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THE WASHINGTON ENERGY REPORT

July 29, 2005

Special Report on the Domenici-Barton Energy Policy Act of 2005

After many years and much debate, Congress has passed the Domenici-Barton Energy Policy Act of 2005. The President is expected to sign the bill early next week. The energy bill is comprehensive and will have a profound change on all aspects of the energy industry. This special edition of our report, which also includes a Timeline of Directives, will provide you with a head start on your company's internal analysis of the bill, including preparation for the many required rulemakings, reports, and studies. The following titles are summarized in this report:

- Energy Efficiency - Title I
- Renewable Energy - Title II
- Oil and Gas - Title III
- Coal - Title IV
- Indian Energy - Title V
- Nuclear Matters - Title VI
- Vehicles and Fuels - Title VII
- Hydrogen - Title VIII
- Research and Development - Title IX
- Department of Energy Management - Title X
- Personnel and Training - Title XI
- Electricity - Title XII
- Energy Policy Tax Incentives - Title XIII
- Miscellaneous - Title XIV
- Ethanol and Motor Fuels - Title XV
- Climate Change - Title XVI
- Incentives for Innovative Technologies - Title XVII
- Studies - Title XVIII

If you have questions about specific titles, please contact us.

Kevin C. Fitzgerald
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TITLE I – ENERGY EFFICIENCY

Subtitle A- Federal Programs

Sec. 101. Energy and water saving measures in congressional buildings. Architect of Capitol must develop, update and implement a cost-effective energy conservation and management plan not later than 180 days after date of enactment of this statute and submit to Congress an annual report on such programs.

Sec. 102. Energy management requirements. Revises energy reduction goals. Not later than December 31, 2014, Secretary shall review results of implementation of energy performance requirement and submit to Congress recommendations concerning energy performance requirements for fiscal years 2016 through 2025. Not later than 180 days after the date of enactment of 42 U.S.C. 8253(c), Secretary shall issue guidelines that establish criteria for exclusions under paragraph (1).

Sec. 103. Energy use measurement and accountability. By October 1, 2012, all federal buildings shall be metered or submetered. Not later than 180 after the date of enactment of this subsection, Secretary with consultation from other agencies and industries shall establish guidelines to carry out paragraph (1). Not later than 6 months after date guidelines established, agency shall submit plan to Secretary on implementation.

Sec. 104. Procurement of energy efficient products. Head of an agency shall procure Energy Star products or FEMP designated products unless it is not cost-effective or reasonably available. Not later than 180 days after date of enactment of this section, Secretary shall issue guidelines to carry out this section.

Sec. 105. Energy saving performance contracts. Section 801(c) of the National Energy Conservation Policy Act (42 U.S.C. 828 (c) is extended through 2016. Contracts entered into after October 1, 2003 and before date of enactment of this Act are considered to have been entered into under that section.

Sec. 106. Voluntary commitments to reduce industrial energy intensity. Secretary may enter into voluntary agreements with persons in industrial sectors that consume significant quantities of primary energy, with a goal of reducing energy intensity by not less than 2.5 percent each year during the period of calendar years 2007 through 2016. Persons entering into the agreements shall be eligible to receive grants to assist in achievement of those goals. Not later than June 30, 2012 and June 30, 2017, Secretary shall submit report to Congress evaluating success of agreements and estimate of energy savings.

Sec. 107. Advanced Building Efficiency Testbed. This program is established for the development, testing and demonstration of advanced engineering systems, components, and materials to enable innovation in building technologies. It will be led by a university and the

Secretary will be appropriated \$6,000,000 for each of the fiscal years 2006 through 2008.

Sec. 108. Increased use of recovered mineral component in federally funded projects involving procurement of cement or concrete. Not later than 1 year after date of enactment of this section, the Administrator and each agency head shall take all necessary actions to implement fully all procurement requirements and incentives. Administrator and Secretary of Transportation and Secretary of Energy will conduct a study to determine energy savings, and report to Congress on the study no later than 30 months after enactment of this section.

Sec. 109. Federal building performance standards. Revised previous standards with new standards established in 2004.

Sec. 110. Daylight savings. Daylight savings time will begin March and end in November. 9 months after date of enactment, Secretary shall report to Congress on impact on energy consumption in the United States.

Sec. 111. Enhancing energy efficiency in management of Federal lands. Seek to incorporate energy efficient technologies in public and administrative buildings associated with management of Federal lands, using energy efficient motor vehicles such as biodiesel or hybrid engine vehicles.

Subtitle B- Energy Assistance and State Programs

Sec. 121. Low income home energy assistance program. Appropriations of \$5,100,000,000 are authorized for each of fiscal years 2005 through 2007. Renewable fuels, including biomass may be purchased to carry out purposes of this title.

Sec. 122. Weatherization assistance. Appropriations of \$500,000,000 for fiscal year 2006, \$600,000,000 for fiscal year 2007 and \$700,000,000 for fiscal year 2008 are authorized.

Sec. 123. State energy programs. Secretary, at least once every 3 years, shall invite Governor of each State to review and revise if necessary their state's energy conservation plan. Appropriations of \$100,000,000 for each of the fiscal years 2006 and 2007, and \$125,000,000 for fiscal year 2008 are authorized to carry out state energy efficiency plans.

Sec. 124. Energy efficient appliance rebate programs. Appropriations of \$50,000,000 are authorized for each of the fiscal years 2006 through 2010 to carry out State energy efficient appliance rebate program.

Sec. 125. Energy efficient public buildings. Appropriations of \$30,000,000 are authorized for each of fiscal years 2006 through 2010 to carry out construction and renovation of public buildings. Not more than 10 percent of appropriated funds shall be used for administration.

Sec. 126. Low income community energy efficiency pilot program. Appropriations of \$20,000,000 are authorized for each of fiscal years 2006 through 2008 for grants to improve energy efficiency in low income rural and urban communities.

Sec. 127. State Technologies Advancement Collaborative. Appropriations are authorized for each of fiscal years 2006 through 2010 for such sums necessary to carry out a cooperative program for research, development, demonstration and deployment of technologies where there is a common Federal and State interest.

Sec. 128. State building energy efficiency codes incentives. Appropriations of \$25,000,000 are authorized for each of fiscal years 2006 through 2010 and such sums as necessary for fiscal year 2011 and each fiscal year thereafter to carry out plan to achieve and document at least a 90 percent compliance rate with residential and commercial building energy efficiency codes.

Subtitle C- Energy Efficient Products

Sec. 131. Energy Star program. Establish new qualifying levels for Energy Star program no later than January 1, 2006 for clothes washers and dishwashers, effective January 1, 2007 and not later than January 1, 2008, for clothes washers, effective beginning January 1, 2010.

Sec. 132. HVAC maintenance consumer education program. Appropriations of such sums as may be necessary and shall remain available until expended, to carry out program to educate homeowners and small business owners on properly maintaining air conditioning systems, no later than 180 days after the date of enactment.

Sec. 133. Public energy education program. Not later than 180 days after date of enactment of this Act, Secretary shall convene organizational conference to establish ongoing, self-sustaining national public energy education program. Appropriations authorized for such sums as necessary to carry out this section.

Sec. 134. Energy Efficiency public information initiative. Appropriations of \$90,000,000 are authorized for each of fiscal years 2006 through 2010 to carry out comprehensive national program to inform consumers about need to reduce energy consumption, benefits of doing so and practical ways to do this. Not later than July 1, 2009, Secretary shall submit to Congress report describing effectiveness of the program.

Sec. 135. Energy conservation standards for additional products. New and amended standards and testing procedures for electrical products.

Sec. 136. Energy conservation standards for commercial equipment. New and amended standards and testing procedures for commercial electrical products.

Sec. 137. Energy labeling. Not later than 90 days after date of enactment, Commission

shall initiate rulemaking to consider effectiveness of consumer products labeling program, and not later than two years after date of enactment, Commission shall complete the rulemaking.

Sec. 138. Intermittent escalators. Escalators installed in a Federal building shall be intermittent escalators.

