director of the National Science Foundation and the Administrator of the EPA would establish the “Barrow Geophysical Research Facility in Barrow, Alaska. A sum of \$61 million would be authorized to be appropriated.

Chapter 2 — Ultra-Deepwater and Unconventional Natural Gas and Other Petroleum Resources

Sections 969 - 976: Ultra-Deepwater and Unconventional Natural Gas and Other Petroleum Resources. Chapter 2 of Subtitle F would authorize and provide funding for a DOE oil and gas research awards program. Advances in seismic surveying, improved drilling methods, and other new technology have allowed oil and gas drilling at greater depths on the outer continental shelf (OCS) and greater production of unconventional on-shore resources. While the OCS is a major source of domestic oil and gas supply, offshore drilling proposals often generate substantial environmental controversy.

Current Law. DOE R&D programs for natural gas and petroleum technologies are funded in the annual Energy and Water Development appropriations bill.

H.R. 6. R&D would be directed toward the demonstration and commercial application of technology for ultra-deepwater oil and gas production, including unconventional oil and gas resources. The R&D program would be designed to benefit “small producers” and address environmental concerns. Complementary research would be carried out through DOE’s National Energy Technology Laboratory (**Sec. 969**). The Secretary of Energy could contract with a consortium to recommend ultra-deepwater research projects and manage funding awarded under this program. The Secretary would make competitive awards to research consortia for conducting R&D on advanced technologies for recovering coalbed methane and other unconventional resources (**Sec. 970**). The Secretary could reduce or eliminate the non-federal cost-share requirement for awards under this program, 2.5% of each award would be designated for technology transfer, and various additional award requirements would be stipulated (**Sec. 971**). An Ultra-Deepwater Advisory Committee and an Unconventional Resources Technology Advisory Committee would be established (**Sec. 972**) as would criteria for foreign participation (**Sec. 973**). The authority in this part would terminate at the end of FY2014 (**Sec. 974**). The terms deepwater, ultra-deepwater, unconventional oil and gas, independent producers of oil and gas, and others would be defined (**Sec. 975**).

The Ultra-Deepwater and Unconventional Natural Gas and Other Petroleum Research Fund would be established. Revenues derived from federal oil and gas leases, after all previously mandated distributions of those revenues had been made, would be deposited in the fund, up to \$200 million annually during FY2005-FY2014. The Secretary of Energy could obligate money from the fund for programs in this part

without an overall annual limit, although annual percentage allocations among the programs would be spelled out (**Sec. 976**).

Title X — Department of Energy Management

Section 1002: Other Transactions Authority. This would amend Section 646 of the DOE Organization Act (42 U.S.C. 7256) to allow the Energy Secretary to enter into additional transactions furthering research, development, or demonstration without requiring that title to inventions be vested in the federal government as currently specified by Section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5908) or section 152 of the Atomic Energy Act of 1954 (42 U.S.C. 2182).

Section 1003: University Collaboration. The Secretary of Energy would report on the feasibility of promoting collaboration between Doctoral Research Extensive Universities in grants, contracts, and cooperative agreements made by the Secretary for energy projects. This section was not in the 108th Congress conference bill.

Section 1004: Sense of Congress. This section would establish a sense of Congress that the Secretary of Energy should apply more stringent procurement and inventory controls to prevent waste of taxpayer funds, and the Department's Inspector General should continue to closely review the use of purchase cards. This section was not in the 108th Congress conference bill.

Title XII — Electricity

Section 1201: Short Title. This title may be cited as the “Electric Reliability Act of 2005.”

Subtitle A — Reliability Standards

Section 1211: Electric Reliability Standards. This section would require the Federal Energy Regulatory Commission to promulgate rules within 180 days of enactment to create a FERC-certified electric reliability organization (ERO). The North American Electric Reliability Council (NERC) currently has responsibility for reliability of the bulk power system. NERC has established reliability guidelines but has no enforcement authority. The Federal Power Act currently gives FERC jurisdiction over unbundled transmission and authority to regulate wholesale rates; however, no authority was provided to regulate reliability. Under this section, the ERO would develop and enforce reliability standards for the bulk-power system, including cybersecurity protection. All ERO standards would be approved by FERC. Under this title, the ERO could impose penalties on a user, owner, or operator of the bulk-power system that violates any FERC-approved reliability standard. In addition, FERC could order compliance with a reliability standard and could impose a penalty if FERC finds that a user, owner, or operator of the bulk-power system has engaged in or is about to engage in a violation of a reliability standard. This provision would

not give an ERO or FERC authorization to order construction of additional generation or transmission capacity.

This provision would also require that FERC establish a regional advisory body if requested by at least two-thirds of the states within a region that have more than half of their electric load served within that region. The advisory body would be composed of one member from each participating state in the region, appointed by the Governor of each state, and could provide advice to the ERO or FERC on reliability standards, proposed regional entities, proposed fees, and any other responsibilities requested by FERC. The entire reliability provision would not apply to Alaska or Hawaii. The state of New York is authorized to develop rules that would result in greater reliability for New York, as long as those rules do not result in lower reliability for neighboring states.

H.R. 6 would require the ERO to be funded through contributions from its utility members. The Congressional Budget Office (CBO) determined that, under the Unfunded Mandates Reform Act (UMRA) of 1995,¹² these contributions would constitute an unfunded mandate both on the private sector and intergovernmentally, because both private sector utilities and those run by local governments (munis) would be obligated to contribute. H.R. 6 would limit the total amount “of all dues, fees, and other charges collected by the ERO” to \$50,000,000 annually, with no adjustment for inflation, through 2015. This limit was initially included in H.R. 6 to avoid a point of order based on the budget resolution. UMRA limits would not apply to dues collected from Canadian utilities, and it is unclear whether the \$50,000,000 limit on the ERO budget applies to fees collected from U.S. and Canadian utilities or just the U.S. utilities’ contributions.¹³ This limit would restrict the cost of this mandate to less than the threshold at which UMRA subjects congressional consideration of legislation containing intergovernmental mandates to a point of order. The 2005 budget for NERC and all of its regional entities, however, is \$51,950,000, of which munis contributed approximately \$6,370,000, and the ERO would be required to engage in functions beyond what NERC already performs. One new function is the ability of the ERO to impose and collect penalties. A \$50,000,000 cap on all dues, fees, and other charges that can be collected by the ERO could limit the penalties that could be collected by the ERO.

CBO provided no separate estimate for the cost of the mandates in this subtitle, but estimated that H.R. 6 as a whole contains both intergovernmental and private sector unfunded mandates that would exceed the applicable thresholds. The CBO estimate stated that the cost of complying with intergovernmental mandates, in aggregate, could be significant and likely would exceed the threshold established in UMRA (\$62 million in 2005, adjusted annually for inflation) at some point over the next five years because CBO expects future damage awards for state and local

¹² P.L. 104-4, 109 Stat. 48 *et seq.*

¹³ According to NERC, Canadian utilities contribute approximately 12.5% to the total NERC budget, leaving U.S. utilities contributing approximately \$45,500,000 to the 2005 NERC budget.

governments under the bill's safe harbor provision (title XV) would likely be reduced.¹⁴

Section 1211(c) would authorize to be appropriated not more than \$50 million per year for fiscal years 2006 through 2015 for all activities under the amendment to the Federal Power Act that creates the ERO. This is in addition to the dues paid by the ERO members. It is unclear whether FERC would be the sole recipient of the \$50 million annual authorization since section 1211(b) specifically states that the ERO, and its regional entities, are not Departments, agencies, or instrumentalities of the United States Government.

The proposed legislation is intended to provide federal jurisdiction over activities that are required to support reliability of the U.S. bulk power system. Clarifying FERC authority to establish and regulate an ERO is intended to improve reliability as restructuring of the U.S. bulk power system proceeds. Similar provisions were included in the conference report of H.R. 6 in the 108th Congress.

Advocates of giving FERC authority over the ERO contend that central jurisdiction would provide more accountability. FERC would be ultimately responsible for reliability issues. If the penalties employed by the ERO were not successful, then FERC would have the authority to enforce penalties for entities that did not comply with reliability standards. Establishing this new relationship between FERC and the ERO would have the potential to improve coordination between market functions and reliability functions. Similar legislation has been introduced during the past several sessions of Congress, but has not been enacted, despite general support. Minor opposition to this proposal has centered on giving FERC jurisdiction over bulk power system reliability, contending that FERC has no experience in this area. If FERC is given this authority, it would have to rely on the ERO for much of its expertise. Placing FERC in this position may add to the uncertainty associated with the changes in institutional structure as FERC takes on this new role.

Section 1221: Siting of Interstate Electric Transmission Facilities.

The Secretary of Energy would be required to conduct a study of electric transmission congestion every three years. Based on the findings, the Secretary of Energy could designate a geographic area as being congested. Under certain conditions, FERC would be authorized to issue construction permits. Under proposed Federal Power Act (FPA) section 216(d), affected states, federal agencies, Indian tribes, property owners, and other interested parties would have an opportunity to present their views and recommendations with respect to the need for and impact of a proposed construction permit. However, there is no requirement for a specific comment period. New FPA section 216(e) would allow permit holders to petition in U.S. District Court to acquire rights-of-way through the exercise of the right of eminent domain. Any exercise of eminent domain authority would be considered to be takings of private property for which just compensation is due. New FPA section

¹⁴ Congressional Budget Office. Letter to Honorable David Dreier. April 19, 2005. The safe harbor provision would potentially provide a liability shield for all those who might be sued for supplying a defective renewable fuel or methyl tertiary butyl ether (MTBE).

216(g) does not state whether property owners would be required to reimburse compensation if the rights-of-way were transferred back to the owner.

An applicant for federal authorization to site transmission facilities on federal lands could request that the Department of Energy be the lead agency to coordinate environmental review and other federal authorization. Once a completed application is submitted, all related environmental reviews would be required to be completed within one year unless another federal law makes that impossible. FPA section 216(h) would give the Department of Energy new authority to prepare environmental documents and appears to give DOE additional decision-making authority for rights-of-way and siting on federal lands. This would appear to give DOE input into the decision process for creating rights-of-way. Review under section 503 of the Federal Land Policy and Management Act could be streamlined by relying on prior analyses. If a federal agency has denied an authorization required by a transmission or distributions facility, the denial could be appealed by the applicant or relevant state to the Secretary of Energy. The Secretary of Energy would be required to issue a decision within 90 days of the appeal's filing. States could enter into interstate compacts for the purposes of siting transmission facilities and the Secretary of Energy could provide technical assistance. This section would not apply to the Electric Reliability Council of Texas (ERCOT). A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1222: Third-Party Finance. The Western Area Power Administration (WAPA) and the Southwestern Power Administration (SWPA) would be able to either continue to design, develop, construct, operate, maintain, or own transmission facilities within their regions or participate with other entities for the same purposes if: the Secretary of Energy designates the area as a National Interest Electric Transmission Corridor and the project would reduce congestion, or the project is needed to accommodate projected increases in demand for transmission capacity. The project would be required to be consistent with the needs identified by the appropriate Regional Transmission Organization or Independent System Operator. No more than \$100 million from third-party financing may be used during fiscal years 2006 through 2015. A similar provision was included in the conference report of H.R. 6 in the 108th Congress. Under current law the enabling statutes for power marketing administrations may restrict third-party financing, construction, operation, and maintenance of transmission facilities.¹⁵

Section 1223: Transmission System Monitoring. Within six months of enactment, the Secretary of Energy and the Federal Energy Regulatory Commission would be required to complete a study and report to Congress on what would be required to create and implement a transmission monitoring system for the Eastern and Western interconnections. The monitoring system would provide all transmission system owners and Regional Transmission Organizations real-time information on the operating status of all transmission lines. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

¹⁵ 16 U.S.C. 460 (SWPA) and 43 U.S.C. 485 (WAPA).

Section 1224: Advanced Transmission Technologies. FERC would be directed to encourage deployment of advanced transmission technologies. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1225: Electric Transmission and Distribution Programs. The Secretary of Energy acting through the Director of the Office of Electric Transmission and Distribution would be required to implement a program to promote reliability and efficiency of the electric transmission system. Within one year of enactment, the Secretary of Energy would be required to submit to Congress a report detailing the program's five-year plan. Within two years of enactment, the Secretary of Energy would be required to submit to Congress a report detailing the progress of the program. The Secretary of Energy would be directed to establish a research, development, demonstration, and commercial application initiative that would focus on high-temperature superconductivity. For this project, appropriations would be authorized for FY2006 through FY2010. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1226: Advanced Power System Technology Incentive Program. A program would be established to provide incentive payments to owners or operators of advanced power generation systems. Eligible systems would include advanced fuel cells, turbines, or hybrid power systems. For FY2006 through FY2012 an annual appropriation of \$10 million would be authorized. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1227: Office of Electric Transmission and Distribution. This would amend Title II of the Department of Energy Organization Act¹⁶ and would establish an Office of Electric Transmission and Distribution. The Director of the office would, in part, coordinate and develop a strategy to improve electric transmission distribution, implement recommendations from the Department of Energy's National Transmission Grid Study, oversee research, development, and demonstration to support federal energy policy related to electricity transmission and distribution, and develop programs for workforce training and power transmission engineering. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Subtitle C — Transmission Operation Improvements

Section 1231: Open Nondiscriminatory Access. FERC would be authorized to require, by rule or order, unregulated transmitting utilities (power marketing administrations, state entities, and rural electric cooperatives) to charge rates comparable to what they charge themselves and require that the terms and conditions of the sales be comparable to those required of other utilities. Currently under the Federal Power Act (Section 201(f)), federal power marketing administrations, state entities, and rural electric cooperatives are not subject to FERC's ratemaking. In §1231, exemptions are established for utilities selling less than 4 million megawatt-hours of electricity per year, for distribution utilities, and

¹⁶ 42 U.S.C. 7131 et seq.

for utilities that own or operate transmission facilities that are not necessary to facilitate a nationwide interconnected transmission system. This exemption could be revoked to maintain transmission system reliability. FERC would not be authorized to order states or municipalities to take action under this section if such action would constitute a private use under section 141 of the Internal Revenue Code of 1986. FERC may remand transmission rates to an unregulated transmitting utility if the rates do not comply with this section. FERC is not authorized to order an unregulated transmitting utility to join a Regional Transmission Organization or other FERC-approved independent transmission organization. This section is often referred to as “FERC-lite.” A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1232: Sense of Congress on Regional Transmission Organizations. This would establish a sense of Congress that utilities should voluntarily become members of regional transmission organizations. A similar provision was included in the conference report of H.R. 6 in the 108th Congress. Currently, section 202(a) of the Federal Power Act directs FERC to promote and encourage regional districts for the voluntary interconnection and coordination of transmission facilities by public utilities and non-public utilities for the purpose of assuring an abundant supply of electric energy throughout the United States with the greatest possible economy.

Section 1233: Regional Transmission Organization Applications Progress Report. FERC would be required to report to Congress within 120 days of enactment the status of all regional transmission organization applications. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1234: Federal Utility Participation in Regional Transmission Organizations. Federal utilities (power marketing administrations or the Tennessee Valley Authority) would be authorized to participate in regional transmission organizations. A law allowing federal utilities to study formation and operation of a regional transmission organization would be repealed.¹⁷ A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1235: Standard Market Design. FERC’s proposed rulemaking on standard market design would be remanded to FERC for reconsideration. No final rulemaking, including any rule or order of general applicability to the standard market design proposed rulemaking, could be issued before October 31, 2006, or could take effect before December 31, 2006. This section would retain FERC’s ability to issue rules or orders and act on regional transmission organization or independent system operator filings. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

¹⁷ 16 U.S.C. 824n

On July 31, 2002, FERC issued a Notice of Proposed Rulemaking (NOPR) on standard market design (SMD).¹⁸ FERC's stated goal of establishing SMD requirements in conjunction with a standardized transmission service is to create "seamless" wholesale power markets that allow sellers to transact easily across transmission grid boundaries. The proposed rulemaking would create a new tariff under which each transmission owner would be required to turn over operation of its transmission system to an unaffiliated independent transmission provider (ITP). The ITP, which could be an RTO, would provide service to all customers and run energy markets. Under the NOPR, congestion would be managed with locational marginal pricing. The NOPR comment period originally was 75 days (November 15, 2002), but the comment period was extended to January 10, 2003, for the following issues: 1) market design for the Western Interconnection; 2) transmission pricing plan, including participant funding; 3) Regional State Advisory Committees and state participation; 4) resource adequacy; and 5) congestion revenue rights and transition issues.

Under the NOPR, FERC would assert jurisdiction over all power transmission, including service to bundled retail customers. Commissioners from 15 states (Alabama, Arkansas, California, Georgia, Idaho, Kentucky, Louisiana, Mississippi, New Hampshire, North Carolina, South Carolina, Oregon, South Dakota, Washington, and Wyoming) have argued that the SMD proposal usurps state authority. On August 15, 2002, state regulators from 22 states and the District of Columbia (Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Montana, North Dakota, Ohio, Oklahoma, Texas, Wisconsin, Delaware, the District of Columbia, New Jersey, New York, Pennsylvania, West Virginia, Connecticut, Maine, Massachusetts, New Hampshire, and Rhode Island) released a statement that "voiced support for FERC's ongoing effort to remedy undue discrimination in the use of the nation's interstate high voltage transmission system in order to create a truly competitive bulk power market." Some industry groups have voiced concerns about the implementation of SMD.

On April 28, 2003, FERC staff issued *Wholesale Power Market Platform*, a White Paper that intended to clarify FERC's SMD proposal. The White Paper responds to approximately 1,000 sets of formal comments submitted to FERC. In the White Paper, FERC states its intention to eliminate a proposed requirement that utilities join an Independent Transmission Provider. Instead, the final rule would require utilities to join an RTO or ISO. In the NOPR, FERC proposed to assert jurisdiction over the transmission component of bundled retail service. The White Paper reverses this position and states that the final rule will not assert new FERC jurisdiction over bundled retail sales.

Some state officials have expressed concern that the proposed rule would infringe on state authority. FERC responded to this in the White Paper by clarifying that the final rule would not include a requirement for a minimum level of resource adequacy. In addition, the final rule would eliminate the NOPR's requirement that Firm Transmission Rights be auctioned. The White Paper noted that each RTO or ISO would need to have a cost recovery policy outlined in its tariff, but each region

¹⁸ Docket No. RM01-12-000

may differ on how participant funding would be used. In addition, FERC stated that the final rule would allow for phased implementation to address regional differences.