Sec. 139. Energy efficient electric and natural gas utilities study. Not later than 1 year after enactment of this Act, the Secretary and various other officials shall conduct a study of State and regional policies that promote cost-effective programs to reduce energy consumption. Not later than 1 year after enactment of this Act, the Secretary shall submit a report to Congress with findings and recommendations.

Sec. 140. Energy efficiency pilot program. Appropriations of \$5,000,000 are authorized for each of fiscal years 2006 through 2010, to remain available until expended. Establish pilot program under which Secretary provides financial assistance to at least 3, but not more than 7, States to encourage energy efficiency and reduction of consumption of electricity by at least 0.75 percent.

Sec. 141. Motor vehicle tire supporting maximum fuel efficiency. The Secretary shall develop a national program to educate consumers on fuel efficiency of replacement tires and implement the requirements of this subsection not later than 1 year after the date of enactment of this subsection.

Subtitle D- Public Housing

Sec. 151. Public housing Capital Fund. Amended and added section regarding third party contracts, terms of which are not to exceed 20 years.

Sec. 152. Energy-efficient appliances. Public housing agency must purchase energy-efficient appliances that are Energy Star products or FEMP-designated products unless it is not cost-effective.

Sec. 153. Energy efficiency standards. Revisions to section 109 of the Cranston-Gonzalez National Affordable Housing Act.

Sec. 154. Energy strategy for HUD. Secretary of HUD shall develop strategy to reduce utility expenses for public and assisted housing through cost-effective energy conservation. Secretary shall submit report to Congress not later than 1 year after date of enactment of Act and shall submit an update every 2 years thereafter on progress in implementing the strategy.

TITLE II -- RENEWABLE ENERGY

Subtitle A - General Provisions

Sec. 201. Assessment of Renewable Energy Resources. The Secretary of Energy will publish an annual report on the amount and characteristics of renewable energy resources within the United States.

Sec. 202. Renewable Energy Production Incentive. This section expands the definition of “qualified renewable energy facilities” to include eligible facilities that: (1) are owned by Indian tribal governments or by public utilities described in section 115 of the Internal Revenue Code of 1986; (2) use landfill gas, livestock methane, or ocean energy; and/or (3) are first used before October 1, 2016. Authorization for such incentive payments expires on September 30, 2026.

Sec. 203. Federal Purchase Requirement. To the extent economically feasible and technically practicable, at least 3 percent of the total amount of electric energy that the Federal Government consumes will be from renewable energy (as defined for purposes of this section) by fiscal year 2007. This minimum percentage increases to 5 percent by fiscal year 2010, and to 7.5 percent by fiscal year 2013. The Secretary of Energy shall report to Congress on progress toward these goals by April 15, 2007, and every two years thereafter.

Sec. 204. Use of Photovoltaic Energy in Public Buildings. Within 60 days of enactment, the Administrator of General Services will establish a program to evaluate photovoltaic solar energy systems as are required in public buildings.

Sec. 205. Biobased Products. The Farm Security and Rural Investment Act of 2002 authorized guidelines under which federal agencies that procure specified biobased products give preference to items composed of the highest percentage of biobased products practicable. This Section 205 adds another category of items that will also receive that preference.

Sec. 206. Renewable Energy Security. The Secretary of Energy will, within 180 days of enactment, submit to Congress a report containing an inventory of renewable fuels available for consumers and a projection of future inventories of such fuels. The Secretary of Energy will also establish a program that provides rebates for consumers for expenditures made for the installation of a renewable energy system in connection with a dwelling unit or small business. Annual appropriations of between \$150 million and \$250 million are authorized for that rebate program between fiscal years 2006 and 2010. In addition, the Secretary of Energy will issue regulations on the designation of renewable energy systems for purposes of the federal Weatherization Assistance program for low-income persons.

Sec. 207. Installation of Photovoltaic System at DOE Headquarters. An appropriation of \$20 million is authorized for fiscal year 2006 to install a photovoltaic system for the Washington, D.C. headquarters building of the Department of Energy.

Sec. 208. Sugar Cane Ethanol Program. The EPA Administrator will establish a Sugar Cane Ethanol Program designed to study the production of ethanol from cane sugar, sugarcane, and sugarcane byproducts. The program will last for no more than three years and will be limited to sugar producers and the production of ethanol in Florida, Louisiana, Texas, and

Hawaii. Appropriations of \$36 million are authorized for purposes of this section.

Sec. 209. Rural and Remote Community Electrification Grants. The Secretary of Energy, in consultation with the Secretary of Agriculture and the Secretary of the Interior, may provide grants for the purpose of: (1) increasing energy efficiency, siting, or upgrading transmission and distribution lines serving rural areas; or (2) providing or modernizing electric generation facilities that serve rural areas. Annual appropriations of \$20 million are authorized for this purpose for each of fiscal years 2006 through 2012.

Sec. 210. Grants to Improve Commercial Value of Forest Biomass. The Secretary of Agriculture and the Secretary of the Interior may make grants to qualifying persons that own or operate a facility that uses biomass as a raw material to produce electric energy, sensible heat, or transportation fuels. The Secretary of Agriculture and the Secretary of the Interior may also make grants to persons to offset the cost of projects to develop or research opportunities to improve the use of, or add value to, biomass. Annual appropriations of \$50 million are authorized for these grant programs for each of fiscal years 2006 through 2016. The Secretary of Agriculture and the Secretary of the Interior will submit a report to the relevant Congressional committees on the results of these grants programs by October 1, 2010.

Sec. 211. Sense of Congress Regarding Generation Capacity of Renewable Energy Resources on Public Lands: It is the sense of Congress that the Secretary of the Interior should, within 10 years of enactment, seek to have approved non-hydropower renewable energy projects located on public lands with a generation capacity of at least 10,000 MW of electricity.

Subtitle B – GEOTHERMAL ENERGY

Sec. 221. Short Title. The “John Rishel Geothermal Steam Act Amendments of 2005.”

Sec. 222. Competitive Lease Sale Requirements. This section allows the Secretary to accept nominations of land to be leased when a competitive lease sale is required.

Sec. 223. Direct Use. This amends the fees for direct use and inserts a new section regarding the establishment of a schedule of fees, in lieu of royalties for geothermal resources, including a nominal fee for State, tribal or local government use of the geothermal resource.

Sec. 224. Royalties and Near-Term Production Incentives. Section 5 of the Geothermal Steam Act of 1970 is amended to insert a provision for a royalty on the electricity produced using geothermal resources. This provision allows for credits for in-kind payments of electricity and amends section 20 to state that all monies received by the US from sales, bonuses, rentals, and royalties under this Act shall be paid into the U.S. Treasury.

Sec. 225. Coordination of Geothermal Leasing and Permitting on Federal Lands. No later than 180 days from the enactment of this section, the Secretaries of the Interior and Agriculture must submit an Memorandum of Understanding regarding coordination of leasing and permitting for geothermal development of public lands and National Forest System lands.

The section includes requirements for the MOU, including the establishment of a joint data retrieval system to track lease and permit applications.

Sec. 226. Assessment of Geothermal Energy Potential. Not later than 3 years after the date of enactment of this Act, the Secretary of the Interior shall update the Assessment of Geothermal Resources made during 1978 and submit the update to Congress.

Sec. 227. Cooperative or Unit Plans. This amends Section 18 of the Geothermal Steam Act of 1970 to allow lessees to unite with each other in collectively adopting and operating under a unit agreement. It further provides for the authority to commit to a unit agreement, including the Secretary initiating such.

Sec. 228. Royalty on Byproducts. This amends section 5 of the Geothermal Steam Act of 1970 to add a provision regarding a royalty on any byproduct that is a mineral specified in the Mineral Leasing Act.

Sec. 229. Authorities of Secretary to Readjust Terms, Conditions, Rentals, and Royalties. This amends section 8(b) of the Geothermal Steam Act of 1970 to add corrective language.

Sec. 230. Crediting of Rental Toward Royalty. This amends section 5 of the Geothermal Steam Act of 1970 to make punctuation corrections and adds a section regarding crediting of rental toward royalty.

Sec. 231. Lease Duration and Work Commitment Requirements. This inserts a new section (g) into section 6 of the Geothermal Steam Act of 1970 that outlines the term, initial extension and additional extension of a geothermal lease.

Sec. 232. Advanced Royalties Required for Cessation of Production. This amends section 5 of the Geothermal Steam Act of 1970 to add a section regarding the advanced royalties required for cessation of production, including reduction and exemptions.

Sec. 233. Annual Rental. This amends section 5 of the Geothermal Steam Act of 1970 to insert a new paragraph (3) and provide for the termination of a lease for failure to pay the rental. This includes provisions for notification and reinstatement.

Sec. 234. Deposit and Use of Geothermal Lease Revenues for 5 Fiscal Years. This creates a provision for the deposit of geothermal resources leases into a separate account in the Treasury. It subscribes the use of the deposits and the transfer of funds.

Sec. 235. Acreage Limitations. This amends section 7 of the Geothermal Steam Act of 1970 to change 2,560 acres to 5,120 acres and striking 20,480 acres and inserting 51,200 acres.

Sec. 236. Technical Amendments. These amendments make grammatical and formatting corrections to the code.

Sec. 237. Intermountain West Geothermal Consortium. This section authorizes participation of the Secretary in a consortium to address science and science policy issues surrounding the expanded discovery and uses of geothermal energy.

Subtitle C -- Hydroelectric

Sec. 241. Alternative conditions and fishways. Authorizes hydroelectric licensees, or other participants in a relicensing, to offer cost or power-saving alternatives to the mandatory license conditions imposed by the Departments of the Interior, Commerce or Agriculture in relicensing hydroelectric projects. These resource agencies must accept the alternative mandatory conditions if they determine that the alternatives will result in significant cost or power savings and meet the existing statutory requirements for environmental and resource protection. Agencies must document that they gave “equal consideration” to the effects of the mandatory conditions adopted and those it rejected on a variety of factors. Authorizes any party to a licensing proceeding to call for a trial-type hearing with respect to mandatory conditions.

Sec 242. Hydroelectric production incentives. Authorizes incentive payments to non-Federal dam owners who add generating devices to existing dams or conduits for ten years at 1.8 cents per kWh.

Sec. 243. Hydroelectric efficiency improvement. Authorizes one incentive payment to non-Federal hydroelectric projects which make capital improvements that increase efficiency by at least 3 %. Payment may not exceed 10% of the cost of improvements, up to \$750,000.

Sec 244. Alaska State jurisdiction over small hydroelectric projects. Modifies current authority of Alaska to regulate hydropower projects in lieu of FERC by authorizing Alaska to decline to adopt a fish and wildlife agency provision in the same manner as FERC.

Sec 245. Flint Creek hydroelectric project. Addresses the status of preliminary permit for the Flint Creek Hydroelectric Project and annual charges owed by the project owner.

Sec. 246. Small hydroelectric power projects. Amends a provision in PURPA in order to change the definition of a project qualifying for an exemption from licensing to use a dam constructed by July 22, 2005.

Subtitle D - Insular Energy

Sec. 251. Insular Areas Energy Security. The Secretary of the Interior is authorized to make grants to governments of insular areas of the United States to carry out eligible projects to protect electric power transmission and distribution lines in such insular areas from damage caused by hurricanes and typhoons.

Sec. 252. Projects Enhancing Insular Energy Independence. The Secretary of Energy may, upon request, conduct feasibility studies of projects having the potential to

significantly reduce the dependence of an insular area on imported fossil fuels or to provide needed distributed generation to an insular area.

TITLE III – OIL AND GAS

Subtitle A – Petroleum Reserve and Home heating Oil

SEC. 301 – PERMANENT AUTHORITY TO OPERATE THE STRATEGIC PETROLEUM RESERVE AND OTHER ENERGY PROGRAMS. Directs the Secretary of Energy to acquire petroleum to fill the Strategic Petroleum Reserve and to develop procedures to guide such acquisitions within 180 days.

SEC. 302 – NATIONAL OILHEAT RESEARCH ALLIANCE. Pub. L. 106-469 amended by striking “4” and inserting “9.”

SEC. 303 – SITE SELECTION. The Secretary of Energy has one year to select a site for the Strategic Petroleum Reserve from the previously studied sites.

Subtitle B – Natural Gas

SEC. 311 – EXPORTATION OR IMPORTATION OF NATURAL GAS. Provides a definition for the term “LNG terminal” and provides the Federal Energy Regulatory Commission with the exclusive authority to approve an application for an LNG terminal, after setting the application for hearing and providing notice to the relevant states and consultation with the Secretary of Defense if the siting impacts a military installation. The Commission must also promulgate regulations requiring applicants for an LNG terminal to adhere to the pre-filing process in the National Environmental Policy Act of 1969 and to consult with state and local officials. Each state must assign a state agency to interact with the Commission during the siting process.

SEC. 312 – NEW NATURAL GAS STORAGE FACILITIES. Natural gas companies that fail to demonstrate a lack of market power may still get Commission authorization to offer storage and storage-related services at market-based rates for new storage capacity in a facility placed in service after the date of enactment of the Domenici-Barton Energy Policy Act of 2005 if the Commission determines that such authorization is in the public interest and customers are adequately protected.

SEC. 313 – PROCESS COORDINATION; HEARINGS; RULES OF PROCEDURE. Designates the Federal Energy Regulatory Commission as the lead agency, and describes attendant responsibilities, for the purposes of coordinating all applicable Federal authorizations and complying with the National Environmental Policy Act of 1969. Also provides for judicial review of any Federal agency (excluding the Commission) or State administrative agency action regarding a Federal permit.

SEC. 314 – PENALTIES. Criminal penalties under Section 21 of the Natural Gas Act and

Section 504(c) of the Natural Gas Policy Act of 1978 are increased as follows: \$5,000 becomes \$1,000,000; two years becomes 5 years; and \$500 becomes \$50,000. For civil penalties, violations of the Natural Gas Act are subject to a maximum penalty of \$1,000,000 per day per violation for the duration of the violation. Under the Natural Gas Policy Act of 1978, civil penalties under Section 204(b)(6)(A) increase from \$5,000 to \$1,000,000 and \$25,000 is increased to \$1,000,000.

SEC. 315 – MARKET MANIPULATION. Any manipulative or deceptive device or contrivance is unlawful.

SEC. 316 – NATURAL GAS MARKET TRANSPARENCY RULES. The Commission is directed to facilitate transparency in the markets for sale or transfer of natural gas. The Commission must conclude a memorandum of understanding the Commodity Futures Trading Commission relating to information sharing.

SEC. 317 – FEDERAL STATE LIQUEFIED NATURAL GAS FORUMS. At least 3 forums on liquefied natural gas must be held within one year to identify and develop best practices for addressing issues of LNG imports.

SEC. 318 – PROHIBITION OF TRADING AND SERVING BY CERTAIN INDIVIDUALS. A Court may prohibit anyone from roles within a natural gas company for violations of Section 4A of the Natural Gas Act.

Subtitle C – Production

SEC. 321 – OUTER CONTINENTAL SHELF PROVISIONS. Amends Section 3(13) of the Deepwater Port Act of 1974 definition of natural gas to include natural gas liquids, liquefied petroleum gas, and condensate recovered from natural gas.

SEC. 322 – HYDRAULIC FRACTURING. Definition of “underground injection” added to the Safe Drinking Water Act.

SEC. 323 – OIL AND GAS EXPLORATION AND PRODUCTION DEFINED. Defines “oil and gas exploration, production, processing, or treatment operation or transmission facilities” in Section 502 of the Federal Water Pollution Control Act.

Subtitle D – Naval Petroleum Reserve

SEC. 331 – TRANSFER OF ADMINISTRATIVE JURISDICTION AND ENVIRONMENTAL REMEDIATION, NAVAL PETROLEUM RESERVE NUMBERED 2, KERN COUNTY, CALIFORNIA. Transfers administrative jurisdiction and control of the named land to the Secretary of the Interior.