The report language that accompanied the FY2003 Consolidated Appropriations Resolution asked the Department of Energy to analyze the SMD NOPR's impact on wholesale electricity prices, and the safety and reliability of generation and transmission facilities.¹⁹ DOE issued its report to Congress on April 30, 2003, but did not include changes from FERC's White Paper in its analysis. DOE, in part, quantitatively analyzed the wholesale and retail price impacts of SMD using two economic models: General Electric's Multi-Area Production Simulation (MAPS) and DOE's Policy Office Electricity Modeling System (POEMS).

Some of the assumptions that DOE uses are: the annual increase in electricity demand is assumed to be approximately 1.8% per year from 2005 to 2020; most regions are assumed to have reserve margins of 15%; current environmental laws and regulations are assumed to apply; generator efficiency for fossil steam plants is assumed to be 2% to 4% higher in new RTO regions with SMD. In the non-SMD case, the models were not able to take into account freezes on retail rates in states that are transitioning to competitive markets, and no increase in transmission capacity is assumed. Under the SMD case, a 5% increase in transmission capability by 2005 is assumed by DOE due to improved operational efficiency at regional seams. In addition, DOE assumes that adopting the SMD would result in some savings that are difficult to quantify but would be a result of several factors including the consolidation of control areas from the currently existing 150, the possible avoidance of capital cost and software expenditures that would have been needed at existing control centers, improved regional planning, and consistency of market design. DOE assigns a 10% savings due to these efficiency improvements. DOE believes that the assumptions used in the models are conservative and result in an underestimation of the net economic benefits of the SMD.

DOE calculates the median cost of FERC's SMD rule to be about \$760 million per year, or about 21 cents per megawatt-hour. The model's range for uncertainties is estimated to be about \$100 million. The cost varies significantly by region, ranging from 47 cents per megawatt-hour for GridFlorida to 12 cents per megawatt-hour for PJM.²⁰ Regions with existing RTOs have zero additional costs. Under the SMD case, the effects of SMD on retail rates are influenced to a significant extent by whether the states in question have cost-of-service regulation or competitive retail choice. DOE found that for some importing regions with cost-based rates, the net result could be increased costs associated with wholesale purchases, which would be passed through to retail customers. For some exporting regions with cost-based rates, additional utility revenues from exports are expected to lead to lower retail prices for the region under the SMD case. In contrast, in regions in which most states have adopted retail choice, increased electricity exports are expected to lead to higher market-clearing prices in the short-term markets and somewhat higher consumer

¹⁹ Conference report H.Rept. 108-10 to accompany H.J.Res. 2.

²⁰ The PJM control area includes all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.

prices. However, in areas such as California that are projected to see increased imports, lower wholesale prices and lower prices for consumers are expected. DOE found that the magnitude of the projected changes, both positive and negative, decreases through 2020. Overall, DOE projects the net benefit for all consumers would be about \$1 billion per year over the first six years, after factoring in the estimated \$760 million per year and RTO costs. Over the long-term (2016-2020), the net benefit is expected to be about \$700 million per year. However, the projected change in retail prices varies by region. The mid-Atlantic region is expected to see a 4% decrease in retail prices, but Illinois, Wisconsin, and Arizona are expected to have a 3% increase in retail prices as a result of SMD.

Section 1236: Native Load Service Obligation. This section would amend the Federal Power Act to clarify that a load-serving entity is entitled to use its transmission facilities or firm transmission rights to serve its existing customers before it is obligated to make its transmission capacity available for other uses. FERC would not be able to change any approved allocation of transmission rights by an RTO or ISO approved prior to January 1, 2005. This section contains language not included in the conference report on H.R. 6 from the 108th Congress to allow for public power utilities to enter into long-term contracts to serve their native load as well as giving them access to the transmission system.

Currently Section 201 of the Federal Power Act gives FERC jurisdiction over “the transmission of electric energy in interstate commerce and the sale of such energy at wholesale in interstate commerce.” Section 205 of the Federal Power Act prohibits utilities from granting “undue preference or advantage to any person or subject any person to any undue prejudice or disadvantage” (16 U.S.C. 824). The new language of this section is intended to clarify that reserving transmission for existing customers (native load) is not considered unduly discriminatory.

Section 1237: Study on the Benefits of Economic Dispatch. The Secretary of Energy, in consultation with the states, would be required to issue an annual report to Congress and the states on the current status of economic dispatch. Economic dispatch would be defined as “the operation of generation facilities to produce energy at the lowest cost to reliably serve consumers, recognizing any operational limits of generation and transmission facilities.” A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Subtitle D — Transmission Rate Reform

Section 1241: Transmission Infrastructure Investment. FERC would be required to establish a rule to create incentive-based transmission rates. FERC would be authorized to revise the rule. The rule would promote reliable and economically efficient electric transmission and generation, provide for a return on equity that would attract new investment in transmission, encourage use of technologies that increased the transfer capacity of existing transmission facilities, and allow for the recovery of all prudently incurred costs that are necessary to comply with mandatory reliability standards. In addition, FERC would be directed to implement incentive rate-making for utilities that join a Regional Transmission Organization or Independent System Operator. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Subtitle E — Amendments to PURPA

Section 1251: Net Metering and Additional Standards. For states that have not considered implementation and adoption of net metering standards, within three years of enactment, state regulatory authorities would be required to consider whether to implement net metering. Net metering service is defined as service to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility (e.g., solar or small generator) and delivered to local distribution facilities may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period. Net metering provisions were included in the conference report of H.R. 6 in the 108th Congress.

Section 1252: Smart Metering. For states that have not considered implementation and adoption of a smart metering standard, state regulatory authorities would be required to initiate an investigation within one year of enactment, and issue a decision within two years of enactment, whether to implement a standard for time-based meters and communications devices for all electric utility customers. These devices would allow customers to participate in time-based pricing rate schedules. This section would amend the Public Utility Regulatory Policies Act of 1978²¹ (PURPA) and would require the Secretary of Energy to provide consumer education on advanced metering and communications technologies, to identify and address barriers to adoption of demand response programs, and issue a report to Congress that identifies and quantifies the benefits of demand response. The Secretary of Energy would provide technical assistance to regional organizations to identify demand response potential and to develop demand response programs to respond to peak demand or emergency needs. FERC would be directed to issue an annual report, by region, to assess demand response resources. A provision for real-time pricing and time-of-use metering standards was included in the conference report of H.R. 6 in the 108th Congress.

Section 1253: Cogeneration and Small Power Production Purchase and Sale Requirements. Currently, §210 of PURPA requires utilities to purchase power from qualifying facilities and small power producers at a rate based on the utilities' avoided cost.²² This section would repeal the mandatory purchase requirement under §210 of PURPA for new contracts if FERC finds that a competitive electricity market exists and a qualifying facility has access to independently administered, auction-based day-ahead and real-time wholesale markets and long-term wholesale markets. Qualifying facilities would also need to have access to transmission and interconnection services provided by a FERC-approved regional transmission entity that provides non-discriminatory treatment for all customers. Ownership limitations under PURPA would be repealed. Repeal of the mandatory purchase requirement was included in the conference report of H.R. 6 in the 108th Congress.

²¹ P.L. 95-617.

²² 16 U.S.C. 824a-3.

The oil embargoes of the 1970s created concerns about the security of the nation's electricity supply and led to enactment of the Public Utility Regulatory Policies Act of 1978. For the first time, utilities were required to purchase power from outside sources. The purchase price was set at the utilities' "avoided cost," the cost they would have incurred to generate the additional power themselves, as determined by utility regulators. PURPA was established in part to augment electric utility generation with more efficiently produced electricity and to provide equitable rates to electric consumers.

In addition to PURPA, the Fuel Use Act of 1978 (FUA) helped qualifying facilities (QFs) become established.²³ Under FUA, utilities were not permitted to use natural gas to fuel new generating technology. QFs, which are by definition not utilities, were able to take advantage of abundant natural gas as well as new generating technology, such as combined-cycle plants that use hot gases from combustion turbines to generate additional power. These technologies lowered the financial threshold for entrance into the electricity generation business as well as shortened the lead time for constructing new plants. FUA was repealed in 1987, but by this time QFs and small power producers had gained a portion of the total electricity supply.

This influx of QF power challenged the cost-based rates that previously guided wholesale transactions. Before implementation of PURPA, FERC approved wholesale interstate electricity transactions based on the seller's costs to generate and transmit the power. Since nonutility generators typically do not have enough market power to influence the rates they charge, FERC began approving certain wholesale transactions whose rates were a result of a competitive bidding process. These rates are called market-based rates.

This first incremental change to traditional electricity regulation started a movement toward a market-oriented approach to electricity supply. Following the enactment of PURPA, two basic issues stimulated calls for further change: whether to encourage nonutility generation and whether to permit utilities to diversify into non-regulated activities.

The Energy Policy Act of 1992 (EPACT) removed several regulatory barriers for entry into electricity generation to increase competition of electricity supply.²⁴ However, EPACT does not permit FERC to mandate that utilities transmit exempt wholesale generator (EWG) power to retail consumers (commonly called "retail wheeling" or "retail competition"), an activity that remains under the jurisdiction of state public utility commissions. PURPA began to shift more regulatory responsibilities to the federal government, and EPACT continued that shift away from the states by creating new options for utilities and regulators to meet electricity demand.

Proponents of PURPA repeal — primarily investor-owned utilities (IOUs) located in the Northeast and in California — argue that their state regulators'

²³ P.L. 95-620.

²⁴ P.L. 102-486.

“misguided” implementation of PURPA in the early 1980s has forced them to pay contractually high prices for power they do not need. They argue that, given the current environment for cost-conscious competition, PURPA is outdated. The PURPA Reform Group, which promotes IOU interests, strongly supports repeal of §210 of PURPA contending that the current law’s mandatory purchase obligation is anti-competitive and anti-consumer.

Opponents of mandatory purchase requirement repeal (independent power producers, industrial power customers, most segments of the natural gas industry, the renewable energy industry, and environmental groups) have many reasons to support PURPA as it stands. Mainly, their argument is that PURPA introduced competition in the electric generating sector and, at the same time, helped promote wider use of cleaner, alternative fuels to generate electricity. Since the electric generating sector is not yet fully competitive, they argue, repeal of PURPA would decrease competition and impede the development of the renewable energy industry. Additionally, opponents of PURPA repeal argue that it would result in less competition and greater utility monopoly control over the electric industry. Some state regulators have expressed concern that §210 repeal would prevent them from deciding matters currently under their jurisdiction.

Section 1253: Interconnection. Each state regulatory authority and each nonregulated utility would consider establishing an interconnection standard for on-site generating facilities wishing to be connected to the local distribution facilities, if it has not already done so. Consideration of the standard would be commenced not later than one year after enactment and completed not later than two years after the date of enactment.

Subtitle F — Repeal of PUHCA

Section 1261: Short Title. This subtitle may be cited as the “Public Utility Holding Company Act of 2005.”

Section 1262: Definitions. This section would provide definitions for: affiliate, associate company, commission, company, electric utility company, exempt wholesale generator and foreign utility company, gas utility company, holding company, holding company system, jurisdictional rates, natural gas company, person, public utility, public-utility company, state commission, subsidiary company, and voting security.

Section 1263: Repeal of the Public Utility Holding Company Act of 1935. The Public Utility Holding Company Act of 1935 (PUHCA) would be repealed. The provision to repeal PUHCA was included in the conference report of H.R. 6 in the 108th Congress.

In general, the Public Utility Holding Company Act of 1935 currently sets forth the structure of holding companies by prohibiting all holding companies that are more than twice removed from the operating subsidiaries. It also federally regulates holding companies of investor-owned utilities, and provides for Securities and Exchange Commission (SEC) regulation of mergers and diversification proposals. Registered holding companies of subsidiaries are required to have SEC approval

prior to issuing securities; all loans and intercompany financial transactions are regulated by the SEC. A holding company can be exempt from PUHCA if its business operations and those of its subsidiaries occur within one state or within contiguous states.

Historically, electricity service was defined as a natural monopoly, meaning that the industry has (1) an inherent tendency toward declining long-term costs, (2) high threshold investment, and (3) technological conditions that limit the number of potential entrants. In addition, many regulators have considered unified control of generation, transmission, and distribution as the most efficient means of providing service. As a result, most people (about 75%) are currently served by a vertically integrated, investor-owned utility.

As the electric utility industry has evolved, however, there has been a growing belief that the historic classification of electric utilities as natural monopolies has been overtaken by events and that market forces can and should replace some of the traditional economic regulatory structure. For example, the existence of utilities that do not own all of their generating facilities, primarily cooperatives and publicly owned utilities, has provided evidence that vertical integration has not been necessary for providing efficient electric service. Moreover, recent changes in electric utility regulation and improved technologies have allowed additional generating capacity to be provided by independent firms rather than utilities.

The Public Utility Holding Company Act and the Federal Power Act (FPA) of 1935 (Title I and Title II of the Public Utility Act) established a regime of regulating electric utilities that gave specific and separate powers to the states and the federal government. A regulatory bargain was made between the government and utilities. In exchange for an exclusive franchise service territory, utilities must provide electricity to all users at reasonable, regulated rates. State regulatory commissions address intrastate utility activities, including wholesale and retail rate-making. State authority currently tends to be as broad and as varied as the states are diverse. At the least, a state public utility commission will have authority over retail rates, and often over investment and debt. At the other end of the spectrum, the state regulatory body will oversee many facets of utility operation. Despite this diversity, the essential mission of the state regulator in states that have not restructured is the establishment of retail electric prices. This is accomplished through an adversarial hearing process. The central issues in such cases are the total amount of money the utility will be permitted to collect and how the burden of the revenue requirement will be distributed among the various customer classes (residential, commercial, and industrial).

Under the FPA, federal economic regulation addresses wholesale transactions and rates for electric power flowing in interstate commerce. Federal regulation followed state regulation and is premised on the need to fill the regulatory vacuum resulting from the constitutional inability of states to regulate interstate commerce. In this bifurcation of regulatory jurisdiction, federal regulation is limited and conceived to supplement state regulation. FERC has the principal functions at the federal level for the economic regulation of the electric utility industry, including financial transactions, wholesale rate regulation, transactions involving transmission of unbundled retail electricity, interconnection and wheeling of wholesale electricity,

and ensuring adequate and reliable service. In addition, to prevent a recurrence of the abusive practices of the 1920s (e.g., cross-subsidization, self-dealing, pyramiding, etc.), SEC regulates utilities' corporate structure and business ventures under PUHCA.

The electric utility industry has been in the process of transformation. During the past two decades, there has been a major change in direction concerning generation. First, improved technologies have reduced the cost of generating electricity as well as the size of generating facilities. Prior preference for large-scale — often nuclear or coal-fired — powerplants has been supplanted by a preference for small-scale production facilities that can be brought on line more quickly and cheaply, with fewer regulatory impediments. Second, this has lowered the entry barrier to electricity generation and permitted non-utility entities to build profitable facilities.

One argument for additional PUHCA change has been made by electric utilities that want to further diversify their assets. Currently under PUHCA, a holding company can acquire securities or utility assets only if the SEC finds that such a purchase will improve the economic efficiency and service of an integrated public utility system. It has been argued that reform to allow diversification would improve the risk profile of electric utilities in much the same way as in other businesses: the risk of any one investment is diluted by the risk associated with all investments. Utilities have also argued that diversification would lead to better use of under-utilized resources (due to the seasonal nature of electric demand). Utility holding companies that have been exempt from SEC regulation argue that PUHCA discourages diversification because the SEC could repeal exempt status if exemption would be “detrimental to the public interest.”

For a number of years there has been significant bipartisan congressional support for repealing much of PUHCA. Since the 1980s, the Securities and Exchange Commission has testified before Congress that many provisions of PUHCA are no longer relevant and other provisions are redundant with state and other federal regulations.²⁵ However, as a result of Enron's dealings and collapse, some in Congress have taken a somewhat different view toward significantly amending or repealing PUHCA.²⁶ Even though Enron had claimed exemption from PUHCA, on February 6, 2003, Securities and Exchange Commission Chief Administrative Law Judge Brenda P. Murray denied Enron's PUHCA exemption applications of April 12, 2000, and February 28, 2002, amended on May 31, 2002.²⁷ In the case of Enron, PUHCA, and many other laws, did not deter or prevent fraudulent filing of information with the SEC.

State regulators have expressed concerns that increased diversification could lead to abuses, including cross-subsidization: a regulated company subsidizing an

²⁵ Testimony is available at [<http://www.sec.gov/news/testimony/021302tsich.htm>].

²⁶ See [http://www.house.gov/commerce_democrats/press/107ltr129.shtml].

²⁷ Initial Decision Release No. 222 (File No. 3-10909) can be found at [<http://www.sec.gov/litigation/aljdec/id222bpm.htm>].

unregulated affiliate. Cross-subsidization was a major argument against the creation of exempt wholesale generators (EWGs) and has reemerged as an argument against further PUHCA change. In the case of electric and gas companies, non-utility ventures that are undertaken as a result of diversification may benefit from the regulated utilities' allowed rate of return. Moneymaking non-utility enterprises would contribute to the overall financial health of a holding company. However, unsuccessful ventures could harm the entire holding company, including utility subsidiaries. In this situation, opponents fear that utilities would not be penalized for failure in terms of reduced access to new capital, because they could increase retail rates.

Several consumer and environmental public interest groups, as well as state legislators, have expressed concerns about PUHCA repeal. PUHCA repeal, such groups argue, could only exacerbate market power abuses in what they see as a monopolistic industry where true competition does not yet exist.

Section 1264: Federal Access to Books and Records. Federal access to books and records of holding companies and their affiliates would be provided. Affiliate companies would have to make available to FERC books and records of affiliate transactions. Federal officials would have to maintain confidentiality of such books and records. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Currently, registered holding companies and subsidiary companies are required to preserve accounts, cost-accounting procedures, correspondence, memoranda, papers, and books that the SEC deems necessary or appropriate in the public interest or for the protection of investors and consumers.²⁸

Section 1265: State Access to Books and Records. A jurisdictional state commission would be able to make a reasonably detailed written request to a holding company or any associate company for access to specific books and records, which would be kept confidential. This section would not apply to an entity that is considered to be a holding company solely by reason of ownership of one or more qualifying facilities. Response to such a request would be mandatory. Compliance with this section would be enforceable in U.S. District Court. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Currently under the Federal Power Act, state commissions may examine the books, accounts, memoranda, contracts, and records of a jurisdictional electric utility company, an exempt wholesale generator that sells to such electric utility, and an electric utility company or holding company that is an associate company or affiliate of an exempt wholesale generator. In issuing such an order, a state commission currently is not required to specify which books, accounts, memoranda, contracts, and records it is requesting.²⁹

²⁸ 15 U.S.C. 79o.

²⁹ 16 U.S.C. 824.

Section 1266: Exemption Authority. FERC would be directed to promulgate rules to exempt qualifying facilities, exempt wholesale generators, and foreign utilities, from the federal access to books and records provision (Section 1264). A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1267: Affiliate Transactions. FERC would retain the authority to prevent cross-subsidization and to assure that jurisdictional rates are just and reasonable. FERC and state commissions would retain jurisdiction to determine whether associate company activities could be recovered in rates. A similar provision was included in the conference report of H.R. 6 in the 108th Congress. Currently, the Federal Power Act requires that jurisdictional rates are just and reasonable and prohibits cross-subsidization.³⁰

Section 1268: Applicability. Except as specifically noted, this subtitle would not apply to the U.S. government, a state or any political subdivision of the state, or foreign governmental authority operating outside the United States. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1269: Effect on Other Regulations. FERC or state commissions would not be precluded from exercising their jurisdiction under otherwise applicable laws to protect utility customers. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1270: Enforcement. FERC would have authority to enforce these provisions under sections 306-317 of the Federal Power Act. Currently, the Securities and Exchange Commission has authority to investigate and enforce provisions of the Public Utility Holding Company Act of 1935.³¹ A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1271: Savings Provisions. Persons would be able to continue to engage in legal activities in which they have been engaged or are authorized to engage in on the effective date of this Act. This subtitle would not limit the authority of FERC under the Federal Power Act or the Natural Gas Act. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1272: Implementation. Not later than 12 months after enactment, FERC would be required to promulgate regulations necessary to implement this subtitle and submit to Congress recommendations for technical or conforming amendments to federal law that would be necessary to carry out this subtitle. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1273: Transfer of Resources. The Securities and Exchange Commission would be required to transfer all applicable books and records to FERC.

³⁰ 16 U.S.C. 791a et seq.

³¹ 15 U.S.C. 79r.

However, no time frame for transfer of books and records is provided. Currently, the Securities and Exchange Commission maintains books and records and regulates security transactions.³² A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1274: Effective Date. Twelve months after enactment, this subtitle would take effect.

Section 1275: Service Allocation. FERC would be required to review and authorize cost allocations for non-power goods or administrative or management services provided by an associate company that was organized specifically for the purpose of providing such goods or services. This section would not preclude FERC or state commissions from exercising their jurisdiction under other applicable laws with respect to review or authorization of any costs. FERC would be required to issue rules within six months of enactment to exempt from the section any company and holding company system if operations are confined substantially to a single state. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1276: Authorization of Appropriations. Necessary funds to carry out this subtitle would be authorized to be appropriated. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1277: Conforming Amendments to the Federal Power Act. The Federal Power Act would be amended to reflect the changes to the Public Utility Holding Company Act of 1935.³³

Subtitle G — Market Transparency, Enforcement, and Consumer Protection

Section 1281: Market Transparency Rules. Within 180 days after enactment, FERC would be required to issue rules to establish an electronic system that provides information about the availability and price of wholesale electric energy and transmission services. FERC would exempt from disclosure any information that, if disclosed, could be detrimental to the operation of the effective market or jeopardize system security. FERC would be required to assure that consumers in competitive markets are protected from adverse effects of potential collusion or other anti-competitive behaviors that could occur as a result of untimely public disclosure of transaction-specific information. This section would not affect the exclusive jurisdiction of the Commodity Futures Trading Commission with respect to accounts, agreement, contracts, or transactions in commodities under the Commodity Exchange Act. FERC would not be allowed to compete with, or displace, any price publisher or regulate price publishers or impose any requirements on the publication of

³² 15 U.S.C. 79 et seq.

³³ Current jurisdiction of the Securities and Exchange Commission under the Public Utility Holding Company Act of 1935 is referenced by 16 U.S.C. 825q; 16 U.S.C. 824(g)(5), and 16 U.S.C. 824m.

information. Creation of market transparency rules was included in the conference report of H.R. 6 in the 108th Congress.

Section 1282: Market Manipulation. It would be unlawful to willfully and knowingly file a false report on any information relating to the price of electricity sold at wholesale or the availability of transmission capacity, with the intent to fraudulently affect data being compiled by a federal agency. It would be unlawful for any individual, corporation, or government entity (municipality, state, power marketing administration) to engage in round-trip electricity trading. Round-trip trading is defined to include contracts in which purchase and sale transactions have no specific financial gain or loss and are entered into with the intent to distort reported revenues, trading volumes, or prices. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Currently, mail fraud laws in part apply to use of the mail for the purpose of executing, or attempting to execute, a scheme or artifice to defraud or for obtaining money or property by false or fraudulent pretenses, representations, or promises.³⁴ Wire fraud statutes cover use of wire, radio, or television communication in interstate or foreign commerce to transmit or to cause to be transmitted any writings, signs, signals, pictures, or sounds for the purpose of executing a scheme or artifice to defraud or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises.³⁵

Section 1283: Enforcement. The Federal Power Act would be amended to allow electric utilities to file complaints with FERC and to allow complaints to be filed against transmitting utilities. Criminal and civil penalties under the Federal Power Act would be increased. Criminal penalties would not exceed \$1 million and/or five years' imprisonment. In addition, a fine of \$25,000 could be imposed. A civil penalty not exceeding \$1 million per day per violation could be assessed for violations of sections 211, 212, 213, or 214 of the Federal Power Act. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Currently, criminal penalties may not exceed \$5,000 and/or two years' imprisonment. An additional fine of \$500 can be imposed. A civil penalty not exceeding \$10,000 per day per violation may be assessed for violations of sections 211, 212, 213, or 214 of the Federal Power Act.

Section 1284: Refund Effective Date. Section 206(b) of the Federal Power Act would be amended to allow the effective date for refunds to begin at the time of the filing of a complaint with FERC but not later than five months after such a filing. If FERC does not make its decision within the time-frame provided, FERC would be required to state its reasons for not acting in the provided time-frame for the decision. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

³⁴ 18 U.S.C. 1341.

³⁵ 18 U.S.C. 1343.

Currently, refunds for rates that FERC finds to be unjust, unreasonable, unduly discriminatory, or preferential begin a minimum of 60 days after a complaint is filed.³⁶

Section 1285: Refund Authority. Any entity that is not a public utility (including an entity referred to under § 201(f) of the Federal Power Act) and enters into a short-term sale of electricity would be subject to the FERC refund authority. A short-term sale would include any agreement to the sale of electric energy at wholesale that is for a period of 31 days or less. This section would not apply to electric cooperatives, or any entity that sells less than 8 million megawatt hours of electricity per year. FERC would have refund authority over voluntary short-term sales of electricity by Bonneville Power Administration if the rates charged are unjust and unreasonable. FERC would have authority over all power marketing administrations and the Tennessee Valley Authority to order refunds to achieve just and reasonable rates. Currently, Section 201(f) of the Federal Power Act exempts government entities from FERC rate regulation.³⁷ Refund authority was provided for in the conference report of H.R. 6 in the 108th Congress.

Section 1286: Sanctity of Contract. Upon determining that failure to take action would be contrary to protection of the public interest, FERC would be authorized to modify or abrogate any contract entered into after enactment of this section. FERC would not be able to abrogate or modify contracts that expressly provide for a standard of review other than the public interest standard. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1287: Consumer Privacy and Unfair Trade Practices. The Federal Trade Commission would be authorized to issue rules to prohibit slamming and cramming. Slamming occurs when an electric utility switches a customer's electric provider without the consumer's knowledge. Cramming occurs when an electric utility adds additional services and charges to a customer's account without permission of the customer. If the Federal Trade Commission determines that a state's regulations provide equivalent or greater protection, then the state regulations would apply in lieu of regulations issued by the Federal Trade Commission. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Subtitle H — Merger Reform

Section 1291: Merger Review Reform and Accountability. Within 180 days of enactment, the Secretary of Energy would be required to transmit to Congress a study on whether FERC's merger review authority is duplicative with other agencies' authority and that would include recommendations for eliminating any unnecessary duplication. FERC would be required to issue an annual report to Congress describing all conditions placed on mergers under section 203(b) of the Federal Power Act. FERC would also be required to include in its report whether

³⁶ 16 U.S.C. 824e(b).

³⁷ 16 U.S.C. 824

such a condition could have been imposed under any other provision of the Federal Power Act. A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Section 1292: Electric Utility Mergers. The Federal Power Act would be amended to give FERC review authority for transfer of assets valued in excess of \$10 million. FERC would be required to give state public utility commissions and governors reasonable notice in writing. FERC would be required to establish rules to comply with this section. Currently, under Section 203(a) of the Federal Power Act, FERC review of asset transfers applies to transactions valued at \$50,000 or more.³⁸ A similar provision was included in the conference report of H.R. 6 in the 108th Congress.

Subtitle I — Definitions

Section 1295: Definitions. The definitions for “electric utility” and “transmitting utility” under the Federal Power Act would be amended. Definitions for the following terms would be added to the Federal Power Act: electric cooperative, regional transmission organization, independent system operator, and commission.

Section 1297: Conforming Amendments. The Federal Power Act would be amended to conform with this title.

Subtitle K — Economic Dispatch

Section 1298. Economic Dispatch. FERC is directed to convene regional boards to study “security constrained economic dispatch.” A member of FERC will chair each regional joint board that is to be composed of a representative from each state. Within one year of enactment, FERC is required to submit a report to Congress on the recommendations of the joint regional boards. This section does not define “security constrained economic dispatch” but it generally means a dispatch system that ensures that all normal and contingency limits of the system are simultaneously met under a base case with one contingency (i.e, the loss of a critical network element, N-1 security analysis).

Title XIII — Energy Tax Incentives

Section 1300: Short Title. This title may be cited as the “Enhanced Energy Infrastructure and Technology Tax Act of 2005.”

Subtitle A — Energy Infrastructure Tax Incentives

Section 1301: Natural Gas Gathering Lines Treated As 7-Year Property. Under IRC § 168(e)(3) and IRS regulations, the recovery period for natural

³⁸ 16 U.S.C. 824b.

gas gathering lines could be either 7 or 15 years, depending upon whether they are classified as production or transportation equipment. Recent court cases reflect the ambiguous tax treatment. Natural gas pipelines have a recovery period of 15 years, while natural gas distribution lines have a recovery period of 20 years. The House bill would assign natural gas gathering lines a seven-year recovery period.

Section 1302: Natural Gas Distribution Lines Treated As 15-Year Property. As noted above, natural gas distribution lines currently are assigned a 20-year recovery period. The House bill would reduce this to 15 years.

Section 1303: Electric Transmission Property Treated As 15-Year Property. The current law recovery period for transmission property is generally 20 years [IRC §168(e)(3)]. In order to create incentives to increase investment in transmission assets, H.R. 6 would shorten the recovery period for transmission property from 20 to 15 years.

Section 1304: Expansion of Amortization of Certain Atmospheric Pollution Control Facilities in Connection With Plants First Placed-in-Service After 1975. Under current law, pollution control equipment can also qualify for a type of accelerated depreciation if it is installed in connection with older facilities (essentially a plant or equipment placed into service before January 1, 1976). Such equipment can be amortized over five years instead of the standard 15- or 20-year period applicable to conventional generating equipment and instead of the same 15- or 20-year period applicable to pollution control equipment installed in connection with newer plants. Amortization is a method of depreciation that recovers the total cost basis evenly over the recovery period. More specifically, the amortization period is five years and if the pollution control equipment has a useful life of 15 years or less, 100% of the cost can be amortized over five years. (If the equipment has a useful life greater than 15 years, then the proportion of the costs that can be amortized is less than 100%.)³⁹ Pollution control equipment added to “newer” plants (those placed in service after 1975) is depreciated using the same General Depreciation System (GDS) methods that apply to other electric generating equipment on the date they are placed in service (15- or 20-year recovery period using the 150% declining balance method, as discussed below).

Pollution control equipment used in connection with coal-fired power plants (scrubbers, particulate collectors and removal equipment such as electrostatic precipitators) is a significant fraction of the cost of a power plant. Thus, the tax treatment of this type of equipment is important in determining the investment decision of the Investor Owned Utility. The more rapid amortization of the cost of pollution control equipment connected with older generating technologies would appear to also provide an incentive to retain old equipment rather than invest in new technologies.

H.R. 6 would repeal the condition that only pollution control equipment installed on pre-1976 plants qualifies for 60-month amortization.

³⁹ Equal to the cost times 15 divided by the useful life. So, if the useful life is 20 years, only 3/4 of the cost could be amortized over five years.

Section 1305: Modification of Credit for Producing Fuel From a Nonconventional Source. IRC §29 provides a \$3 tax credit (in 1979 dollars) for each barrel (or equivalent) of fuels produced or mined from unconventional sources, and sold to independent parties in an arms-length transaction. For most fuels, the credit ended in 2002 for facilities and mines placed in service by the end of 1992; for biogases and synfuels, the credit ends in 2007 for facilities placed in service by June 30, 1998. No credit is available for facilities placed in service after these cut-off dates (which apply to different fuels). The credit is phased out when oil prices exceed certain limits (currently \$49.75/barrel). The credit in 2004 was \$6.56/barrel of oil equivalent, which is equivalent to \$1.16/mcf of gas. Most of the benefits from this tax credit have accrued to coalbed methane and to other unconventional fossil gases, and more recently to coal, due to the way synfuels is treated. (See CRS Report 97-679 E). The §29 tax credit is limited to the excess of the regular tax over the tentative minimum tax and it may not be carried forward or back to other taxable years.

H.R. 6 would make the §29 tax credit part of the general business tax credit under IRC§38. The current-year general business credit is the sum of the following components:

- (1) investment tax credit;
- (2) work opportunity credit (formerly the targeted jobs credit);
- (3) alcohol fuels credit;
- (4) credit for increasing research activities;
- (5) low-income housing credit;
- (6) enhanced oil recovery credit;
- (7) disabled access credit for expenditures paid or incurred by an eligible small business;
- (8) renewable resources electricity production credit;
- (9) empowerment zone employment credit;
- (10) Indian employment credit;
- (11) employer social security credit;
- (12) orphan drug credit;
- (13) new markets tax credit;
- (14) small employer pension plan startup costs credit;
- (15) employer-provided child care credit;
- (16) credit for unused payments into the trans-Alaska pipeline liability fund; and
- (17) credit for contributions to certain community development corporations (CDCs).

Each of the above credits is computed separately under its respective IRC section, and then the total of these components becomes the current-year business credit. The general business credit is equal to the sum of (1) the current-year business credit (adjusted for passive activity credits), (2) any carry-forwards (of the general business credit, former employee stock ownership credit in effect before 1987, and the former WIN credit in effect for pre-1982 wages), and (3) general business credit carry-backs.⁴⁰ This amount is subject to a tax liability limitation. If more than one

⁴⁰ WIN denotes the “Work Incentive” program that was in effect from the 1960s through the (continued...)

of these components is claimed, or if there is a general business credit carry-back or carryforward, Form 3800 must be filed in conjunction with the respective form used to compute a component. The sum of (1) the business credit carry-forwards carried to the tax year, (2) the current-year business credit, and (3) the business credit carry-backs carried to the tax year constitutes the general business credit for purposes of applying the tax liability limitation rules of IRC §38 and the carry-back and carry-forward rules of IRC §39.

Section 1306: Modifications to Special Rules for Nuclear Decommissioning Costs. Contributions into a nuclear decommissioning fund are tax deductible in the year made and as long as the utility is regulated. Deductions are limited to the lesser of the amounts relating to the cost of service regulations or the IRS’s ruling amount. Moneys withdrawn from the fund are taxable as income, and expenditures for decommissioning are deductible as costs on an accrual basis. Decommissioning funds may be transferred tax-free in connection with a change in ownership of the nuclear facility to which they relate, but the transferee generally has to be a regulated utility eligible to maintain such a fund. In a deregulated and restructured industry, ambiguity regarding the tax treatment of decommissioning fund transfers may make such transactions taxable [IRC§468A].

The House provision would repeal the requirement that the utility has to be regulated under cost of service rate regulations in order to qualify for the deduction. Thus, unregulated utilities would also qualify. The bill also would repeal the current limitations regarding the magnitude of the fund accumulations — a utility could make contributions into the fund in excess of the maximum amount established by the Internal Revenue Service in certain circumstances.

Section 1307: Arbitrage Rules Not to Apply to Prepayment of Natural Gas. State and local governments currently cannot use the proceeds of tax-exempt bond issues to profit from arbitrage (by pre-payment) on natural gas purchases [IRC§148] — bond proceeds must be used to finance qualifying public-purpose projects. Under the House bill, state and local governments would be exempt from the arbitrage restrictions of the tax-exempt bond rules, thus allowing (with some restrictions) such proceeds to purchase a supply of natural gas for customers of a public utility.

Section 1308: Determination of Small Refiner Exception to Oil Depletion Allowance. The percentage depletion allowance for oil and gas is 15% of revenues and is only available to independent producers and royalty owners. Independent producers can claim a higher depletion rate (up to 25%, rather than the normal 15%) for up to 15 barrels per day (bpd) of oil (or the equivalent amount of gas) from marginal wells (“stripper” oil/gas and heavy oil). For purposes of percentage depletion, an independent oil producer is a) one that, on any given day,

⁴⁰ (...continued)

1980s. As part of the Revenue Act of 1971, businesses could claim a tax credit for employing AFDC (Aid to Families with Dependent Children) recipients who registered for the WIN program.

does not refine more than 50,000 barrels of oil, and b) does not have a retail operation grossing more than \$5 million/year [IRC§613A(d)].