SEC. 332 – NAVAL PETROLEUM RESERVE NUMBERED 2 LEASE REVENUE ACCOUNT. Establishes a lease revenue account to fund any environmental investigations and remediation.

SEC. 333 – LAND CONVEYANCE, PORTION OF NAVAL PETROLEUM RESERVE NUMBERED 2, TO CITY OF TAFT, CALIFORNIA. Parcel of land conveyed to the city of Taft, CA.

Sec. 334. Revocation of Land Withdrawal. Revokes Executive Order of December 13, 1912 which created the Naval Petroleum Reserve Numbered 2.

Subtitle E – Production Incentives

SEC. 341. DEFINITION OF SECRETARY.

SEC. 342 – PROGRAM ON OIL AND GAS ROYALTIES IN-KIND. Provides that the Secretary of the Interior may demand royalties in-kind accruing to the United States under Federal law governing leasing of land for oil and gas development.

SEC. 343 – MARGINAL PROPERTY PRODUCTION INCENTIVES. Provides an interim definition of marginal property and reduces the royalty rate on certain oil and gas production.

SEC. 344 – INCENTIVES FOR NATURAL GAS PRODUCTION FROM DEEP WELLS IN THE SHALLOW WATERS OF THE GULF OF MEXICO. Requires the Secretary to issue regulations within 180 days granting royalty relive suspension volumes for production of natural gas from certain wells in the Gulf of Mexico.

SEC. 345 – ROYALTY RELIEF FOR DEEP WATER PRODUCTION. For certain deep water wells, any oil or gas lease sale under the Outer Continental Shelf Lands Act within the following 5 years must use that Act’s bidding system. Provides limits for volumes of oil for suspension of royalties.

SEC. 347 – OIL AND GAS LEASING IN THE NATIONAL PETROLEUM RESERVE IN ALASKA. Provides for competitive leasing of oil and gas in the National Petroleum Reserve in Alaska by issuing lease for terms of at least 10 years.

SEC. 348 – NORTH SLOPE SCIENCE INITIATIVE. Directs the Secretary of the Interior to study and manage the North Slope region.

SEC. 349 – ORPHANED, ABANDONED, OR IDLED WELLS ON FEDERAL LAND. Directs establishment of a program to remediate, reclaim and close abandoned oil and gas wells located on certain federal lands.

SEC. 350 – COMBINED HYDROCARBON LEASING. Permits separate leases for exploration and extraction of tar sand in areas that also contain oil and gas.

SEC. 351 – PRESERVATION OF GEOLOGICAL AND GEOPHYSICAL DATA. Establishes a program to archive geologic, geophysical, and engineering data maps, well logs and samples.

SEC. 352 – OIL AND GAS LEASE ACREAGE LIMITATIONS. Comporting amendment to the Mineral Leasing Act.

SEC. 353 – GAS HYDRATE PRODUCTION INCENTIVE. Allows the suspension of royalties to promote natural gas production on the outer Continental Shelf and Federal lands in Alaska.

SEC. 354 – ENHANCED OIL AND NATURAL GAS PRODUCTION THROUGH CARBON DIOXIDE INJECTION. Allows the suspension of certain royalties under a Federal oil and gas lease to promote: capturing, transportation, and injection of produced carbon dioxide, natural carbon dioxide, and other appropriate gases; and oil and natural gas production from the outer Continental Shelf and onshore Federal lands.

SEC. 355 – ASSESSMENT OF DEPENDENCE OF STATE OF HAWAII ON OIL. Authorizes funds to study and report to Congress within 300 days regarding Hawaii's dependence on oil.

SEC. 356 – DENALI COMMISSION. Provides that the Denali Commission should use funds to implement, inter alia, energy generation and development programs.

SEC. 357 – COMPREHENSIVE INVENTORY OF OCS OIL AND NATURAL GAS RESOURCES. Directs an inventory of the oil and natural gas resources found in the Outer Continental Shelf and report to Congress within 6 months.

Subtitle F – Access to Federal Lands

SEC. 361 – FEDERAL ONSHORE OIL AND GAS LEASING AND PERMITTING PRACTICES. Directs a review of current Federal onshore oil and gas leasing and permitting practices and a subsequent report to Congress within 180 days.

SEC 362 – MANAGEMENT OF FEDERAL OIL AND GAS LEASING PROGRAMS. Directs the Secretary of the Interior to implement best management practices for administration of the oil and gas leasing program.

SEC. 363 – CONSULTATION REGARDING OIL AND GAS LEASING ON PUBLIC LAND. Within 180 days, the Secretaries of the Interior and Agriculture must enter into MOU regarding oil and gas leases streamlining the processes.

SEC. 364 – ESTIMATES OF OIL AND GAS RESOURCES UNDERLYING ONSHORE FEDERAL LAND. Directs the Secretary of Energy to make periodic assessment of economically recoverable resources.

SEC. 365 – PILOT PROJECT TO IMPROVE FEDERAL PERMIT COORDINATION. Establishes the Federal Permit Streamlining Pilot Project to coordinate between Federal agencies, and directs placement of a regulatory specialist in certain Bureau of Land Management offices, with a report to Congress in 3 years regarding the results of the Pilot Project.

SEC. 366 – DEADLINE FOR CONSIDERATION OF APPLICATION FOR PERMITS. Within 10 days of an application for a drilling permit, the applicant must be notified of the application's completeness. Within 30 days, the agency must issue a permit or defer the decision.

SEC. 367 – FAIR MARKET VALUE DETERMINATIONS FOR LINEAR RIGHTS-OF-WAY ACROSS PUBLIC LANDS AND NATIONAL FORESTS. Within one year, the Secretary of the Interior must revise the per acre rental fee zone value schedule.

SEC. 368 – ENERGY RIGHT-OF-WAY CORRIDORS ON FEDERAL LAND. States and Federal agencies must designate pipeline corridors, perform necessary environmental reviews, and incorporate the corridors in any relevant land use plan.

SEC. 369 – OIL SHALE, TAR SANDS, AND OTHER STRATEGIC UNCONVENTIONAL FUELS. Congressional declaration of the importance of developing other fuels and allows leasing of Federal lands for research and development to this end. Directs creation of a task force to accelerate and coordinate commercial development of strategic unconventional fuels. Directs streamlining of permitting process.

SEC. 370 – FINGER LAKES WITHDRAWAL. The Finger Lakes National Forest is exempt from disposition under oil and gas leasing laws.

SEC. 371 – REINSTATEMENT OF LEASES. Describes the conditions for reinstating a lease that was cancelled due to failure to pay rental fees.

SEC. 372 – CONSULTATION REGARDING ENERGY RIGHTS-OF-WAY ON PUBLIC LAND. Directs agencies to enter into an MOU that provides a unified right-of-way procedures, and coordination of planning and review.

SEC. 373 – SENSE OF CONGRESS REGARDING DEVELOPMENT OF MINERALS UNDER PADRE ISLAND NATIONAL SEASHORE. Regulation of oil or gas development in Padre Island National Seashore must recognize ownership of that land as of 9/27/1962.

SEC. 374 – LIVINGSTON PARISH MINERAL RIGHTS TRANSFER. For certain lands in Livingston Parish, Louisiana, conveys remaining mineral right to holders of that right on the day of enactment.

Subtitle G – Miscellaneous

SEC. 381 – DEADLINE FOR DECISION ON APPEALS OF CONSISTENCE DETERMINATION UNDER THE COASTAL ZONE MANAGEMENT ACT OF 1972. Amends the Coastal Zone Management Act of 1972 to provide for appeal procedures.

SEC. 382 APPEALS RELATING TO OFFSHORE MINERAL DEVELOPMENT. A consolidated record of all appeals under Section 319 of the Coastal Zone Management Act of 1972 will be maintained by the lead agency.

SEC. 383 – ROYALTY PAYMENTS UNDER LEASES UNDER THE OUTER CONTINENTAL SHELF LANDS ACT. Under certain circumstances, for royalties due under the Outer Continental Shelf Lands Act beginning 10/1/2006, a lessee may withhold royalties due as compensation.

SEC. 384 – COASTAL IMPACT ASSISTANCE PROGRAM. Amends the Outer Continental Shelf Lands Act to allocate \$250,000,000 for FY 2007 - 2010 from Outer Continental Shelf revenues among coastal states to implement the Coastal Impact Assistance Plan.

SEC. 385 – STUDY OF AVAILABILITY OF SKILLED WORKERS. National Academy of Sciences to conduct a study regarding the availability of skilled workers necessary to meet the energy and mineral security requirements of the United States.

SEC. 386 – GREAT LAKES OIL AND GAS DRILLING BAN. Bans permits or leases for new oil or gas drilling in the Great Lakes.

SEC. 387 – FEDERAL COALBED METHANE REGULATION. Allows for future removal of certain states from the list of Affected States under Section 1339(b) of the Energy Policy Act of 1992.

SEC. 388 – ALTERNATE ENERGY-RELATED USES ON THE OUTER CONTINENTAL SHELF. Allows leases, easement, or right-of-way on the outer Continental Shelf for activities that support exploration, development, production, storage, or transportation of oil, natural gas, or other energy sources.

SEC. 389 – OIL SPILL RECOVERY INSTITUTE. Amends dates in Sections 5001(i) and 5006(c) of the Oil Pollution Act of 1990 to one year after ceasing oil and gas exploration, development, and production in Alaska.

SEC. 390 – NEPA REVIEW. Provides exclusions from NEPA review for activity under the Mineral Leasing Act for oil or gas exploration or development.

Subtitle H – Refinery Revitalization

SEC. 391 – FINDINGS AND DEFINITIONS. Congress finds that increasing petroleum refining capacity is in the national interest.

SEC. 392 – FEDERAL-STATE REGULATORY COORDINATION AND ASSISTANCE. The Administrator of EPA may enter into agreements with the States to streamline the permitting process for a new refinery.

TITLE IV -- COAL

Subtitle A -- Clean Coal Power Initiative

Sec. 401. Authorization of Appropriations. Appropriations of \$200 million are authorized for each fiscal year between 2006 through 2014 to carry out the clean coal power initiatives.

Sec. 402. Project Criteria. To receive assistance, a project must meet certain criteria established by the Secretary. In allocating the funds, at least 70 percent are to be used for advanced gasification technologies. The Secretary shall set technical and emissions reduction milestones.

Sec. 403. Report. Not later than one year after the date of enactment of the Act and every 2 years thereafter, the Secretary shall report to Congress on the progress of meeting the milestones established under section 402 and the status of projects funded.

Sec. 404. Clean Coal Centers of Excellence. The Secretary shall award grants to institutions of higher education for advancing clean coal technologies.

Subtitle B - Clean Power Projects

Sec. 411. Integrated Coal/Renewable Energy System. The Secretary may provide loan guarantees for a combined gasification and renewable project located in the Upper Great Plains.

Sec. 412. Loan to Place Alaska Clean Coal Technology Facility in Service. The Secretary shall provide a direct loan to convert a clean coal facility in Alaska.

Sec. 413. Western Integrated Coal Gasification Demonstration Project. Subject to appropriations, the Secretary shall carry out a project to demonstrate integrated gasification combined cycle technology using western coal.

Sec. 414. Coal Gasification. The Secretary is authorized to provide loan guarantees for a gasification project of at least 400 megawatts that produces power in deregulated markets and receives no subsidies from ratepayers.

Sec. 415. Petroleum Coke Gasification. The Secretary is authorized to provide loan guarantees for at least 5 petroleum coke gasification projects.

Sec. 416. Electron Scrubbing Demonstration. The Secretary shall use \$5 million to initiate a high energy electron scrubbing project.

Sec. 417. Department of Energy Transportation Fuels from Illinois Basin Coal. The Secretary shall evaluate the viability of advanced technologies for the production of transportation fuels from Illinois basin coal.

Subtitle C - Coal and Related Programs

Sec. 421. Amendment of the Energy Policy Act to add Clean Air Coal Program.

The Secretary shall carry out a program to facilitate the production and generation of coal-based power that improves energy efficiency and environmental performance and to facilitate coal-based plants that deploy advanced air pollution control equipment. Financial assistance shall be in the form of cost-sharing, grants, or loans.

Subtitle D - Federal Coal Leases

Sec. 431. Short Title. This subtitle is entitled the “Coal Leasing Amendments Act of 2005.”

Sec. 432. Repeal of the 160-Acre Limitation for Coal Leases. This section replaces the 160-acre limitation on additions to coal leases, as set forth in Section 3 of the Mineral Leasing Act, with a 960-acre limitation.

Sec. 433. Approval of Logical Mining Units. The Secretary of Energy is authorized to establish periods for mining of logical mining units of longer than 40 years upon a determination that the longer period will ensure the maximum economic recovery of a coal deposit or is in the interest of the orderly, efficient, or economic development of a coal resource.

Sec. 434. Payment of Advance Royalties under Coal Leases. The Mineral Leasing Act authorizes the Secretary of the Interior to suspend, upon the payment of advance royalties, a coal lease’s condition of diligent development and continued operation of the mine. This Section 434 modifies the manner in which advance royalties will be computed. This section also extends from 10 to 20 years the period during which advance royalties may be accepted in lieu of the condition of continued operation.

Sec. 435. Elimination of Deadline for Submission of Coal Lease Operation and Reclamation Plan. This section eliminates the three-year deadline following issuance of a coal lease for the submission of a coal lease operation and reclamation plan.

Sec. 436. Amendment Relating to Financial Assurances with Respect to Bonus Bids. The Secretary of Energy shall not require a surety bond or any other financial assurance to guarantee payment of deferred bonus bid installments with respect to any coal lease issued on a cash bonus bid to a person having a history of a timely payment of royalties. However, if the lessee fails to pay any installment of a deferred cash bonus bid within 10 days after the Secretary of Energy provides written notice that the payment is past due, the lease will terminate automatically and any bonus payments already made to the United States with respect to the lease will not be returned to the lessee or credited in any future lease sale.

Sec. 437. Inventory Requirement. Within two years of enactment, the Secretary of the Interior, in consultation with the Secretary of Agriculture and the Secretary of Energy, will complete an inventory that identifies federal lands with coal resources that are available for development, as well as any restrictions on the development of those coal resources. The Secretary of Energy will update the inventory as developments warrant and will submit to

Congress both the original inventory and each update to the inventory.

Sec. 438. Application of Amendments. The amendments made by this subtitle apply to any coal lease issued before, on, or after the date of enactment.

TITLE V – INDIAN ENERGY

Sec. 501. Short Title. The Indian Tribal Energy Development and Self-Determination Act of 2005.

Sec. 502. Office of Indian Energy Policy and Programs. Establishes an Office of Indian Energy Policy and Programs within the Department of Energy. The Office shall promote Indian tribal energy development.

Sec. 503. Establishes an Indian energy resource development program to provide tribes with grants, low-interest loans and technical assistance in order to promote energy resource development on Indian lands, including the development of generation, transmission and distribution facilities on tribal lands.

Establishes Tribal Energy Resource Agreements, prepared by tribes and submitted to Interior for approval. Once approved, the Agreements will govern leases, business agreements and rights-of-way related to energy development on Indian lands

Eliminates the need for approval from the Department of the Interior for certain leases and business agreements related to energy resource development, provided that the tribe has a Tribal Energy Resource Agreement in place. Tribal Energy Resource Agreements must provide for an environmental review that is similar to a NEPA review, except there is no need to examine alternatives to the proposed development.

Authorizes the Western Area Power Administration to purchase non-federally generated power from tribes to meet WAPA's firming and reserve requirements.

Authorizes DOE to coordinate with the Army Corps of Engineers to conduct a cost and feasibility study of a demonstration project blending wind energy and hydropower from Corps dams on the Missouri River to supply firming power to WAPA.

Sec. 505. Four Corners Transmission Line Project and Electrification. Authorizes the Navajo Nation's power authority to receive grants and other assistance to develop a transmission line from the Four Corners Area to southern Nevada, including related power generation opportunities.