Under H.R. 6, the 50,000 barrel daily limit would be raised to 75,000, and it would apply to the average over an entire taxable year, rather than on any day during the taxable year.

Subtitle B — Miscellaneous Energy Tax Provisions

Section 1311: Credit for Residential Energy Efficiency Property.

There are no tax subsidies, under current law, for residential applications of solar, wind, or other renewable energy technologies. The 1978 energy tax credits for solar and wind established under President Carter's National Energy Act expired in 1985. Under the House bill, a 15% tax credit (up to \$2,000) would be provided for residential applications of solar technologies to heat water, rooftop photovoltaics to generate electricity, and fuel cell property. The credit for fuel cell property would be limited to \$1,000/kilowatt (KW) of capacity.

Section 1312: Credit for Business Installation of Qualified Fuel Cells. Various business tax subsidies are available to renewable energy technologies under current law [IRC§45,46,48, 613(e)]. A 10% tax credit is provided for investment in solar equipment 1) to generate electricity (including photovoltaic systems), 2) to heat or cool a structure, and 3) for process heat. Geothermal energy reservoirs qualify for a 15% depletion allowance. Electricity from wind technologies receives the §45 tax credit. The recovery period for renewable technologies used to generate electricity is five years. Fuel cells do not qualify for tax subsidies.

Under H.R. 6, a 15% tax credit would be provided for business investments in stationary fuel cells, subject to a maximum credit of \$1,000/KW of capacity.

Section 1313: Reduced Motor Fuels Excise Tax on Certain Mixtures of Diesel Fuel. Diesel fuel used in highway vehicles is generally taxed at 24.4¢/gal., comprising the 24.3¢ Highway Trust Fund (HTF) rate, and the 0.1¢ leaking underground storage tank (LUST) trust fund rate. Gasoline is taxed at 18.4¢/gal., comprising a 18.3¢ HTF rate and the .01¢ LUST tax [IRC§4081]. Other motor fuels are taxed at various rates per gallon, with the rates set so as to equate the tax on a Btu basis.

Under the House bill, the 24.3¢ HTF component of the tax on emulsified blends of diesel and water fuels would be reduced to 19.7¢, reflecting the lower Btu value of such blended fuel.

Section 1314: Amortization of Delay Rentals. Under the uniform capitalization rules, delay rental payments must be capitalized (via depletion). All costs of abandoned properties are deductible [IRC§263,263A]. Under the House bill, delay rental payments would be deducted evenly (amortizable) over two years. The same rule would apply to abandoned properties.

Section 1315: Amortization of Geological and Geophysical Expenditures. Under current law, geological and geophysical (G&G) costs for

retained properties must be capitalized (via depletion) [IRC§263]. Dry hole costs are expensed (deducted in the year incurred).

Under H.R. 6, G&G costs for retained properties would be amortizable (deducted evenly) over two years. The same rule would apply to abandoned properties.

Section 1316: Advanced Lean-Burn Technology Motor Credit. Under current law [IRC§179A], the incremental costs of an alternative-fuel vehicle are tax deductible, up to \$2,000 for a car, and up to \$50,000 for a truck or van (depending on weight class). This applies to vehicles powered by LPG, LNG, CNG, hydrogen, E85 and M85. The credit is reduced by 25% in 2006, and is not available for purchases after December 31, 2006. No credit is currently available for advanced lean burn vehicles, which are advanced technology vehicles that are highly fuel efficient yet generate fewer emissions than standard internal combustion engines.

The House bill would provide a tax credit for advanced lean-burn technology vehicles ranging from a base of \$500 to \$3,000 depending on fuel efficiency, and an additional tax credit of \$250-\$550 depending on estimated lifetime fuel savings.

Section 1317: Credit for Energy Efficiency Improvements to Existing Homes. No special tax treatment is accorded homeowners for purchases of materials and property that enhances the energy efficiency of a personal residence. Subsidies provided by utilities can be excluded from gross income [IRC§136]. The 1978 Energy Tax Act — part of President Carter's National Energy Act — provided conservation tax credits for certain types of energy efficiency retrofits (insulation, storm windows and doors, weatherstripping), but these expired in 1985.

Under H.R. 6, a tax credit of 20% would be provided for expenditures on energy efficient envelope components — more energy-efficient insulation, windows/doors, roofs, and structural envelope components — retrofitted to existing homes that reduce heat loss (in winter) or heat gain (in summer) for a dwelling unit. The maximum lifetime credit per dwelling unit would be \$2,000. Qualifying units and materials must meet energy efficiency guidelines for such components established by the International Energy Conservation Code.

Subtitle C — Alternative Minimum Tax Relief

Section 1321: New Non-refundable Personal Credit Allowed Against Regular and Alternative Minimum Tax. Under current tax law, most non-refundable personal income tax credits are available only to the extent of the difference between the personal and the tentative minimum tax liability — this means that the alternative minimum tax could limit the amount of the tax credit claimed. Such limitation, if triggered, would reduce the incentive effect of the credits, which in the case of any new energy-efficiency credits that may be enacted would reduce the incentives to invest in the qualifying materials and property.

Under H.R. 6, the alternative minimum tax limitation would not apply to the new energy-efficiency tax credits proposed under sections 1311, and 1317.

Section 1322: Certain Business Energy Credits Allowed Against Regular and Minimum Taxes. Under current tax law, businesses have access to a variety of energy tax incentives, both for energy conservation, renewable fuels (such as the §45 tax credit) and for energy production (such as the marginal oil and gas production tax credit, and the enhanced oil recovery tax credit). For some of these tax credits, the alternative minimum tax also acts to limit the amount of a tax credit otherwise available under the income tax laws. This might reduce the incentive effects of energy tax credits.

H.R. 6 would expand the list of business energy tax credits for which the tentative minimum tax is removed as a limitation on the amount of tax credit otherwise claimed.

Title XIV — Miscellaneous

Subtitle C — Other Provisions

Section 1441. Continuation of Transmission Security Order. On August 28, 2003, the Secretary of Energy issued Order No. 202-03-2, allowing the Cross Sound Cable between Connecticut and Long Island to begin transmitting electric power. This provision would require the order to remain in effect unless rescinded by federal statute.

In 2002, a 24-mile 330-megawatt (MW) transmission cable was installed beneath the seabed of Long Island Sound between Connecticut and Long Island. Shortly after the line was installed, it was determined that in several places the cable was not buried to depths specified in permits issued by the U.S. Army Corps of Engineers (Corps) and the Connecticut Department of Environmental Protection (CDEP). While the Corps determined that operation of the cable would not pose environmental or navigational harm and did not object to the operation of the transmission line, the CDEP objected to the operation of the line based on procedural grounds. CDEP's position was that operation of the cable would violate the permit, unless the cable was installed to the permitted depth requirements. CDEP denied a request to modify the permit.

On June 12, 2003, Cross-Sound, the owners of the cable, filed a new permit application with the CDEP. However, on June 26, 2003, Connecticut Governor John Rowland signed into law a bill extending a prohibition on considering permits or applications related to certain infrastructure crossings of the sound. On August 14, 2003, the Northeast experienced a widespread electric blackout. In response, Secretary of Energy Spencer Abraham issued an emergency order to energize the cross-sound cable. This order was rescinded on May 7, 2004. Long Island Power Authority (LIPA) and Cross-Sound filed a petition with FERC to have the cable re-energized by July 1, 2004. At a June 17, 2004, FERC meeting, Chairman Pat Wood asked the parties to negotiate a settlement within seven days, after which FERC was ready to issue an order. On June 25, 2004, the parties came to an agreement and the cross-sound cable was re-energized.

Section 1442: Review of Agency Determinations on Gas Projects.

This section would amend the Natural Gas Act, giving the D.C. Circuit Court of Appeals exclusive jurisdiction over disputes involving “unreasonable delay” of a natural gas pipeline project certificated by FERC. Unreasonable delay would mean the failure of a permitting agency to take action within a year after the date of filing for the permit in question, or within 60 days after the issuance of a FERC certificate. There is no explicit time-line in existing law for issuance of ancillary permits and licenses, or requirement to consolidate authority in one court. This fast-tracking measure would limit the amount of time taken by other agencies after FERC had issued a certificate for a pipeline project.

Section 1443: Attainment Dates for Downwind Ozone Nonattainment Areas.

This section would extend Clean Air Act deadlines for areas that have not attained ozone air quality standards if upwind areas “significantly contribute” to their nonattainment. Under the 1990 Clean Air Act Amendments (P.L. 101-549), ozone nonattainment areas were classified in one of five categories: Marginal, Moderate, Serious, Severe, or Extreme. Areas with higher concentrations of the pollutant were given more time to reach attainment. In return for the additional time, they were required to implement more stringent controls on emissions. Failure to reach attainment by the specified deadline was to result in reclassification of an area to the next higher category and the imposition of more stringent controls. Areas such as Dallas-Fort Worth, for example, classified as Serious, were required to reach attainment by 1999. If they did not do so, the law required that they be reclassified (or “bumped up”) to the Severe category, with a new deadline of 2005, and more stringent controls.

For a variety of reasons, EPA has often not reclassified areas when they failed to reach attainment by the statutory deadlines. As of April 2005, the agency’s website listed 18 Marginal areas, 6 Moderate areas, and 9 Serious areas; most of the 33 should have been categorized as Severe under the statutory requirements. In several cases, the agency granted additional time to reach attainment on the grounds that a significant cause of the area’s continued nonattainment was pollution generated outside the area and transported into it by prevailing winds. EPA has been sued over its failure to bump up five of these areas; the Agency lost the first three cases decided (Washington, D.C.; St. Louis; and Beaumont-Port Arthur, Texas).⁴¹

Sec. 1443 would roll back reclassifications that occurred after April 1, 2003, and would extend attainment deadlines in areas affected by upwind pollution to the date on which the last reductions in pollution necessary for attainment in the downwind area are required to be achieved in the upwind area. The specific date is open for interpretation. Under EPA’s overturned policy, areas were given extensions no longer than the attainment or compliance deadline in the upwind area (generally 2004, 2005, or 2007). The language of Section 1443 appears to give EPA flexibility to extend the deadlines beyond those dates, however. It also would apply to the

⁴¹ The three cases were *Sierra Club v. EPA*, 311 F.3d 853, 55 ERC 1385 (7th Cir. 2002); *Sierra Club v. EPA*, 314 F.3d 735, 55 ERC 1577 (5th Cir. 2002); and *Sierra Club v. EPA*, 294 F.3d 155, 54 ERC 1641 (D.C. Cir. 2002).

agency's new eight-hour ozone standard implemented last year, making many additional areas eligible for extensions.

Section 1444: Energy Production Incentives. States would be allowed to provide taxpayers that generate electricity from selected types of energy, or produce ethanol fuel, credits against any state taxes or fees owed to the state either under a state law or federal law without violating the commerce clause of the U.S. Constitution. The provision would apply to production in the state of 1) electricity from coal mined in the state and used in a facility, if such production meets all applicable federal and state laws and if such facility uses scrubbers or other forms of clean coal technology, 2) electricity from a renewable source such as wind, solar, or biomass, or 3) ethanol. Any action taken by a state in accordance with this section with respect to a tax or fee payable, or incentive applicable, for any period beginning after the date of the enactment of this Act would be considered to be a reasonable regulation of commerce, and not be considered to impose an undue burden on interstate commerce or to otherwise impair, restrain, or discriminate against interstate commerce.

Section 1446: Regulation of Certain Oil Used in Transformers. Under this section, utilities would not be required to develop a "Spill Prevention, Control, and Countermeasure Plan" for soy bean oil use in transformers as regulated by the Environmental Protection Agency under 40 CFR Part 112.12-15.

Section 1447: Risk Assessments. The Energy Policy Act of 1992 would be amended to require that federal agencies conducting risk assessments of energy related technologies use sound and objective scientific practices that consider the best available science. This section was not in the 108th Congress conference bill.

Section 1448: Oxygen-fuel. DOE would be directed to create a program for oxygen-fuel systems, in which pure oxygen is substituted for air in high-temperature boilers of industrial and electric utility steam generators. If feasible, the program would include two small (10 to 50 megawatt) units, one retrofit and one new; and two large (100 megawatts or larger) units, one retrofit and one new.

Section 1449: Petrochemical and Oil Refinery Facility Health Assessment. The Secretary of Energy would be charged to study the health impacts of living near petrochemical and oil refining plants. In designing the study, the Secretary would consult with the National Cancer Institute and other governmental bodies having expertise. The Secretary would have to transmit the report to Congress within six months of enactment. Such sums as necessary would be authorized for this study.

Sec. 1450: United States — Israel Cooperation. The United States and Israel have an agreement "to establish a framework for collaboration" between the two nations for collaboration on energy research and development activities. The agreement, which went into effect in February 2000, was automatically extended (pursuant to terms of the original agreement) in early 2005 for an additional five years. This provision would require the Secretary of Energy to submit reports to the relevant House and Senate Committees on past, current, and future activities and projects that are attributable to the agreement.

Section 1451: Carbon-Based Fuel Cell Development. The Secretary of Energy would be authorized to make a single grant for the design and fabrication of a 5-kilowatt prototype direct coal fuel cell.

Section 1452: National Priority Project Designation. This section, added as a floor amendment (H.Amdt. 91), would establish a presidential National Priority Project designation for organizations with projects certified by the Secretary of Energy as advancing renewable energy technology.

Title XV — Ethanol and Motor Fuels

Subtitle A — General Provisions

Section 1501: Renewable Content of Motor Vehicle Fuel. This section would require the use of renewable fuel in motor fuel. Renewable fuels include ethanol, biodiesel, and natural gas produced from landfills and sewage treatment plants. H.R. 6 would require the use of 3.1 billion gallons of renewable fuel in 2005, increasing to 5.0 billion gallons in 2012. After 2012, the minimum percentage of renewable fuel in gasoline would be equal to the percentage in 2012. The Environmental Protection Agency would be required to promulgate regulations for the generation and trading of credits between entities; in this manner refiners and blenders who could not meet the requirement would be able to purchase credits from those refiners or blenders who exceeded the requirement.

Policy Context. The Clean Air Act Amendments of 1990 established the Reformulated Gasoline (RFG) program. Among its provisions is a requirement that RFG contain oxygen. The two main ways to meet the requirement are the use of MTBE and ethanol. However, MTBE (methyl tertiary butyl ether) has been found to contaminate groundwater, and there is interest in banning the substance (**see Sec. 1504**). Because some states have acted to limit the use of MTBE, and because of the potential federal ban, there is interest in eliminating the oxygen standard as well (**see Sec. 1506**).

The ethanol industry has benefitted significantly from the oxygen requirement, and some are concerned about the future of ethanol in the absence of the requirement. Further, proponents of the fuel see ethanol use as a way to limit petroleum consumption and dependence on foreign oil. Thus, the interest in establishing a renewable fuels standard. However, opponents of ethanol have raised concerns that the fuel is too costly, that the energy efficiency of the ethanol fuel cycle is questionable, and that the potential for groundwater contamination by ethanol-blended fuels has not been fully studied.

Section 1502: Fuels Safe Harbor. This section would provide a “safe harbor” for renewable fuels and fuels containing MTBE (i.e., such fuels could not be deemed defective in design or manufacture by virtue of the fact that they contain renewables or MTBE). The effect of this provision would be to protect anyone in the product chain, from manufacturers to retailers, from liability for cleanup of MTBE and renewable fuels or for personal injury or property damage based on the nature of

the product (a legal approach that has been used in California to require refiners to shoulder liability for MTBE cleanup). Were liability for manufacturing and design defects ruled out, plaintiffs would need to demonstrate negligence in the handling of such fuels to establish liability — a more difficult legal standard to meet. The bill sets an effective date of September 5, 2003, for the safe harbor, rather than the date of enactment. This effective date would protect oil and chemical industry defendants from defective product claims in about 150 lawsuits that were filed in 15 states after that date.⁴²

Section 1503: MTBE Transition Assistance. This section would amend the Clean Air Act to authorize \$2 billion (\$250 million in each of FY2005-FY2012) for grants to help merchant U.S. producers of MTBE convert to production of other fuel additives (including renewable fuels), unless EPA determines that such fuel additives may reasonably be anticipated to endanger public health or the environment.

Sections 1504-1505: Ban on the Use of MTBE. The use of MTBE in motor vehicle fuel would be prohibited after December 31, 2014, except in states that specifically authorize its use. EPA could allow MTBE in motor vehicle fuel in quantities up to 0.5% in cases the Administrator determines to be appropriate (**Sec. 1504**). The bill would also allow the President to make a determination, not later than June 30, 2014, that the restrictions on the use of MTBE should not take place. The National Academy of Sciences would conduct a review of MTBE's beneficial and detrimental effects on environmental quality or public health or welfare, including costs and benefits, by May 31, 2014 (**Sec. 1505**).

Section 1506: Elimination of Oxygen Requirement and Maintenance of Toxic Emission Reductions. This section would amend the Clean Air Act to eliminate the requirement that reformulated gasoline contain at least 2% oxygen. This requirement has been a major stimulus to the use of MTBE. The provision would take effect 270 days after enactment, except in California, where it would take effect immediately upon enactment.

The section would also amend the Clean Air Act to require that each refinery or importer of gasoline maintain the average annual reductions in emissions of toxic air pollutants *achieved* by the reformulated gasoline it produced or distributed in 1999 and 2000. This provision is intended to prevent backsliding, since the reductions actually achieved in those years exceeded the regulatory requirements. A credit trading program would be established among refiners and importers for emissions of toxic air pollutants.

In addition, the section would require EPA to promulgate final regulations to control hazardous air pollutants from motor vehicles and their fuels by July 1, 2005. It would also eliminate the less stringent requirements for volatility applicable to

⁴² Environmental Working Group. "Communities That Have Filed MTBE Lawsuits Against Oil Companies." [<http://www.ewg.org/reports/oilandwater/lawsuits.php>]

reformulated gasoline sold in northern states, by applying the more stringent standards of VOC Control Region 1 (southern states).⁴³

Sections 1507-1508: Analyses and Data Collection. EPA would be required to publish an analysis of the effects of the fuels provisions in the Clean Air Act on air pollutant emissions and air quality, within five years of enactment (**Sec. 1507**). DOE would be required to collect and publish monthly survey data on the production, blending, importing, demand, and price of renewable fuels, both on a national and regional basis (**Sec. 1508**).