Sec. 506. Energy Efficiency in Federally Assisted Housing. Directs the Secretary of Housing and Urban Development to promote energy conservation on Indian lands through procurement of energy efficient appliances and other measures.

TITLE VI- NUCLEAR MATTERS

Subtitle A - Price-Anderson Act Amendments

Sec. 601. Short Title. May be cited as the “Price-Anderson Amendments Act of 2005”

Sec. 602. Extension of indemnification authority. Indemnification of Nuclear Regulatory Commission Licensees until December 31, 2025. Indemnification of Department Contractors until December 31, 2025. Indemnification of Nonprofit Educational Institutions until December 31, 2025.

Sec. 603. Maximum assessment. Revision to Section 170 of Atomic Energy Act of 1954 (42 U.S.C. 2210) increased dollar amounts.

Sec. 604. Department liability limit. Revisions to Indemnification of Department Contractors.

Sec. 605. Incidents outside the United States. Amount of Indemnification in 42 U.S.C. 2210(d)(5) increased to \$500,000,000, Liability Limit in 42 U.S.C. 2210(e)(4) increased to \$500,000,000.

Sec. 606. Reports. 42 U.S.C. 2210(p) revise date to December 31, 2021.

Sec. 607. Inflation adjustment. 42 U.S.C. 2210(t) amended to include adjustment in accordance with Consumer Price Index.

Sec. 608. Treatment of modular reactors. 42 U.S.C. 2210(b) amended by adding criteria for facility kilowatt capacity.

Sec. 609. Applicability. 603, 604, and 605 do not apply to a nuclear incident that occurs before date of enactment of this Act.

Sec. 610. Civil Penalties. Repeal of Automatic Remission. Limitation for Not-For-Profit Institutions.

Subtitle B- General Nuclear Matters

Sec. 621. Licenses. 103 c. of the Atomic Energy Act of 1954 (42 U.S.C. 2133(c)) License period, amended to read: Each such license shall be issued for a specified period, as determined by the Commission, depending on the type of activity to be licensed, but not exceeding forty years from the authorization to commence operations, and may be renewed upon the expiration of such period.

Sec. 622. Nuclear Regulatory Commission scholarship and fellowship program.

Establish Scholarship and Fellowship Program to enable students to study science, engineering or related fields.

Sec. 623. Cost recovery from Government agencies. Section 161w of the Atomic Energy Act of 1954 (42 U.S.C. 2201(w)) amended to read: Prescribe and collect from any other Government agency, which applies to the Commission for, or is issued by the Commission, a license or certificate, any fee, charge, or price which it may require, in accordance with the provisions of section 9701 of title 31 of the United States Code or any other law.

Sec. 624. Elimination of pension offset for certain rehired Federal retirees. Commission may waive on case-by-case basis in cases where there is difficulty in recruiting or a temporary emergency hiring need exists.

Sec. 625. Antitrust review. Section 105 c of the Atomic Energy Act of 1954 (42 U.S.C. 2135(c)) revisions to applicability of antitrust provisions. Subsection does not apply to an application for a license to construct or operate a utilization facility or production facility under section 103 or 104 b. that is filed on or after the date of enactment of this paragraph.

Sec. 626. Decommissioning. Section 161 i of the Atomic Energy Act of 1954 (42 U.S.C. 2201(i)) general provisions amended to add clause regarding decommissioning to ensure that sufficient funds will be available for the decommissioning of any production or utilization facility licensed under section 103 or 104 b., including standards and restrictions governing the control, maintenance, use and disbursement by any former licensee under this Act that has control over any fund for the decommissioning of the facility.

Sec. 627. Limitation on legal fee reimbursement. 42 U.S.C. 5841 Title II of the Energy Reorganization Act of 1974 amended to add limitation on reimbursement of legal fees.

Sec. 628. Decommissioning pilot program. Appropriations of \$16,000,000 authorized to carry out decommissioning pilot program for reactor in northwest Arkansas.

Sec. 629. Whistleblower protection. 42 U.S.C. 5851(a)(2) amended to add de novo review option if final decision not issued within 1 year after filing of complaint.

Sec. 630. Medical isotope production. Add definition of Medical isotope production to section 134 of the Atomic Energy Act of 1954.

Sec. 631. Safe disposal of greater-than-Class C radioactive waste. Secretary shall provide Congress report on permanent disposal facility.

Sec. 632. Prohibition on nuclear exports to countries that sponsor terrorism. Revisions to clarify criteria.

Sec. 633. Employee benefits. Continuity of benefits for certain employees at the Portsmouth, Ohio or Paducah, Kentucky Gaseous Diffusion Plant.

Sec. 634. Demonstration hydrogen production at existing nuclear power plants. Appropriations of \$100,000,000 authorized to establish 2 projects to demonstrate commercial production of hydrogen.

Sec. 635. Prohibition on assumption by United States Government of liability for certain foreign incidents. Limits officers of the United States from entering into contracts that would impose liability on the United States Government.

Sec. 636. Authorization of appropriations. Appropriations authorized for such sums as necessary to carry out this subtitle and amendments made by this subtitle.

Sec. 637. Nuclear Regulatory Commission user fees and annual charges. Revisions to Section 6101 of the Omnibus Budget Reconciliation Act of 1990, Section 7601 repealed. Amendments effective October 1, 2006.

Sec. 638. Standby support for certain nuclear plant delays. Appropriations authorized for amount necessary to carry out Standby support program, includes definition of covered delays and exclusions.

Sec. 639. Conflicts of interest relating to contracts and other arrangements. Amended to add provisions regarding Nuclear Regulatory Commission entering contracts where there is conflict of interest.

Subtitle C- Next Generation Nuclear Plant Project

Sec. 641. Project establishment. Project shall consist of research, development, design, construction and operation of a prototype plant, including nuclear reactor based on research and development from Generation IV Nuclear Energy Systems Initiative that will generate electricity and produce hydrogen.

Sec. 642. Project management. Project will be managed by Office of Nuclear Energy, Science and Technology. The Idaho National Laboratory will be lead National Laboratory and prototype will be sited there.

Sec. 643. Project organization. Major elements of the program, project phases, and requirements are outlined. The Nuclear Energy Research Advisory Committee will review the program and Secretary will report NERAC's findings to Congress.

Sec. 644. Nuclear Regulatory Commission. Nuclear Regulatory Commission has licensing and regulatory authority for any reactor authorized under section 202 of the Energy Reorganization Act of 1974 and will be active participant throughout duration of project.

Sec. 645. Project timelines and authorization of appropriations. Appropriations of \$1,250,000,000 for the period of fiscal years 2006 through 2015 and such sums as necessary for

each of fiscal years 2016 through 2021 for research and construction activities under this subtitle.

Subtitle D- Nuclear Security

Sec. 651. Nuclear facility and materials security. Security Response evaluations established at least once every 3 years, that include force-on-force exercises and action by licensees, design basis threat rulemaking,

Sec. 652. Fingerprinting and criminal history record checks. Commission shall require fingerprints of certain individuals, establishes who is required to be fingerprinted.

Sec. 653. Use of firearms by security personnel. Commission may authorize security personnel to use firearms if they are properly trained and subject to background check. Section takes effect on date which guidelines issued by Commission take effect.

Sec. 654. Unauthorized introduction of dangerous weapons. Revisions to section regarding Trespass on Commission installations Section 229 of the Atomic Energy Act of 1954 42 U.S.C. 2278a.

Sec. 655. Sabotage of nuclear facilities, fuel, or designated material. Revisions to section on Sabotage of Nuclear facilities, fuel, or designated material under Section 236a of the Atomic Energy Act of 1954 42 U.S.C. 2284(a).

Sec. 656. Secure transfer of nuclear materials. Chapter 14 of the Atomic Energy Act of 1954 42 U.S.C. 2201-2210b amended to add new section: Commission shall establish system to ensure materials accompanied by manifest describing type and amount of materials.

Sec. 657. Department of Homeland Security consultation. Commission shall consult with Department of Homeland Security before issuing a license for a utilization facility concerning potential vulnerabilities of the location to terrorist attack.

TITLE VII--VEHICLES AND FUELS

Subtitle A--Existing Programs

Sec. 701. Use of alternative fuels by dual fueled vehicles. Dual fuel vehicles acquired pursuant to this section shall be operated on alternative fuels unless the agency is granted a waiver because the alternative fuel is not reasonably available or is unreasonably expensive.

Sec. 702. Incremental cost allocation. Federal agencies that shall allocate the incremental cost of alternative fueled vehicles across the entire fleet.

Sec. 703. Alternative compliance and flexibility. New section 514 allows any person subsection to section 501 and any State subject to section 507(o) to petition the Secretary for a waiver of the requirements of section 501 or 507(o). The Secretary shall grant the waiver if the

fleet owned, operated, leased or controlled by the entity will achieve a reduction in consumption of petroleum that would result from 100 percent compliance with the fuel use requirement of section 501; or a reduction equal to the annual consumption by the State of all alternative fuels if all of the cumulative alternative fuel vehicles of the state entity given credit were to use alternative fuel 100 percent of the time.

Sec. 704. Review of Energy Policy Act of 1992 programs. Not later than 180 days after enactment, the Secretary shall complete a study to determine the effect that titles III, IV, and V of the EPA Act of 1992 have had on the development of alternative fueled vehicle technology; the availability of that technology in the market; and the cost of alternative fueled vehicles.

Sec. 705. Report concerning compliance with alternative fueled vehicle purchasing requirements. Amends Section 310(b)(1) of the EPA Act by striking “1 year after the date of enactment of this subsection” and inserting “February 15, 2006.”

Sec. 706. Joint flexible fuel/hybrid vehicle commercialization initiative. The Secretary shall establish a program to improve technologies for the commercialization of a combination hybrid/flexible fuel vehicle; or a plug-in flexible fuel vehicle. The Secretary shall provide grants that give preference to proposals that achieve the greatest reduction in miles per gallon of petroleum fuel consumption; achieve not less than 250 miles per gallon of petroleum fuel consumption; and have the greatest potential of commercialization within 5 years.

Sec. 707. Emergency exemption. Exempts vehicles used in the repair of transmission lines and in the restoration of electricity service following power outages from the alternative fuel requirements of this section.

Subtitle B--Hybrid Vehicles, Advanced Vehicles and Fuel Cell Buses.

Part 1--Hybrid Vehicles.

Sec. 711. Hybrid vehicles. The Secretary shall accelerate efforts directed toward the improvement of batteries and other rechargeable energy storage systems, power electronics, hybrid systems integration, and other technologies for use in hybrid vehicles.

Sec. 712. Efficient hybrid and advanced diesel vehicles. The Secretary shall establish a program to encourage domestic production and sales of efficient hybrid and advanced diesel vehicles.

Part 2--Advanced Vehicles.

Sec. 721. Pilot programs. The Secretary shall establish a pilot program to be administered through the Clean Cities Program of the Department, to provide up to 30 geographically dispersed project grants to state governments, local governments, or metropolitan transportation authorities for the acquisition of alternative fueled vehicles or fuel cell vehicles,

including passenger vehicles, motorized two-wheel bicycles, buses for public transportation, delivery vehicles, and ground support at public airports.

Sec. 722. Reports to Congress. The Secretary shall report to Congress no later than 60 days after the grants are awarded, identifying the grant recipients and other applicants. Not later than 3 years after enactment, and annually thereafter, the Secretary shall submit a report containing an evaluation of the effectiveness of the pilot program.

Sec. 723. Authorization of appropriations. \$200 Million is authorized to be appropriated to the Secretary to carry out this part.

Part 3--Fuel Cell Buses.

Sec. 731. Fuel cell transit bus demonstration. The Secretary shall establish a transit bus demonstration program to make competitive, merit-based awards for 5-year projects to demonstrate not more than 25 fuel-cell transit buses in 5 geographically dispersed localities.

Subtitle C--Clean School Buses

Sec. 741. Clean school bus program. The Administrator of the EPA shall establish a program for awarding grants on a competitive basis for the replacement, or retrofit of certain existing school buses.

Sec. 742. Diesel truck retrofit and fleet modernization program. The Administrator shall establish a program for awarding grants on a competitive basis to public agencies and entities for fleet modernization programs including installation of retrofit technologies for diesel trucks.

Sec. 743. Fuel cell school buses. The Secretary shall establish a program for entering into cooperative agreements with private sector fuel cell bus developers for the development of fuel-cell power school buses, and subsequently, with local governments to demonstrate the use of fuel cell-powered school buses.

Subtitle D--Miscellaneous.

Sec. 751. Railroad efficiency. The Secretary shall establish a cost-shared, public-private research partnership to develop and demonstrate railroad locomotive technologies that increase fuel economy, reduce emissions, and lower cost of operation.

Sec. 752. Mobile emission reductions trading and crediting. Not later than 180 days after enactment, the Administrator of the EPA shall submit to Congress a report on the experience of the Administrator with the trading of mobile source emission reduction credits for use by owners and operators of stationary source emission sources to meet emission offset requirements within a non-attainment area.

Sec. 753. Aviation fuel conservation and emissions. Not later than 60 days after the date of enactment, the Administrator of the Federal Aviation Administration and the Administrator of the EPA shall jointly initiate a study to identify the impact of aircraft emissions on air quality in nonattainment areas, ways to promote fuel conservation measures for aviation to enhance fuel efficiency and reduce emissions, and opportunities to reduce air traffic inefficiencies that increase fuel burn and emissions.

Sec. 754. Diesel fueled vehicles. The Secretary shall accelerate efforts to improve diesel combustion and after-treatment technologies for use in diesel fueled motor vehicles with a view toward: developing and demonstrating diesel technologies that, not later than 2010 meet the Tier 2 emission standards; the heavy-duty emissions standards of 2007 that are applicable to heavy-duty vehicles; and developing the next generation of low-emission, high efficiency diesel engine technologies.

Sec. 755. Conserve by Bicycling Program. Creates a program within the Department of Transportation to be known as the “Conserve by Bicycling Program.” The Secretary shall establish not more than 10 pilot projects designed to conserve energy resources by encouraging the use of bicycles in place of motor vehicles.

Sec. 756. Reduction of engine idling. The Administrator of the EPA shall, not later than 90 days after enactment, commence a review of the mobile source air emissions models of the EPA used under the Clean Air Act to determine whether the emissions resulting from long-duration idling of heavy duty vehicles and other vehicles and other vehicles and engines, and update those models as appropriate.

Sec. 757. Biodiesel engine testing program. Not later than 180 days after enactment, the Secretary shall initiate a partnership with diesel engine, diesel fuel injection systems, and diesel vehicle manufacturers and diesel and biodiesel fuel providers, to include biodiesel testing in advanced diesel engine and fuel system technology.

Not later than 2 years after the date of enactment, the Secretary shall provide an interim report to Congress on the findings of the program.

Sec. 758. Ultra-efficient engine technology for aircraft. The Secretary shall enter into a cooperative agreement with the National Aeronautics and Space Administration for the development of ultra-efficient engine technology for aircraft.

Sec. 759. Fuel economy incentive requirements. In order for any model of dual fueled automobile to be eligible to receive the fuel economy incentives included in this section, a label shall be attached to the fuel compartment of each dual fueled automobile of that model, notifying that the vehicle can be operated on an alternative fuel and on gasoline or diesel, with the form of alternative fuel stated on the notice.

Subtitle E--Automobile Efficiency

Sec. 771. Authorization of appropriations for implementation and enforcement of fuel economy standards. \$3.5 Million is authorized for each of the fiscal years 2006-2010 to the National Highway Traffic Safety Administration to carry out its obligations with respect to average fuel economy standards.