Section 1509: Reducing the Proliferation of State Fuel Controls. Section 211 of the Clean Air Act allows states to establish their own fuel standards with approval from EPA. H.R. 6 would bar the EPA Administrator from approving a state fuel restriction unless the Administrator, after consultation with the Secretary of Energy, determined that the fuel standard would not cause fuel supply disruptions or adversely affect the ability to produce fuel for nearby areas in other states.

Section 1510: Fuel System Requirements Harmonization Study. The EPA Administrator and the Secretary of Energy would be required to study all federal, state, and local motor fuels requirements. They would be required to analyze the effects of various standards on consumer prices, fuel availability, domestic suppliers, air quality, and vehicle emissions. Further, they would be required to study the feasibility of developing national or regional fuel standards.

Section 1511: Commercial Byproducts From Municipal Solid Waste and Cellulosic Biomass Loan Guarantee Program. The Secretary of Energy would be required to establish a loan guarantee program for the construction of facilities to produce fuel ethanol and other commercial byproducts from municipal solid waste and cellulosic biomass.

Section 1512: Conversion Assistance for Cellulosic Biomass, Waste-Derived Ethanol, Approved Renewable Fuels. DOE would be allowed to provide grants to help build production facilities. To qualify, the ethanol must be produced from cellulosic biomass, municipal solid waste, wood residues, agricultural waste, or agricultural byproducts.

Section 1513: Blending of Compliant Reformulated Gasolines. This provision would allow reformulated gasoline (RFG) retailers to blend batches with and without ethanol as long as both batches were compliant with the Clean Air Act. In a given year, retailers would be permitted to blend batches over any two 10-day periods in the summer months. Currently, retailers must drain their tanks before switching from ethanol-blended RFG to non-ethanol RFG (or vice versa).

Subtitle B — Underground Storage Tank Compliance

Sections 1521- 1533: Underground Storage Tank Provisions. As part of the legislative effort to address drinking water contamination by MTBE, this

⁴³ VOC: volatile organic compounds.

subtitle would amend Subtitle I of the Solid Waste Disposal Act (SWDA) to add new leak prevention provisions to the underground storage tank (UST) regulatory program, and to broaden the allowable uses of the Leaking Underground Storage Tank (LUST) Trust Fund.

Policy Context. Congress created the UST leak prevention, detection, and cleanup program in 1984, to address a nationwide pollution problem caused by leaking tanks. In 1986, Congress established the LUST Trust Fund to help EPA and states pay the costs of cleaning up leaking petroleum USTs where owners fail to do so, and to oversee LUST cleanup activities. While much progress has been made in the program, several issues remain. A major issue concerns the discovery of MTBE at thousands of LUST sites across the country. This gasoline additive, used to reduce air pollution from auto emissions, is very water soluble, and leaks involving MTBE are more costly to remediate than conventional gasoline leaks. MTBE tends to separate from the gasoline and spread further, and these leaks are more likely to reach water supplies. Another issue is that state resources have not met the demands of overseeing the UST regulatory program, which is aimed at preventing leaks. States have long sought larger appropriations from the Trust Fund to support the LUST program, and some have sought more flexibility in using LUST funds.⁴⁴

Subtitle B would require EPA or states to conduct compliance inspections of USTs every three years (**Sec. 1523**); add operator training requirements (**Sec. 1524**); authorize EPA and states to use LUST Trust Fund money to respond to tank leaks involving oxygenated fuel additives (e.g., MTBE and ethanol) (**Sec. 1525**). It also would prohibit fuel delivery to ineligible tanks (**Sec. 1527**); clarify and expand UST compliance requirements for federal facilities (**Sec. 1528**); and require EPA, with Indian tribes, to develop and implement a strategy to address releases on tribal lands (**Sec. 1529**). This subtitle would allow EPA and states to use LUST funds to conduct inspections and enforce UST release prevention and detection requirements (**Sec. 1526**). It would require that, when determining the portion of cleanup costs to recover from a tank owner or operator, EPA or a state must consider the owner or operator's ability to pay for cleanup and still maintain basic business operations (**Sec. 1522**).

Sec. 1530 would require states to do one of the following: 1) require that new tanks are secondarily contained and monitored for leaks if the tank is within 1,000 feet of a community water system or potable well; or 2) require that UST manufacturers and installers maintain evidence of financial responsibility to pay for corrective actions; and require that persons installing UST systems are certified or licensed, or that their UST system installation is certified by a professional engineer

⁴⁴ The LUST Trust Fund has been funded primarily through a 0.1 cent-per-gallon motor fuels tax that commenced in 1987. During FY2004, the tax generated \$193 million in revenues, and the fund earned \$66.7 million in interest (on an accrual basis). At the end of FY2004, the fund's net assets were \$2.24 billion. For EPA and states to administer the LUST cleanup program, Congress appropriated from the Fund nearly \$76 million for FY2004 and nearly \$70 million for FY2005. The President has requested \$73 million for FY2006. Roughly 81% of the appropriated amount goes to the states to oversee and enforce cleanups by responsible parties. EPA uses the remainder for its program responsibilities and for LUST activities on Indian lands.

or inspected and approved by the state, or is compliant with a code of practice or other method that is no less protective of human health and the environment.

Sect. 1531 would authorize annually, from the LUST Trust Fund for FY2005 through FY2009, the appropriation of \$200 million for cleaning up leaks from petroleum tanks generally, and another \$200 million for responding to tank leaks involving MTBE or other oxygenated fuel additives (e.g., other ethers and ethanol).⁴⁵

Also from the Trust Fund, **Sec. 1531** would authorize to be appropriated, for each of FY2005 through FY2009, \$155 million for EPA and states to carry out and enforce the UST leak prevention and detection requirements added by this bill and the LUST cleanup program. From general revenues, this section would authorize the appropriation of another \$50 million, for each of FY2005 through FY2009, for EPA and states to carry out the general UST program.

Subtitle C — Boutique Fuels

Section 1541: Reducing the Proliferation of Boutique Fuels. The EPA Administrator would be permitted to temporarily waive fuel requirements, including state fuel requirements and RFG standards, in the case of a natural disaster, Act of God, pipeline or refinery equipment malfunction, or other unforeseeable event. In addition, the Administrator could not approve a fuel standard under a State Implementation Plan if that standard would increase the number of unique state formulations above the number as of September 1, 2004.

Title XVI — Studies

Section 1601: Study on Inventory of Petroleum and Natural Gas Storage. The Secretary of Energy would have to report to Congress within a year of enactment on the amount of storage capacity for petroleum and natural gas. While the oil and gas industry is subject to broad reporting requirements under a variety of laws, this language would call for a comprehensive study of the nation's storage capability and the role it plays in the marketplace and the hydrocarbon industries' ability to meet demand. The relationship between storage capacity and price volatility could be significant in the current context of oil and natural gas markets — which have experienced a number of price spikes.

⁴⁵ Note that the MTBE cleanup money is for the LUST program; funds can be used to clean up contaminated drinking water supplies if the contamination can be tied to a federally regulated underground storage tank. However, because no federal standard has been established for MTBE in drinking water, some states do not require testing for MTBE at LUST sites, and fewer than half the states are taking steps to ensure that MTBE and other oxygenates are not migrating beyond the standard monitoring boundaries for LUST cleanup. For more information, see New England Interstate Water Pollution Control Commission, *Survey of State Experiences with MTBE and Other Oxygenate Contamination at LUST Sites*, August 2003.

Section 1605: Study of Energy Efficiency Standards. DOE would be directed to have the National Academy of Sciences study whether the goals of energy efficiency standards are best served by focusing measurement at the site (energy end-use) or at the source (the full fuel cycle). This provision relates to a previous Executive Order, which found that federal agencies should get credit toward meeting energy efficiency goals even where “source energy use declines but site energy use increases.”⁴⁶

Section 1606: Telecommuting Study. DOE would be directed to study and report on the energy conservation potential of widespread adoption of telecommuting by federal employees. In this effort, DOE would be required to consult with the Office of Personnel Management, General Services Administration, and National Telecommunications and Information Administration.

Section 1607: LIHEAP Report. The Department of Health and Human Services (HHS) would be directed to report on how the Low-Income Home Energy Assistance Program could be used more effectively to prevent loss of life from extreme temperatures.

Section 1608: Oil Bypass Filtration Technology. DOE and EPA would be required to jointly study the benefits of oil bypass filtration technology in reducing demand for oil and protecting the environment. This study would include consideration of its use in federal motor vehicle fleets and an evaluation of products and manufacturers.

Section 1609: Total Integrated Thermal Systems. DOE would be directed to study the potential for integrated thermal systems to reduce oil demand and to protect the environment. Also, DOE would study the feasibility of using this technology in Department of Defense and other federal motor vehicle fleets.

Section 1610: University Collaboration. DOE would be directed to report on the feasibility of promoting collaboration between large and small colleges through grants, contracts, and cooperative agreements for energy projects. DOE would also be directed to consider providing incentives for the inclusion of small colleges in grants, contracts, and cooperative agreements.

Section 1611: Reliability and Consumer Protection Assessment. Within five years of enactment, and every five years thereafter, FERC would be required to assess the effects of electric cooperative and government-owned utilities’ exemption from FERC ratemaking regulation under section 201(f) of the Federal Power Act. If FERC found that the exemption resulted in adverse effects on consumers or electric reliability, FERC would be required to make recommendations to Congress.

⁴⁶ Executive Order 13123. DOE’s Federal Energy Management Program (FEMP) discusses this issue in its *Guidance for Providing Credit Toward Energy Efficiency Goals for Cost-Effective Projects Where Source Energy Use Declines But Site Energy Use Increases*, April 26, 2000, 4 pp.

Section 1612: Report on Energy Integration with Latin America. The Secretary of Energy would be called on to submit a report to the House Committee on Energy and Commerce and the Senate Energy and Natural Resources Committee about energy export development in Latin America. With special focus on Mexico, it would detail Latin America and regional energy integration, and describe U.S. efforts to promote constructive relationships. In particular, it would focus on efforts made with regard to U.S.-Mexico cross-border energy projects.

Section 1613: Low-Volume Gas Reservoir Study. The Secretary of Energy would be required to make a grant to an organization of gas producing states formed to deal with marginal oil and natural gas wells. The grant would be used for an annual study of these reservoirs, to determine their location and production characteristics, and recommend incentives for production enhancement. Extensive data collection is envisioned, and this analysis would have to be performed by an institution of higher education with GIS (geographic information system) technology capabilities.

Section 1614: Consolidation of Gasoline Industry. In recent decades, mergers, acquisitions, and regional withdrawals by oil producers and by marketers of petroleum products have reduced substantially the number of sellers of petroleum products in the United States, particularly on a regional and local level. Some have asserted that a consequent increase in market power of the remaining sellers lies behind the extended periods of considerably increased retail gasoline prices being experienced by consumers. The bill would require the Comptroller General of the United States to conduct a study of the consolidation of the refiners, importers, producers, and wholesalers of gasoline with the sellers of such gasoline at retail. The study would analyze the impact of such consolidation on the retail price of gasoline and small business ownership, corollary effects on the market economy of fuel distribution and local communities, and other market impacts of such consolidation.

Section 1615: Study of Fuel Savings From Information Technology for Transportation. The Secretary of Energy, in consultation with the Secretary of Transportation, would be required to report to Congress on the potential fuel savings from the use of information technologies to help businesses and consumers plan their trips and avoid delays.

Section 1616: Feasibility Study for Mustard Seed Biodiesel. The Secretary of Energy would be required to contract with the National Academy of Sciences for a study to determine the feasibility of using mustard seed as a feedstock for biodiesel production.

Title XVII — Renewable Energy — Resources

Section 1701: Grants to Improve the Commercial Value of Forest Biomass for Electric Energy, Useful Heat, Transportation Fuels, Petroleum-Based Product Substitutes, and Other Commercial Purposes. The Secretaries of Agriculture and the Interior would be authorized to make grants of up to \$20 per green ton (a ton of freshly sawed or undried wood or

other biomass) to individuals, businesses, communities, and Indian tribes for the commercial use of biomass for fuel, heat, or electric power. Also, the Secretaries of Agriculture and the Interior may make grants as an incentive to projects that develop ways to improve the use of, or add value to, biomass. The maximum grant would be \$500,000. Preference is given to small towns, rural areas, and areas at risk of damage to the biomass resource. This provision is intended to address the increasing risk of wildfires and the growing threat to forests of insect infestation and disease.

Section 1702: Environmental Review for Renewable Energy Projects. For all development projects proposed for federal lands (or other federally controlled areas), the National Environmental Policy Act (NEPA) requires an environmental assessment or environmental impact statement (EIS). This provision would limit the number of alternative site analyses that a federal agency must perform when these requirements are triggered by a proposed renewable energy project.

Section 1703: Sense of Congress Regarding Generation Capacity of Electricity From Renewable Energy Resources on Public Lands. For the Secretary of the Interior, this provision would set a goal of having 10,000 megawatts of non-hydropower renewable energy generation capacity installed on public lands within 10 years from the date of enactment.

Title XVIII — Geothermal Energy

Sections 1801-1820: Geothermal Energy Leasing Amendments. Much of the nation's geothermal energy potential is located on federal lands. Reducing delays in the federal geothermal leasing process and reducing royalties could increase geothermal energy production, although the environmental impact of greater geothermal development is also an issue.

Current Law. Competitive geothermal lease sales are based on whether lands are within a known geothermal resource area (Geothermal Steam Act of 1970, U.S.C. 1003). Geothermal production on federal lands is charged a royalty of 10%-15% under Section 5 of the Geothermal Steam Act. The royalty is imposed on the amount or value of steam or other form of heat derived from production under a geothermal lease.

The Secretary of the Interior can withdraw public lands from leasing or other public use and modify, extend, or revoke withdrawals under provisions in the Federal Land Policy and Management Act of 1976 (FLPMA, 43 U.S.C. 1714). At certain intervals the Secretary may readjust terms and conditions of a geothermal lease, including rental and royalty rates. Annual rental fees of not less than \$1 per acre on geothermal leases are paid in advance. The primary lease term is 10 years and would continue as long as geothermal steam is produced or used in commercial quantities. Rents are \$1 per acre or fraction thereof for each year of a geothermal lease.

H.R. 6. Amendments to the Geothermal Steam Act would change lease procedures for competitive and non-competitive lease sales. Competitive lease sales

would be held every two years. If there were no competitive bid, then lands would be made available for two years under a non-competitive process (**Sec. 1802**). A fee schedule in lieu of any royalty or rental payments would be established for low-temperature geothermal resources. Existing geothermal leases may be converted to leases for direct utilization of low-temperature geothermal resources (**Sec. 1803**). Royalties on electricity produced from geothermal resources would be not less than 1% and not more than 2.5% of the gross proceeds from geothermal electricity sales in the first 10 years of production and not less than 2% and more than 5% of the gross proceeds from geothermal electricity sales each year after the 10-year period (**Sec. 1804**). With respect to National Forest lands, the Secretary of Agriculture and the Secretary of the Interior would ensure timely actions for processing applications pending as of January 1, 2005 (**Sec. 1805**). A memorandum of understanding between the Secretaries of the Interior and Agriculture should include provisions that would identify known geothermal areas on public lands within the National Forest system and establish an administrative procedure that would include time frames for processing lease applications (**Sec 1806**).

The Secretary of the Interior would review all areas under moratoria or withdrawals and report to Congress on whether the reasons for withdrawal still applied (**Sec. 1807**). The Secretary could reimburse lessees for the costs of environmental analyses required by NEPA through royalty credits under certain circumstances (**Sec. 1808**). The U.S. Geological Survey (USGS) would provide Congress with an assessment of current geothermal resources (**Sec. 1809**). Cooperative or unit plans for geothermal development would be promoted (**Sec. 1810**). Leasable minerals produced as a byproduct of a geothermal lease would pay royalties under the Mineral Leasing Act (30 U.S.C. 181) (**Sec. 1811**).

Sections 8(a) and (b) of the Geothermal Steam Act would be repealed, which would eliminate the Secretary's authority to readjust geothermal rental and royalty rates at "not less than 20 year intervals beginning 35 years after the date geothermal steam is produced" (**Sec. 1812**). Annual rentals would be credited towards the royalty of the same lease (**Sec. 1813**), and the primary lease term could be extended for two additional five-year terms if work commitments were met (**Sec. 1814**). If production from a geothermal lease were suspended during a period in which a royalty was required, royalties would be paid in advance until production resumed (**Sec. 1815**). The bill would establish rental rates for competitive and non-competitive lease sales (**Sec. 1816**). For the first five years after the enactment of this act, a separate account would be established for revenue receipts from leases under the Geothermal Steam Act of 1970, excluding money necessary for payments to states and county governments (**Sec. 1817**). Section 7 of the Geothermal Steam Act on acreage limitations is repealed (**Sec. 1818**). About two dozen technical amendments are included in **Sec. 1819**. The Intermountain West Geothermal Consortium would be established to focus on expanded use of geothermal energy. The consortium would involve the participation of the Secretary of Energy, universities in the region, and state agencies (**Sec. 1820**).

Title XIX — Hydropower — Resources

Section 1901: Increased Hydroelectric Generation at Existing Federal Facilities. Within 18 months of enactment, the Secretaries of the Interior, Energy, and the Army would submit a study of the potential for increasing electric power production capability at federally owned or operated water regulation, storage, and conveyance facilities.

Section 1902: Shift of Project Loads to Off-Peak Periods. The Secretary of the Interior would review electric power consumption by the Bureau of Reclamation facilities for water pumping, and, with the consent of affected irrigation customers, adjust water pumping schedules to reduce power consumption during periods of peak electric power demand. This section would not affect Interior's existing obligations to provide electric power, water, or other benefits.

Section 1903: Report Identifying and Describing the Status of Potential Hydropower Facilities. Within 90 days of enactment, the Secretary of the Interior would submit a report identifying and describing the status and characteristics of potential hydropower facilities included in water surface storage studies undertaken for projects that have not been completed or authorized for construction.

Title XX — Oil and Gas — Resources

Subtitle A — Production Incentives

Section 2001: Definition of Secretary. In this subtitle, "Secretary" means Secretary of the Interior.

Section 2002: Program on Oil and Gas Royalties-In-Kind. The federal government would be allowed to continue to receive physical quantities of oil and gas as royalty-in-kind payments if it can receive market value for the product and revenues greater than or equal to the revenues it would have received under a comparable cash-payment royalty. The royalty product would have to be placed in marketable condition (as defined in H.R. 6) at no cost to the United States. Small refineries would receive preferential treatment if supplies on the market were insufficient. A report to Congress in each year from FY2004-FY2013 would explain, among other things, how the Secretary determined whether the amount received was at least the amount that would have been taken in cash and how a lease was evaluated as to whether royalty in kind were taken.

Section 2003: Marginal Property Production Incentives. The Secretary of the Interior would have the authority to reduce or terminate royalties for independent producers under certain conditions. The Secretary would be authorized to prescribe different standards for marginal properties in lieu of those in this section.

Section 2004: Incentives for Natural Gas Production From Deep Wells in the Shallow Waters of the Gulf of Mexico. Royalty reductions

would be provided for shallow water production at certain depths not later than 180 days after enactment. An “ultra-deep” well would also be defined in this section.

Section 2005: Royalty Reductions for Deep Water Production. Royalty reductions would be provided for deepwater areas at fixed production levels at certain depths.

Section 2006: Alaska Offshore Royalty Suspension. Planning areas in offshore Alaska would be included under section 8(a)(3)(B) of the Outer Continental Shelf Lands Act (OCSLA, 43 U.S.C. 1337(a)(3)(B)). This section of OCSLA currently provides a mechanism for the Secretary of the Interior to reduce or eliminate royalty or net profit share established in leases for oil and gas production in Gulf of Mexico planning areas.

Section 2007: Oil and Gas Leasing in the National Petroleum Reserve in Alaska. The competitive leasing system for oil and gas in the National Petroleum Reserve in Alaska would be modified. Leases would be issued for successive 10-year terms if leases met specific criteria. Active participation would be sought by the State of Alaska and Regional Corporations as defined under the Alaska Native Claims Settlement Act (43 U.S.C. 1602). The Secretary of the Interior could grant royalty reductions if they were found to be in the public interest.

Section 2008: Orphaned, Abandoned, or Idled Wells on Federal Land. Within a year after enactment, the Secretary would establish a technical assistance program to help states remediate and close abandoned or idled wells. Technical and financial assistance would be made available over a 10-year period to quantify and mitigate environmental dangers. A program would be established for reimbursing the private sector with credits against federal royalties for reclaiming, remediating, and closing orphaned wells.

Section 2009: Combined Hydrocarbon Leasing. The Mineral Leasing Act would be amended to allow separate leases for tar sands and for oil and gas in the same area. Tar sands would be leased under the same system as for oil and gas and would require a minimum acceptable bid of \$2 per acre.

Section 2010: Alternate Related Uses on the Outer Continental Shelf. The Secretary would be authorized to grant rights-of-way or easements on the OCS for energy-related activity on a competitive or noncompetitive basis and would charge fees for such access. A surety bond or other financial guarantee would be required.

Section 2011: Preservation of Geological and Geophysical Data. Under the proposed “National Geological and Geophysical Data Preservation Program Act of 2003,” the Interior Department through the U.S. Geological Survey would establish a program to archive geologic, geophysical, and engineering data, maps, well logs, and samples; provide a national catalog of archival material; and provide technical and financial assistance related to the archival material. State agencies that elect to be part of the data archive system that stores and preserves geologic samples would receive 50% financial assistance, subject to the availability of appropriations. Private contributions would be applied to the non-federal share.

Appropriations of \$30 million per year from FY2006 through FY2010 would be authorized.

Section 2012: Oil and Gas Lease Acreage Limitations. Lease acreage limits would be altered so that additional federal lands would not fall under the Mineral Leasing Act's single-state ownership limitations.

Section 2013: Deadline for Decision on Appeals under the Coastal Zone Management Act. This section would replace language in Section 319 of the Coastal Zone Management Act of 1972 (CZMA), as amended (16 U.S.C. 1465). Section 319 had been added as an amendment in 1996. It established a time line for appeals to the Secretary of Commerce on consistency determinations when a state and federal agency are unable to reach agreement. The consistency provisions, set forth in Section 307 of the CZMA, require federal activities in or affecting the coastal zone to be consistent with the policies of a federally approved and state-administered coastal zone management plan. (Federal activities include activities and development projects performed by a federal agency or by a contractor on behalf of a federal agency, and federal financial assistance.) A proposal to modify the appeals time line with deadlines very similar to this legislation was included in a proposed rule on federal consistency, published in the June 11, 2003, *Federal Register*. A final rule has not been issued.

The consistency provision creates an unusual relationship where states can halt most federal actions that are incompatible with state interests. When enacted, the consistency requirement was viewed as a main reason why states would pursue development and implementation of coastal plans since the other incentive to participate, federal financial grants, always has been modest. This view appears to have some validity as 34 of the 35 eligible states and territories are now administering federally approved coastal management programs.

Current Law. The consistency provisions in Section 307 of the CZMA guides state consideration of whether a proposed federal activity will be compatible with a federally approved and state-administered coastal zone management plan. Since the first state plan was approved in the mid-1970s, there has been considerable friction between states and federal agencies over the reach of the consistency provisions. States have sought broader application to have a strong role in decisions about the largest possible array of proposed federal activities, while the federal government has sought narrower interpretations, especially relating to offshore energy development. Determining an exact boundary separating actions on which the state is to have a primary role in halting a proposal from actions on which the state does not have such powers has been a subject of federal appeals and litigation, including decisions by the U.S. Supreme Court (notably *Secretary of the Interior v. California*, 464 U.S. 312 (1984), in which the court determined that the sale of oil and gas leases on the outer continental shelf was not an act affecting the coastal zone).

When a state and a federal agency cannot reach an agreement on a consistency determination, the law and regulations lay out an elaborate process for resolving that disagreement. Most disagreements are resolved through this process, but if no agreement can be reached, the final step is an appeal to the Secretary of Commerce to make a decision. Appeals to the Secretary have not been common. According to

citations of appeals posted on the website of the Office of Ocean and Coastal Resource Management in the National Oceanic and Atmospheric Administration (NOAA), viewed May 12, 2005, 38 consistency determinations were appealed to the Secretary between 1984 and 1999, and 19 of them involved proposed activities by oil companies. The appeals process, like all other aspects of consistency, is currently covered under a final rule issued by NOAA in the December 8, 2000, *Federal Register*.

Section 319 in current law has less detail than the proposed amendment. It states that the Secretary will either issue a final decision on the appeal or publish a notice in the *Federal Register* stating why a decision cannot be reached within 90 days after the record has closed. If the Secretary publishes a notice that a decision has not been made, that decision must be issued within 45 days of the date of publication of that notice.

Bill Language. H.R. 6 would replace the current Section 319 of the CZMA with a new set of provisions that would stipulate three sequential deadlines, and thereby limit the overall length of this appeals process to a total of 270 days from the date when an appeal is filed. The first deadline would be for the Secretary of Commerce to publish an initial notice of an appeal in the *Federal Register* within 30 days of the appeal's filing. The second deadline would be that the administrative record would be open for no more than 120 days. During that time period, the Secretary could receive filings related to the appeal. The final deadline would give the Secretary up to 120 days to issue a decision after the administrative record had been closed. The second and third deadlines would also apply to all pending appeals not resolved prior to the date of enactment. Also, any appeals in which the record is open on the date of enactment would have to be closed within 120 days of that date.

Policy Context. Consistency appeals have been contentious and, in some instances, the appeals process has dragged on for long time periods. The 1996 amendments in Section 319 were meant to address those delays by establishing some time limits. This has proved unsatisfactory to some, who seek additional statutory language that would remove decisions about deadlines from the unpredictable rule-making process by defining the length of component steps in law, and therefore the overall process, after an appeal to the Secretary has been filed.

Section 2014: Reimbursement for Costs of NEPA Analysis, Documentation, and Studies. The Mineral Leasing Act would be amended to provide reimbursement for costs of NEPA-related studies under certain circumstances.

Section 2015: Gas Hydrate Production Incentive. Royalties would be suspended for the first 50 billion cubic feet of natural gas produced from gas hydrate resources per 9 square miles of leased tract, in addition to any other applicable royalty relief.

Section 2016: Onshore Deep Gas Production Incentive. Royalties for onshore deep-well natural gas would be suspended for up to 50 billion cubic feet per natural gas lease.

Section 2017: Enhanced Oil and Natural Gas Production. Royalty relief would be available for the purposes of enhancing oil and natural gas recovery from specified leases.

Section 2018: Oil Shale. The Secretary of the Interior would develop an oil shale leasing program as soon as practicable and publish a final regulation to implement the program by December 31, 2006.

Section 2019: Use of Information about Oil and Gas Public Challenges. The Secretary of the Interior and the Secretary of Agriculture would collect and use information on public challenges to manage oil and gas programs within their departments.

Subtitle B — Access to Federal Lands

Sections 2021- 2027: Leasing and Permitting Processes. An Office of Federal Energy Project Coordination (FEPC) would be established to review and report on accomplishments that are considered more efficient and effective for federal permitting (**Sec. 2021**). The Secretary of the Interior would perform an internal review of the federal onshore oil and gas leasing and permitting process with particular focus on lease stipulations affecting the environment and conflicts over resource use (**Sec. 2022**). The Secretary would be required to ensure expeditious completion of environmental and other reviews and implement “best management practices” that would lead to timely action on oil and gas leases and drilling permits (**Sec. 2023**). The Secretary of the Interior and the Secretary of Agriculture would enter into a memorandum of understanding to ensure timely processing of oil and gas lease applications (**Sec. 2024**).

The U.S. Geological Survey would be required to estimate onshore oil and gas resources and identify impediments and restrictions that might delay permits. The Department of Energy would be required to make regular assessments of economic reserves (**Sec. 2025**).

A pilot program would be established to demonstrate energy development on federal land in accordance with the multiple-use mandate; Wyoming, Montana, Colorado, Utah, and New Mexico would be asked to participate (**Sec. 2026**). The Secretary of the Interior would have 10 days after receiving an application for a permit to drill (APD) to notify the applicant whether the APD was complete. The Secretary would have 30 days after a complete APD was submitted to issue or defer a permit with correcting measures. If deferred, the applicant would have a two-year window to complete the application, as specified by the Secretary. If the applicant met the requirements, then the Secretary would issue a permit within 10 days. The Secretary would deny the permit if the criteria were not met within the two-year period (**Sec. 2027**).

Section 2028: Fair Market Rental Value Determinations for Public Land and Forest Service Rights-of-Way. The Secretaries of the Interior and Agriculture would annually revise and update rental fees for land encumbered by linear rights-of-way to reflect fair market value.

Section 2029: Energy Facility Rights-of-Way and Corridors on Federal Lands. Not later than one year after enactment, the Secretaries of the Interior and Agriculture, in consultation with the Secretaries of Defense, Commerce, and Energy and FERC, would submit to Congress a report addressing the location of existing rights-of-way on federal land for oil and gas pipelines and electric transmission and distribution facilities.

Section 2030: Consultation Regarding Energy Rights-of-Way on Public Land. Within six months after enactment, the Secretaries of the Interior and Agriculture would be required to enter into an MOU to coordinate environmental compliance and processing of rights-of-way applications.

Section 2031: Electricity Transmission Line Right-of-Way in Cleveland National Forest and Adjacent Public Land. The Bureau of Land Management would become the lead federal agency for environmental and other necessary reviews for a high-voltage electricity transmission line right-of-way through the Trabuco Ranger District of the Cleveland National Forest in California.

Section 2032: Sense of Congress Regarding Development of Minerals Under Padre Island National Seashore. In recognition of the split estate on Padre Island National Seashore, it would be the sense of Congress that the federal government owns the surface rights while the mineral rights are held privately and also by the state of Texas.

Section 2033: Livingston Parish Mineral Rights Transfer. Section 102 of P.L. 102-562 is amended by striking the “Conveyance of Lands” provision, which maintains the reservation of mineral rights held by the United States in specific areas of Livingston Parish, Louisiana.

Subtitle C — Naval Petroleum Reserves

Sections 2041-2044: Naval Petroleum Reserves. The National Defense Authorization Act for FY1996 (P.L. 104-106) authorized sale of the federal interest in the oil field at Elk Hills, CA (Naval Petroleum Reserve-1 (NPR-1)). Transfers of other NPR sites have followed in subsequent years. This leaves in the Naval Petroleum Reserves program two small oil fields in California and Wyoming, which will generate estimated revenue to the government of roughly \$7.2 million during FY2005. The Kern County site (NPR-2) comprises a “checkerboard” pattern of government and privately owned tracts adjacent to the Elk Hills field. Of the 50 tracts owned by the government, nearly 90% are leased by private oil companies with royalty payments deposited in the U.S. Treasury. This provision would transfer administration of virtually all the government-held tracts to the Department of the Interior.

Surface rights, title, and interest of a roughly 167-acre parcel would be transferred to the city of Taft, CA. The federal government would retain rights to all fossil fuel and mineral resources for itself or its lessees, but would yield all surface rights and responsibilities for care of the surface. The Executive Order of December 13, 1912, establishing NPR-2 would be revoked.

Subtitle D — Miscellaneous Provisions

Section 2051: Split-Estate Federal Oil and Gas Leasing and Development Practices. The Secretary of the Interior would conduct a review of how management practices by federal subsurface oil and gas development activities affect privately owned surface users. The review would detail the rights and responsibilities of surface and subsurface owners, compare consent provisions under the Surface Mining Control and Reclamation Act of 1977 with provisions for oil and gas development, and make recommendations that would address surface owner concerns.

Section 2052: Royalty Payments Under Certain Leases. The lessee of a “covered lease tract” off the coast of Louisiana would be allowed to withhold royalties due to the United States if it paid the state of Louisiana 44 cents for every dollar of the federal royalty withheld. This royalty relief would end when certain drainage claims were satisfied.

Section 2053: Domestic Offshore Energy Reinvestment. This would add a new Section 32 at the end of the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et. seq.) to return a portion of the federal revenues from offshore energy activities to affected coastal states to fund specified activities. Representatives of states with offshore energy development have been seeking to return a significant portion of the federal revenues generated to these states, and particularly the coastal areas within these states that may be more affected by onshore and near-shore activities that support that development. Proponents of these proposals look to the rates at which funds are given to jurisdictions where energy development occurs within those jurisdictions on federal lands, and seek revenues that will help coastal states respond to adverse onshore effects of offshore energy development. Coastal destruction has received more attention in Louisiana, where many square miles of wetlands are being lost to the ocean each year.

A federal program to address the impacts of coastal energy development was enacted during the energy crisis of the late 1970s. Called the Coastal Energy Impact Assistance Program, it operated briefly, providing loans and grants to states through the federal Coastal Zone Management Program.

Current Law. There is no comparable program operating under in current law.

H.R. 6. The House-passed bill would create a new Domestic Offshore Energy Reinvestment Program. The program would be funded from a new Secure Energy Reinvestment Fund. The fund would receive deposits of all qualified revenues from energy activities on the outer continental shelf (OCS). All deposits into the fund would be subject to appropriation. These revenues would include \$35 million in royalty income each year, plus all royalty income above a specified amount that would generally increase annually (starting at \$7 billion in FY2006, rising to \$9 billion in FY2014, and ending at \$7.5 billion in FY2015), bonus bid income above \$880 million each year, and interest income earned by the Fund. Each year beyond FY2015 the Secretary of the Treasury would deposit 25% of all qualified revenues of the preceding year into the Fund plus investment interest earned.

Coastal states where energy activities occur offshore and coastal political subdivisions in those states would be eligible to receive money from the fund. Eligible states and political subdivisions are defined in the legislation. Allocations among eligible states would be determined by a formula that accounts for energy revenues generated offshore in federal waters that lie between outward extensions of the state's lateral boundaries over the past 10 years. Each coastal state is to pass along 35% of the total it receives to eligible coastal political subdivisions, with the allocation among these subdivisions in each state to be based on a formula that considers population, length of coastline, distance from leased tracts, and amount of outer continental shelf support activities within that subdivision.

Each state could use these funds to implement a plan it develops that would improve environmental quality and address the impacts of offshore energy activities. All plans must be approved by the Secretary of the Interior before states could receive funds. Plans must describe how recipients will evaluate the effectiveness of their implementation efforts. Each eligible state with an approved plan would receive at least 5% of the total available amount each year. Authorized uses of the funds would be limited to (1) conserving, protecting or restoring coastal areas, including wetlands; (2) mitigating damage to or protecting fish, wildlife, or natural resources; (3) paying reasonable planning assistance and administrative costs; (4) implementing federally approved plans or programs to minimize the effects of natural disasters, and; (5) funding onshore infrastructure and public service projects that mitigate impacts of outer continental shelf activities. Revisions and amendments to plans would have to be approved by the Secretary. In addition, a new coastal restoration program would be established using 2% of the funds available each year to assess the effects of coastal habitat restoration techniques and develop new technologies, develop improved models to predict ecosystem change, and identify economic options to address socio-economic consequences of coastal degradation. This program would be administered by the Secretaries of the Interior and Commerce. In addition to the 2% funding, an appropriation of \$10 million annually would be authorized.

Policy Context. This is the most recent of repeated efforts to allocate a portion of federal offshore oil and gas revenues to coastal states to assist them in addressing the impacts of these activities. Recent Congresses, starting with the 105th, considered numerous similar legislative proposals. These proposals came to be known as CARA, or the Conservation and Reinvestment Act. In the 106th Congress, the House passed a version of CARA on May 11, 2000 (H.R. 701). Some of these proposals were also reflected in the Clinton Administration's Lands Legacy Initiative proposal in 2000, and also a one-time \$150 million appropriation provided in the FY2001 Commerce appropriations legislation (P.L. 106-553) for coastal impact assistance.

Support for the CARA proposals, which would also have funded many related federal natural resource protection programs, grew as the budget deficit of the early and mid-1990s was replaced by forecasts of a surplus, as protecting natural resources came to be viewed as part of the effort to address sprawl, and as efforts and support to secure federal funding for coastal resource protection and restoration efforts grew. With the replacement of the budget surplus forecast with deficit forecasts and changing national priorities since the 9/11 terrorist attacks, broad support for wide-ranging legislation like CARA has declined, but interest has remained in returning

a portion of the money currently paid to the federal government by private companies leasing offshore areas to those locations most affected by the offshore activity.

Section 2054: Repurchase of Leases That Are Not Allowed To Be Explored or Developed. Under certain circumstances any federal lease (oil, gas, coal, tar sands, etc.) if not allowed to be explored or developed would be authorized for repurchase and cancellation by the Secretary of the Interior.

Section 2055: Limitation on Required Review Under NEPA. Certain activities would not be subject to NEPA if the activity is conducted for the purpose of exploration or development of a domestic federal energy resource.

Title XXI — Coal — Resources

Sections 2101-2109: Federal Coal Leases. This subtitle would modify federal coal leasing procedures to encourage greater coal production on federal lands. Issues raised by these provisions include their impact on regional competition and returns to the U.S. Treasury.

Current Law. Under the Mineral Leasing Act of 1920 (30 U.S.C. 203), modifications to an existing coal lease would not exceed 160 acres or add acreage larger than that in the original lease. Coal leases are subject to diligent development requirements, but the Secretary of the Interior may suspend the condition upon payment of advance royalties. Advance royalties are computed on a fixed production reserve ratio, and the aggregate number of years advance royalties may be accepted in lieu of production is 10. An operation and reclamation plan must be submitted within three years after a lease is issued under the Leasing Act (30 U.S.C. 207). Financial assurance is required to guarantee payment of bonus bid installments (30 U.S.C. 201 (a)).

H.R. 6. The House-passed bill would repeal the 160 acre limitation on coal lease modifications. The total area added to an existing coal lease through a modification could not exceed 1,280 acres or add acreage larger than the original lease (**Sec. 2102**). Criteria would be established for extending the mine-out period of a coal lease beyond 40 years (**Sec. 2103**). The Secretary of the Interior may upon payment of an advance royalty, suspend a coal lessee's requirement for continuous operation. Advance royalties would be based on the average price of coal sold on the spot market from the same region, and the aggregate number of years advance royalties could be accepted in lieu of production would not exceed 20 (**Sec. 2104**). The current three-year deadline for submission of a coal lease operation and reclamation plan would be repealed (**Sec. 2105**). The financial surety bond or other financial guarantee for a bonus bid would no longer be required (**Sec. 2106**). The Secretary of the Interior, in consultation with the Secretaries of Agriculture and Energy, would be required to assess coal on public lands, including low-sulfur coal and various impediments to developing such resources (**Sec. 2107**). Amendments made under this provision would apply to any coal lease issued before, on, or after the date of enactment (**Sec. 2108**). The Secretary of the Interior would report to

Congress on plans to resolve conflicts between development of coal and coalbed methane in the Powder River Basin (**Sec. 2109**).

Title XXII — Energy Development in Arctic Refuge

Current Law

Section 1003 of the Alaska National Interest Lands Conservation Act of 1980 (ANILCA, P.L. 96-487, 94 Stat. 2371) prohibited oil and gas development in the entire Arctic National Wildlife Refuge, or “leasing or other development leading to production of oil and gas from the range” unless authorized by an act of Congress. Section 1002 required a legislative environmental impact statement on proposed development and its potential effects. The Final Legislative Environmental Impact Statement (FLEIS) and a recommendation to proceed to full development was issued in 1987. Under current law for the management of national wildlife refuges (16 U.S.C. §668dd), and under 43 C.F.R. §3101.5-3 for Alaskan refuges specifically, an activity may be allowed in a refuge only if it is compatible with the purposes of the particular refuge and with those of the Refuge System as a whole. In the 25 years since the passage of ANILCA, various unsuccessful attempts have been made to pass development legislation.

Section 2201: Short Title. The short title is the “Arctic Coastal Plain Domestic Energy Security Act of 2005.”

Section 2202: Definitions. The ANWR *Coastal Plain* would be defined as approximately 1.5 million acres as identified under ANILCA, and described in Appendix I to Part 37 of Title 50 C.F.R. “Secretary” would be defined as the Secretary of the Interior.

Comments. The Appendix refers to the legal boundaries of the Coastal Plain that were administratively drawn to exclude the three townships selected by the Kaktovik Inupiat Corporation (KIC, an Alaska Native Village Corporation) from the defined Coastal Plain. However, the lands are within the geographical limits of the “coastal plain.” Also under ANILCA, KIC was entitled to select a fourth township, for a total of approximately 92,000 acres. In addition, there are over 10,000 acres of Native-owned *allotments* in the Refuge. These are basically surface ownerships, with the federal government reserving the oil, gas, and coal rights. Although allotments were originally restricted titles, under P.L. 108-337, allotments may now be subdivided and dedicated as if the surface estate were held in unrestricted, fee-simple title — a fact that could facilitate development on them if the Refuge is opened.

Section 2203: Leasing Program. This section would direct the Secretary to establish the leasing program subject to various conditions, described below.

Section 2203(a) and (b): Establishment of Leasing Program and Repeal of Leasing Prohibition. Acting through the Bureau of Land Management and in consultation with the Fish and Wildlife Service, the Secretary would be required to establish a competitive oil and gas leasing program under the

Mineral Leasing Act (30 U.S.C. 181 et seq.) for the Coastal Plain; the program is to result in “no significant adverse effect” on specified environmental and subsistence resources, and leasing is to be conducted in “a manner that ensures the receipt of fair market value by the public for the mineral resources to be leased.” Section 1003 of ANILCA would be repealed.

Section 2203(c) and (d): Compatibility with Purposes of Refuge; NEPA Requirements; No Effect on State Authorities. Section 2203(c) states that the oil and gas leasing program and activities in the Coastal Plain are deemed to be compatible with the purposes for which ANWR was established and that no further findings or decisions are required to implement this determination.

Subsection (c) would also declare that the FLEIS is deemed to satisfy the requirements of NEPA with respect to actions by the Secretary to develop and promulgate leasing regulations, yet requires the Secretary to prepare an Environmental Impact Statement (EIS) with respect to other actions, some of which might usually require only a (shorter) environmental assessment. Consideration of alternatives is to be limited to two choices, a preferred option and a “single leasing alternative.” (Generally, an EIS analyzes several alternatives, including a “no action” alternative.)

Subsection (d) would declare that the title does not expand or limit state regulatory authority.

Comments. The language of subsection (a) appears to answer the compatibility question and to eliminate the usual compatibility determination processes. The extent of leasing “activities” that might be included as compatible is debatable: at issue would be whether the term encompasses, for example, necessary support activities, such as construction and operation of port facilities, staging areas, and personnel centers.

Section 2203(e) and (f): Special Areas. This subsection would allow the Secretary to set aside up to 45,000 acres (and names one specific special area that must be designated) in which leases, if permitted, must prohibit surface occupancy. The FLEIS identified four special areas which together total more than 52,000 acres, so the Secretary would be required to select among these areas or any others that may seem significant. Section 2203(f) also would state that the closure authority in the ANWR title was the Secretary’s sole closure authority, which might limit possible secretarial actions under the Endangered Species Act.

Section 2203(g): Issuance and Revision of Regulations. Regulations would be issued within 15 months of enactment, and reviewed and revised periodically in light of any significant biological, environmental, or engineering data coming to the Secretary’s attention.

Section 2204: Leasing Procedures, Bidding System, Minimum Acreage. The Secretary would establish procedures (a) to receive and consider nominations for areas to be included in a lease sale, (b) to hold the sales, and (c) provide for public notice and comment. The bidding system would be by sealed competitive cash bonus bids, and the first offering would total at least 200,000 acres.

The first sale would be conducted within 22 months of enactment, with additional sales thereafter as industry interest warranted.

Section 2205: Grant of Leases. The Secretary could grant leases to the highest responsible qualified bidder. Leases could not be transferred to another party without approval of the Secretary, acting in consultation with the Attorney General.

Section 2206: Terms and Conditions of Leases; Project Labor Agreements. Under § 2206(a), leases would provide for at least a 12.5% royalty payment; allow for seasonal closure of the Coastal Plain to exploratory drilling to protect caribou calving areas and other species; require lessees to be responsible for reclamation of adversely affected lands in the Coastal Plain; and provide that lessees could not delegate their obligation to reclaim lands without written approval of the Secretary. The subsection would further require that the reclamation standard be an ability to support the uses of the land before exploration and development, or “a higher or better use” as approved by the Secretary, and that the lease contain fish, wildlife, and environmental protection standards as required in §2203(a)(2). The subsection would require that lessees use their best efforts to provide employment and contracts to Alaska Natives and Native Corporations, and would prohibit export of oil produced under the lease.

Subsection 2206(b) would direct the Secretary to require lessees to negotiate project labor agreements (PLAs) — “recognizing the Government’s proprietary interest in labor stability and the ability of construction labor and management to meet the particular needs and conditions of projects to be developed” (A PLA is an agreement between a project owner or main contractor and the union(s) representing the craft workers for a particular project; it establishes the terms and conditions of work that will apply for the particular project.)

Section 2207: Environmental Protection. This section contains most (but not all) of the environmental protection provisions of the title.

Section 2207(a): No Significant Adverse Effect; 2,000-Acre Limit. Subject to the requirements in §2203 (see above), the Secretary would ensure that oil and gas activities on the Coastal Plain resulted in “no significant adverse impact” on fish, wildlife, their habitat, and the environment; require use of best commercially available technology; and “ensure that the maximum amount of surface acreage covered by production and support facilities, including airstrips and any areas covered by gravel berms or piers for support of pipelines, does not exceed 2,000 acres on the Coastal Plain.” (This last provision has been a focus of considerable debate concerning (a) its applicability to the more than 100,000 acres of Native lands in the Refuge, (b) the facilities that would be limited; and (c) the economic and practical impacts of such a limitation. For more information, see CRS Report RS22143, *Oil and Gas Leasing in the Arctic National Wildlife Refuge (ANWR): the 2,000-Acre Limit.*)

Section 2207(b): Assessment and Mitigation. The Secretary would have to require a site-specific analysis of the probable effects of drilling and other activities on fish, wildlife, and the environment; and a plan to avoid or reduce any

significant adverse effect on these resources. The plan's developer would have to consult with any agencies with jurisdiction over matters mitigated in the plan.

Section 2207(c): Promulgating Regulations. Before implementing the leasing program, the Secretary would be required to promulgate "regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other measures" to ensure that activities on the Coastal Plain under this title were consistent with the title's environmental requirements and purposes.

Section 2207(d): Compliance with Other Environmental Laws and Requirements. This subsection would set out 21 requirements for the environmental standards in the leasing program, to be implemented through regulations, lease terms, etc. These requirements would include, among other things: complying with all applicable state and federal environmental laws; setting appropriate seasonal limits on operations; prohibiting public access via specified roads or other modes of transportation; consolidating facilities; treating and disposing of specified wastes, avoiding (to the extent practicable) streams, rivers, wetlands, etc.; complying with reasonable stipulations for cultural and archeological resources; and other requirements.

Section 2207(e): Documents To Be Considered by Secretary. In developing the regulations, lease terms, etc., the Secretary is to consider stipulations and standards in three specified documents.

Section 2207(f): Consolidation of Facilities. The Secretary would be directed to develop and update a plan to consolidate facilities, avoid unnecessary duplication, site activities to minimize their environmental impacts, and use existing facilities where practicable.

Section 2207(g): Access to Coastal Plain. The Secretary would be required to manage the Coastal Plain to allow subsistence access, including the use of snowmobiles and motorboats (16 U.S.C. 3121), and to allow local residents generally to have "reasonable access" to the Coastal Plain for traditional uses.

Section 2208: Expedited Judicial Review. Section 2208 would require that any complaints seeking judicial review be filed within 90 days. (Subsections (a)(1) and (a)(2) appear to contradict each other as to where suits are to be filed.) Section 2208(a)(3) would limit the scope of review by stating that review of a Secretarial decision, including environmental analyses, would be limited to whether the Secretary complied with the terms of the ANWR Title, be based on the administrative record, and that the Secretary's analysis of environmental effects is "presumed to be correct unless shown otherwise by clear and convincing evidence to the contrary." (This standard is unclear, but in this context arguably would make overturning a decision more difficult.)

Section 2209: Federal and State Distribution of Revenues; Low Income Home Energy Assistance. This section would provide that 50% of adjusted revenues be paid to Alaska, and the balance deposited in the U.S. Treasury as miscellaneous receipts, except for part of the federal share of bonus bids that would be available to be appropriated for low income home energy assistance and a

portion (not to exceed \$11 million in an unspent balance, with \$5 million available for annual appropriation) that would go into a fund to assist Alaska communities under §2212 in addressing local impacts of energy development (see below). Section 2209(c) would allow certain revenues from bids for leasing to be available for appropriation for energy assistance for low-income households (42 U.S.C. 8621, the LIHEAP program; see CRS Report RL31865, *Low Income Home Energy Assistance Program (LIHEAP): Program and Funding.*)

Comments. Under §2203(a), the Secretary is to establish and implement a leasing program *under the Mineral Leasing Act*, yet §2212 directs a revenue sharing program different from that in the MLA, which may raise validity questions. If the alternative disposition were struck down and the revenue provisions were determined to be severable, Alaska could receive 90% of ANWR revenues.

Section 2210: Rights of Way Across the Coastal Plain. This section would declare that the provisions of 16 U.S.C. 3161 (an ANILCA provision containing a congressional finding in support of a single comprehensive statutory authority for approval of transportation systems) would not apply to oil and gas transportation on the Coastal Plain. The Secretary would have to ensure that rights of way and easements would not cause significant adverse effects on fish, wildlife, subsistence resources, and the environment, and that facilities were sited or designed to avoid unnecessary duplication of roads and pipelines. Appropriate regulations would have to be issued within 15 months of enactment, as required in §2203(g).

Section 2211: Surface and Subsurface Estate Conveyance to Native Corporations. The Secretary would be required to convey certain additional surface rights to the Kaktovik Inupiat Corporation and certain subsurface rights to the Arctic Slope Regional Corporation (ASRC).

Section 2212: Local Government Impact and Community Service Assistance. The Secretary would be authorized to use funds from the Coastal Plain Local Government Impact Aid Assistance Fund for financial assistance to eligible entities as a result of oil and gas exploration and development in the Coastal Plain. A maximum of \$5 million could be appropriated each year; the unappropriated balance in the fund would be limited to a maximum of \$11 million.

Title XXIII — Set America Free (SAFE)

Sections 2301- 2305: The Set America Free Act of 2005. The findings in this title would recognize predictions of growing energy consumption and dependence upon imported oil, and the accompanying risks (**Sec. 2302**). A U.S. commission would make recommendations for “a coordinated and comprehensive North American energy policy that will achieve energy self-sufficiency by 2025” for not only the United States but Canada and Mexico as well (**Sec. 2303**). The panel would be called United States Commission on North American Energy Freedom. Citizens of any of the three nations may be among the 16 appointees to the commission, which would submit a report on findings and recommendations within a year. \$10 million would be authorized for two fiscal years to carry out the act

(Sec. 2304). The President would submit a response or set of recommendations pursuant to the commission's report within 90 days of receipt of the report (Sec. 2305).

Title XXIV — Grand Canyon Hydrogen-Powered Transportation Demonstration

Sections 2401-2406. The Secretaries of Energy and the Interior would be required to establish a research and development program relating to hydrogen-based transportation technologies suitable for operations in sensitive areas such as national parks (Sec. 2404). Over the duration of the program, the Secretaries would report to Congress annually on ongoing and planned activities (Sec. 2405). A total of \$120,000 would be authorized over three years for the program (Sec. 2406).

Title XXV — Additional Provisions

Section 2501: Wind Energy Royalty Relief. This provision, which was added as a floor amendment (H.Amdt. 97), would reduce by 50% any royalty payments, excluding the costs of processing the rights-of-way, for wind energy generation on BLM lands that otherwise would be paid to the Treasury. This royalty relief provision would terminate after 10 years of enactment or after the Secretary of the Interior declared that at least 10,000 megawatts of electricity was available from renewable sources on public lands, whichever is sooner.

Table 1. Authorizations in H.R. 6 as passed by the House
(in millions of dollars)

In this table, text in *italics and smaller font* indicate subcategories.

| HR6 House | Title | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2005- FY2010 | FY2011 | FY2012- FY2015 | FY2006- FY2015 |
|-----------------|--|---------|---------|---------|--------|--------|--------|-------------------|--------|-------------------|-------------------|
| TITLE I | — ENERGY EFFICIENCY | | | | | | | | | | |
| Subtitle A | — Federal Programs | | | | | | | | | | |
| Sec. 101 | Energy & Water Saving Measures in Congressional Buildings | — | \$2.0 | \$2.0 | \$2.0 | \$2.0 | \$2.0 | \$10.0 | — | — | \$10.0 |
| Sec. 108 | Advanced Building Efficiency Testbed | — | 6.0 | 6.0 | 6.0 | — | — | 18.0 | — | — | 18.0 |
| Subtitle B | — Energy Assistance and State Programs | | | | | | | | | | |
| Sec. 121 | Low-income Home Energy Assistance Program | 5,100.0 | 5,100.0 | 5,100.0 | — | — | — | 15,300.0 | — | — | 15,300.0 |
| Sec. 122 | Weatherization Assistance | — | 500.0 | 600.0 | 700.0 | — | — | 1,800.0 | — | — | 1,800.0 |
| Sec. 123 | State Energy Programs | — | 100.0 | 100.0 | 125.0 | — | — | 325.0 | — | — | 325.0 |
| Sec. 124 | Energy Efficient Appliance Rebate Programs | — | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 250.0 | — | — | 250.0 |
| Sec. 125 | Energy Efficient Public Buildings | — | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 150.0 | — | — | 150.0 |
| Sec. 126 | Low Income Community Energy Efficiency Pilot Program | — | 20.0 | 20.0 | 20.0 | — | — | 60.0 | — | — | 60.0 |
| TITLE II | — RENEWABLE ENERGY | | | | | | | | | | |
| Subtitle A | — General Provisions | | | | | | | | | | |
| Sec. 201 | Assessment of Renewable Energy Resources | — | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 50.0 | — | — | 50.0 |
| Sec. 202 | Renewable Energy Production Incentive (ss for FY05 - FY25) | ss | ss | ss | ss | ss | ss | ss | ss | ss | ss |
| Sec. 204 | Insular Areas Energy Security ^a | — | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 25.0 | 5.0 | 20.0 | 50.0 ^a |

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| HR6 House | Title | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2005- FY2010 | FY2011 | FY2012- FY2015 | FY2006- FY2015 |
|------------------|--|--------|--------------------|--------|--------|--------|--------|--------------------|--------|-------------------|--------------------|
| Sec. 441 | Clean Air Coal Program | | | | | | | | | | |
| | Pollution Control Projects | — | 300.0 | 100.0 | 40.0 | 30.0 | 30.0 | 500.0 | — | — | 500.0 |
| | Generation Projects (FY2012 \$400M, FY2013 \$300M) | — | — | 250.0 | 350.0 | 400.0 | 400.0 | 1,400.0 | 400.0 | 700.0 | 2,500.0 |
| TITLE V | — INDIAN ENERGY | | | | | | | | | | |
| Sec. 503 | Indian Energy (ss for FY2006 - FY2016) | — | ss | ss | ss | ss | ss | ss | ss | ss | ss |
| | Federal Power Marketing Administrations (amount has been rounded up for this table, actual amount is \$0.75M) | — | 0.8 ^a | — | — | — | — | 0.8 ^a | — | — | 0.8 ^a |
| TITLE VI | — NUCLEAR MATTERS | | | | | | | | | | |
| Subtitle B | — General Nuclear Matters | | | | | | | | | | |
| Sec. 622 | NRC Training Program | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | — | 5.0 | — | — | 5.0 |
| Sec. 631 | Cooperative R&D and Special Demonstration Projects for the Uranium Mining Industry | — | 10.0 | 10.0 | 10.0 | — | — | 30.0 | — | — | 30.0 |
| Subtitle C | — Additional Hydrogen Production Provisions | | | | | | | | | | |
| Sec. 651 | Hydrogen Production Programs | — | 65.0 | 74.8 | 86.0 | 98.9 | 113.7 | 438.3 | 130.7 | 750.7 | 1,319.7 |
| Subtitle D | — Nuclear Security | | | | | | | | | | |
| Sec. 668 | Authorization of Appropriations | — | ss | ss | ss | ss | ss | ss | ss | ss | ss |
| TITLE VII | — VEHICLES AND FUELS | | | | | | | | | | |
| Subtitle B | — Hybrid Vehicles, Advanced Vehicles & Fuel Cell Buses | | | | | | | | | | |
| Sec. 712 | Hybrid Retrofit & Electric Conversion Program | 20.0 | 35.0 | 45.0 | ss | ss | — | 100.0 | — | — | 100.0 |
| Sec. 713 | Efficient Hybrid & Advanced Diesel Vehicles | — | 300.0 | 300.0 | 300.0 | 300.0 | 300.0 | 1,500.0 | 300.0 | 1,200.0 | 3,000.0 |
| Sec. 724 | Authorization of Appropriations Advanced Vehicles (secs.721-723) | — | 200.0 ^a | — | — | — | — | 200.0 ^a | — | — | 200.0 ^a |

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| HR6 House | Title | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2005- FY2010 | FY2011 | FY2012- FY2015 | FY2006- FY2015 |
|-------------------|---|--------|------------------|---------|---------|---------|---------|-------------------|--------|-------------------|-------------------|
| Sec. 731 | Fuel Cell Transit Bus Demonstration | — | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 50.0 | — | — | 50.0 |
| Subtitle C | — Clean School Buses | | | | | | | | | | |
| Sec. 742 | Replacement of Certain School Buses w/ Clean School Buses | 45.0 | 65.0 | 90.0 | ss | ss | — | 200.0 | — | — | 200.0 |
| Sec. 743 | Diesel Retrofit Program | 20.0 | 35.0 | 45.0 | ss | ss | — | 100.0 | — | — | 100.0 |
| Sec. 743A | Diesel Truck Retrofit & Fleet Modernization Program | 20.0 | 35.0 | 45.0 | ss | ss | — | 100.0 | — | — | 100.0 |
| Sec. 744 | Fuel Cell School Buses | 20.0 | 25.0 | 25.0 | — | — | — | 70.0 | — | — | 70.0 |
| Subtitle D | — Miscellaneous | | | | | | | | | | |
| Sec. 751 | Railroad Efficiency | — | 25.0 | 35.0 | 50.0 | — | — | 110.0 | — | — | 110.0 |
| Sec. 755 | Conserve by Bicycling Program | — | 6.2 ^a | — | — | — | — | 6.2 ^a | — | — | 6.2 ^a |
| Sec. 756 | Reduction of Engine Idling of Heavy-Duty Vehicles | — | 19.5 | 30.0 | 45.0 | — | — | 94.5 | — | — | 94.5 |
| Sec. 757 | Biodiesel Engine Testing Program | — | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 25.0 | — | — | 25.0 |
| Subtitle E | — Automobile Efficiency | | | | | | | | | | |
| Sec. 771 | Implementation & Enforcement of Fuel Economy Standards ¹ | — | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 10.0 | — | — | 10.0 |
| TITLE VIII | — HYDROGEN | | | | | | | | | | |
| Sec. 809 | Authorization of Appropriations | — | 546.0 | 750.0 | 850.0 | 900.0 | 1,000.0 | 4,046.0 | | | 4,046.0 |
| TITLE IX | — RESEARCH AND DEVELOPMENT | | | | | | | | | | |
| Subtitle A | — Science Programs | | | | | | | | | | |
| Sec. 901 | Rare Isotope Accelerator ² | — | ss | ss | ss | ss | ss | ss | ss | ss | ss |
| Sec. 910 | Authorization of Appropriations Total | — | 3,785.0 | 4,153.0 | 4,628.0 | 5,300.0 | 5,800.0 | 23,666.0 | — | — | 23,666.0 |

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| HR6 House | Title | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2005- FY2010 | FY2011 | FY2012- FY2015 | FY2006- FY2015 |
|-------------|--|--------|--------|--------|--------|--------|---------|-------------------|--------|-------------------|-------------------|
| | <i>Part of the total is specifically allocated as follows in italic:</i> | | | | | | | | | | |
| | <i>Systems Biology Program (sec. 902)</i> | — | 100.0 | ss | ss | ss | ss | 100.0 | — | — | 100.0 |
| | <i>Scientific Computing (sec. 905)</i> | — | 252.0 | 270.0 | 350.0 | 375.0 | 400.0 | 1,647.0 | — | — | 1,647.0 |
| | <i>Fusion Energy Sciences (sec.906, except sec. 906(c))</i> | — | 335.0 | 349.0 | 362.0 | 377.0 | 393.0 | 1,816.0 | — | — | 1,816.0 |
| | <i>ITER Construction (906c)</i> | — | ss | ss | ss | ss | ss | ss | — | — | ss |
| | <i>Science and Technology Scholarship Program (sec. 907)</i> | — | 0.8 | 1.6 | 2.0 | 2.0 | 2.0 | 8.4 | — | — | 8.4 |
| | <i>Office of Science and Technical Information (sec. 908)</i> | — | 7.0 | 7.5 | 8.0 | 8.0 | 8.5 | 39.0 | — | — | 39.0 |
| | <i>Science and Engineering Pilot Program (sec. 909)</i> | — | 4.0 | 4.0 | 4.0 | 8.0 | 8.0 | 28.0 | — | — | 28.0 |
| Sec. 910(h) | Integrated Bioenergy Research and Development ³ | 49.0 | 49.0 | 49.0 | 49.0 | 49.0 | — | 245.0 | — | — | 245.0 |
| Subtitle C | — Energy Efficiency | | | | | | | | | | |
| Chapter 1 | — Vehicles, Buildings, and Industries | | | | | | | | | | |
| Sec. 930 | Authorization of Appropriations Total for Chapter 1 | — | 620.0 | 700.0 | 800.0 | 925.0 | 1,000.0 | 4,045.0 | — | — | 4,045.0 |
| | <i>Part of the total is specifically allocated as follows in italic:</i> | | | | | | | | | | |
| | <i>Vehicles (sec. 923)</i> | — | 200.0 | 240.0 | 270.0 | 310.0 | 340.0 | 1,360.0 | — | — | 1,360.0 |
| | <i>Buildings (sec. 924)</i> | — | 100.0 | 130.0 | 160.0 | 200.0 | 240.0 | 830.0 | — | — | 830.0 |
| | (Buildings, grant prg. (924(b))) | — | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 50.0 | — | — | 50.0 |
| | <i>Industries (sec. 925(a))</i> | — | 100.0 | 115.0 | 140.0 | 170.0 | 190.0 | 715.0 | — | — | 715.0 |
| | <i>Electric Motor Control Technology (sec. 925(b))</i> | — | 2.0 | 2.0 | 2.0 | — | — | 6.0 | — | — | 6.0 |
| | <i>Demonstration & Commercial Applications (sec. 926)</i> | — | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 50.0 | — | — | 50.0 |

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| HR6 House | Title | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2005- FY2010 | FY2011 | FY2012- FY2015 | FY2006- FY2015 |
|------------|--|--------|--------|--------|--------|--------|---------|-------------------|--------|-------------------|-------------------|
| | <i>Secondary Electric Vehicle Battery Use Program (sec. 927)</i> | — | 4.0 | 7.0 | 7.0 | 7.0 | 7.0 | 32.0 | — | — | 32.0 |
| | <i>Next Generation Lighting Initiative (sec. 928)</i> | — | 20.0 | 30.0 | 50.0 | 50.0 | 50.0 | 200.0 | 50.0 | 200.0 | 450.0 |
| Chapter 2 | — Distributed Energy and Electric Energy Systems | | | | | | | | | | |
| Sec. 934 | Authorization of appropriations Total for Chapter 2 | — | 220.0 | 240.0 | 250.0 | 265.0 | 275.0 | 1,250.0 | — | — | 1,250.0 |
| | <i>Part of the total is specifically allocated as follows in italic:</i> | | | | | | | | | | |
| | <i>Micro-cogeneration Energy Technology (sec. 932(b))</i> | — | 20.0 | 20.0 | — | — | — | 40.0 | — | — | 40.0 |
| | <i>Electricity Trans. & Dist. & Energy Assurance (sec. 933)</i> | — | 130.0 | 140.0 | 150.0 | 160.0 | 165.0 | 745.0 | — | — | 745.0 |
| | (High Voltage Transmission Lines (sec.933(c))) | — | 2.0 | — | — | — | — | 2.0 | — | — | 2.0 |
| Subtitle D | — Renewable Energy | | | | | | | | | | |
| Sec. 945 | Authorization of Appropriations Total | — | 465.0 | 605.0 | 775.0 | 940.0 | 1,125.0 | 3,910.0 | — | — | 3,910.0 |
| | <i>Part of the total is specifically allocated as follows in italic:</i> | | | | | | | | | | |
| | <i>Concentrating Solar power (sec. 938)</i> | — | 100.0 | 140.0 | 200.0 | 250.0 | 300.0 | 990.0 | — | — | 990.0 |
| | <i>Bioenergy (sec. 939)</i> | — | 200.0 | 245.0 | 310.0 | 355.0 | 400.0 | 1,510.0 | — | — | 1,510.0 |
| | (Biorefinery (sec. 939(c))) | — | 100.0 | 125.0 | 150.0 | 175.0 | 200.0 | 750.0 | — | — | 750.0 |
| | <i>Wind (sec. 940)</i> | — | 55.0 | 60.0 | 65.0 | 65.0 | 65.0 | 310.0 | — | — | 310.0 |
| | (Regional Field Verification Program (sec. 940(c)) ^b) | — | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 20.0 | — | — | 20.0 |
| | (Research and Testing Facility (sec. 940(b))) | — | 10.0 | 15.0 | 10.0 | 5.0 | 1.0 | 41.0 | — | — | 41.0 |
| | <i>Geothermal (sec. 941)</i> | — | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 150.0 | — | — | 150.0 |
| | <i>Photovoltaic (sec. 942)</i> | — | 50.0 | 100.0 | 150.0 | 200.0 | 300.0 | 800.0 | — | — | 800.0 |

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| HR6 House | Title | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2005- FY2010 | FY2011 | FY2012- FY2015 | FY2006- FY2015 |
|-------------------|---|--------|------------------|--------|--------|--------|--------|-------------------|--------|-------------------|-------------------|
| | Cleanup of Leaks from Underground Fuel Tanks, General | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | — | 1,000.0 | — | — | 1,000.0 |
| | Cleanup of Leaks Containing Oxygenated Fuels (e.g. MTBE, Ethanol) | 200.0 | 200.0 | 200.0 | 200.0 | 200.0 | — | 1,000.0 | — | — | 1,000.0 |
| | State Ust/lust Program Implementation & Tank Inspections | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | — | 500.0 | — | — | 500.0 |
| | UST Leak Prevention & Program Compliance/enforcement | 55.0 | 55.0 | 55.0 | 55.0 | 55.0 | — | 275.0 | — | — | 275.0 |
| | (Total amount authorized from LUST Trust Fund) | 555.0 | 555.0 | 555.0 | 555.0 | 555.0 | — | 2,775.0 | — | — | 2,775.0 |
| Sec. 1531 | Authorization of Appropriations (from general revenues) | | | | | | | | | | |
| | Generally to Administer and Enforce Current UST Program (except for the activities specified here in sec. 1531 above) Solid Waste Disposal Act (SWDA, Subtitle I) | — | 50.0 | 50.0 | 50.0 | 50.0 | — | 200.0 | — | — | 200.0 |
| Subtitle C | — Boutique Fuels | | | | | | | | | | |
| Sec. 1541 | Reducing the Proliferation of Boutique Fuels | — | 0.5 ^a | — | — | — | — | 0.5 ^a | — | — | 0.5 ^a |
| TITLE XVI | — STUDIES | | | | | | | | | | |
| Sec. 1613 | Low-Volume Gas Reservoir Study | — | 1.5 | 0.5 | 0.5 | 0.5 | 0.5 | 3.5 | — | — | 3.5 |
| TITLE XVII | — RENEWABLE ENERGY — RESOURCES | | | | | | | | | | |
| Sec. 1701 | Grants to Improve the Commercial Value of Forest Biomass, * (includes \$50M for FY2016) | — | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 250.0 | 50.0 | 200.0 | 550.0* |
| TITLE XX | — OIL AND GAS — RESOURCES | | | | | | | | | | |
| Subtitle A | — Production Incentives | | | | | | | | | | |
| Sec. 2008 | Orphaned, Abandoned, or Idled Wells on Federal Land | — | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 125.0 | — | — | 125.0 |
| | <i>Technical Assistance for Non-Federal Land (sec. 2008 f)</i> | — | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 25.0 | — | — | 25.0 |
| Sec. 2011 | Preservation of Geological and Geophysical Data | — | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 150.0 | — | — | 150.0 |

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| HR6 House | Title | FY2005 | FY2006 | FY2007 | FY2008 | FY2009 | FY2010 | FY2005- FY2010 | FY2011 | FY2012- FY2015 | FY2006- FY2015 |
|--------------------|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|----------------|-------------------|-------------------|
| Subtitle B | — Access to Federal Land | | | | | | | | | | |
| Sec.2023 a,b | Management of Federal Oil & Gas Leasing Programs | — | 40.0 | 40.0 | 40.0 | 40.0 | — | 160.0 | — | — | 160.0 |
| Sec. 2023 c | Improved Enforcement | — | 20.0 | 20.0 | 20.0 | 20.0 | — | 80.0 | — | — | 80.0 |
| Subtitle D | — Miscellaneous Provisions | | | | | | | | | | |
| Sec. 2053 | Domestic Offshore Energy Reinvestment | — | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 250.0 | 50.0 | 200.0 | 500.0 |
| TITLE XXII | — ARCTIC COASTAL PLAIN DOMESTIC ENERGY | | | | | | | | | | |
| Sec. 2212 | Local Government Impact Aid & Community Service Assistance ^a | — | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 25.0 | 5.0 | 20.0 | 50.0 ^a |
| TITLE XXIII | — SET AMERICA FREE (SAFE) | | | | | | | | | | |
| Sec. 2304 | U.S. Commission on North American Energy Freedom | 5.0 | 5.0 | — | — | — | — | 10.0 | — | — | 10.0 |
| TITLE XXIV | — GRAND CANYON HYDROGEN — POWERED TRANSPORTATION DEMONSTRATION | | | | | | | | | | |
| Sec. 2406 | Authorization of Appropriations | — | 0.4 | 0.4 | 0.4 | — | — | 1.2 | — | — | 1.2 |
| | Total Authorized Appropriations | 6,185.0 | 16,000.8 | 16,824.6 | 12,235.9 | 12,354.4 | 12,572.2 | 76,172.8 | 1,523.7 | 4,280.7 | 82,027.2 |

Source: Table prepared by CRS using the text of H.R. 6 as passed by the House on April 21, 2005.

Table Notes:

This table shows funding that would be authorized, including loans but not loan guarantees, in H.R. 6 as passed by the House. The section number in the far left column is the location of the authorizing language in the bill. When an activity is described in a separate section of the bill from where it is authorized, it is indicated in parentheses after the program title in column two.

ss. Such sums as may be necessary.

a. No fiscal year(s) indicated. A single amount in a row indicates a lump sum .

b. No more than specified amount(s).

Endnotes:

1. Sec. 771. Funds go to the National Highway Traffic Safety Administration in the Department of Transportation.
2. Sec. 901. No more than \$1.1 billion in federal funds prior to operation.
3. Sec. 910(h). A minimum of \$5M per year must go to training of minority and socially disadvantaged farmers and ranchers.
4. Sec. 961(b). Reactor Operation & Construction Limit of \$500M for construction.
5. Sec. 976. Congressional Budget Office estimate
6. Sec. 1531. The LUST Trust Fund has been funded primarily through a 0.1 cent-per-gallon motor fuels tax that commenced in 1987. For EPA and states to administer the LUST cleanup program, Congress appropriated from the Fund nearly \$76 million for FY2004 and nearly \$70 million for FY2005. The President has requested \$73 million for FY2006.