Sec. 772. Extension of maximum fuel economy increase for alternative fueled vehicles. Extends the manufacturing incentives in subsections (b) and (d) Section 32905 of Title 49 USC from 2004 to 2010, in subsection (f) from 2001 to 2007, and in subsection (f)(1) from 2004 to 2010. Extends the maximum fuel economy increase in subsection (a)(1) of Section 32906 of title 49 in subparagraph (A) from 1993-1994 to 1993-2010 and in subparagraph (B) from 2005-2008 to 2011-2014.

Sec. 773. Study of feasibility and effects of reducing use of fuel for automobiles. Not later than 30 days after enactment, the Administrator of the National Highway Traffic Safety Administration shall initiate a study of the feasibility and effects of reducing by model year 2014, by a significant percentage, the amount of fuel consumed by automobiles.

Sec. 774. Update testing procedures. The Administrator of the EPA shall update or revise the adjustment factors in the Fuel Economy Regulations for 1977 and Later Model Year Automobiles to take into consideration higher speed limits, faster acceleration rates, variations in temperature, use of air conditioning, shorter city test cycle lengths, current reference fuels, and the use of other fuel depleting features.

Subtitle F--Federal and State Procurement.

Sec. 781. Definitions. Defines, "fuel cell," "light-duty or heavy duty vehicle fleet," "stationary," "portable," "task force," and "technical advisory committee."

Sec. 782. Federal and State procurement of fuel cell vehicles and hydrogen energy systems. Not later than December 31, 2006, the Secretary shall promulgate regulations for the period 2008-2010 that extend and augment energy savings goals for each Federal agency in accordance with any Executive order issued after March 2000; and not later than December 31, 2010, the Secretary shall review the regulations, evaluate any progress made toward achieving energy savings by Federal agencies and promulgate new regulations for the period 2011 through 2015 to achieve additional energy savings.

Sec. 783. Federal procurement of stationary, portable, and micro fuel cells. Not later than January 1, 2006, the head of any federal agency that uses electrical power from stationary, portable, or microportable devices shall lease or purchase a fuel cell to meet any applicable energy savings goals, subject to certain conditions.

Subtitle G--Diesel Emission Reduction

Sec. 791. Definitions. Defines "Administrator," "Certified Engine Configuration,"

“Eligible Entity,” “Emerging Technology,” “Fleet,” “Heavy-duty Truck,” “Medium-duty Truck,” and “Verified Technology.”

Sec. 792. National grant and loan programs. The Administrator shall use 70 percent of the funds made available to carry out this subtitle to provide grants and low-cost revolving loans to eligible entities to achieve significant reductions in diesel emissions.

Sec. 793. State grant and loan programs. The Administrator shall use 30 percent of the funds made available for a fiscal year under this subtitle to support grant and loan programs administered by States that are designed to achieve significant reductions in diesel emissions.

Sec. 794. Evaluation and report. Not later than 1 year after the date on which funds are made available under this subtitle, the Administrator shall submit to Congress a report evaluating the implementation of the programs under this subtitle.

Sec. 795. Outreach and incentives. The Administrator shall develop appropriate guidance to provide credit to a State for emissions reductions in the State created by the use of eligible technologies through a State implementation plan under section 110 of the Clean Air Act. The Administrator shall inform foreign countries with air quality problems of the potential of technology developed or used in the United States to provide emissions reductions in those countries.

Sec. 796. Effect of subtitle. Nothing in this subtitle affects any authority under the Clean Air Act in existence on the day before the date of enactment.

Sec. 797. Authorization of appropriations. \$200 million is authorized to be appropriated to carry out this subtitle for FY 2007-2011, to remain eligible until expended.

TITLE VIII--HYDROGEN

Sec. 801. Hydrogen and fuel cell program. This title may be cited as the “Spark M. Matsunaga Hydrogen Act of 2005”.

Sec. 802. Purposes. The purposes of this title are to (1) enable and promote comprehensive development, demonstration, and commercialization of hydrogen and fuel cell technology in partnership with industry; (2) to make critical investments in building strong links to expand innovation and industrial growth; (3) to build a mature hydrogen economy that creates fuel diversity; (4) to decrease the dependency of the United States on imported oil; and (5) to create a sustainable national energy economy.

Sec. 803. Definitions. Defines “fuel cell,” “heavy-duty vehicle,” “infrastructure,” “light-duty vehicle,” “stationary,” “portable,” “task force,” and “technical advisory committee.”

Sec. 804. Plan. Not later than 6 months after enactment, the Secretary shall transmit to

Congress a coordinated plan for the programs described in this title and any other programs that are directly related to fuel cells or hydrogen.

Sec. 805. Programs. The Secretary shall conduct a research and development program on technologies relating to the production, purification, distribution, storage, and use of hydrogen energy, fuel cells, and related infrastructure.

Sec. 806. Hydrogen and Fuel Cell Technical Task Force. Not later than 120 days after the date of enactment, the President shall establish an interagency task force chaired by the Secretary. The task force shall work towards: a safe, economical and environmentally sound fuel infrastructure for hydrogen; fuel cells in government and other applications; distribute power generation; uniform hydrogen codes, standards, and safety protocols; and vehicle hydrogen fuel system integrity safety performance.

Sec. 807. Technical Advisory Committee. Establishes a Hydrogen Technical and Fuel Cell Advisory Committee to advise the Secretary on the programs and activities under this title. The Technical Advisory Committee shall review and make recommendations to the Secretary on: the implementation of programs and activities under this title; the safety, economical, and environmental consequences of technologies for the production, distribution, delivery, storage, or use of hydrogen energy and fuel cell; and the plan under Section 804.

Sec. 808. Demonstration. The Secretary shall fund a limited number of demonstration projects, consistent with this title and a determination of the maturity, cost-effectiveness, and environmental impacts of technologies supporting each project.

Sec. 809. Codes and standards. The Secretary shall provide grants to support timely and extensive development of safety codes and standards relating to fuel cell vehicles, hydrogen energy systems, and stationary, portable, and micro fuel cells.

Sec. 810. Disclosure. Section 623 of the EPA Act shall apply to any project carried out through a grant, cooperative agreement, or contract under this title.

Sec. 811. Reports. Not later than 2 years after enactment the Secretary shall submit to Congress a report describing activities carried out by the Department under this title, for hydrogen and fuel cell technology; measures the Secretary has taken during the preceding 3 years to support the transition of primary industry to a fully commercialized hydrogen economy; any change made to the strategy relating to hydrogen and fuel cell technology to reflect the results of the learning demonstrations; progress made toward achieving the goal of producing deploying hydrogen fueled vehicles; progress made toward achieving the goal of supplying hydrogen at a sufficient number of fueling stations by 2010; any problem relating to the design, execution, or funding of a program under this title; progress made toward and goals achieved in carrying out this title; and any updates to strategic plans that are necessary to meet the goals described above.

Sec. 812. Solar and wind technologies. The Secretary shall establish a program to

develop optimized concentrating solar power devices that may be used for the production of both electricity and hydrogen. The Secretary shall support programs at institutions of higher education for the development of solar energy technologies and wind energy technologies for the production of hydrogen.

Sec. 813. Technology transfer. In carrying out this title, the Secretary shall carry out programs that provide for the transfer of critical hydrogen and fuel cell technologies to the private sector, accelerate wide application of those technologies, foster the exchange of nonproprietary information, and assess technical and commercial viability of technologies relating to the production, distribution, storage, and use of hydrogen energy and fuel cells.

Sec. 814. Miscellaneous provisions. The Secretary may represent the United States interests with respect to activities and programs under this title before governments and non-governmental organizations.

Sec. 815. Cost sharing. The costs of carrying out projects and activities under this title shall be shared in accordance with section 988.

Sec. 816. Savings clause. Nothing in this title shall be construed to affect the authority of the Secretary of Transportation that may exist prior to the date of enactment of this Act.

TITLE IX – RESEARCH AND DEVELOPMENT

Sec. 901. Short Title. This act is cited as the “Energy Research, Development, Demonstration, and Commercial Application Act of 2005.”

Sec. 902. Goals. The Secretary shall conduct a balanced set of programs with the goals of increasing the efficiency of all energy intensive sectors through conservation and improved technologies; promoting diversity of energy supply; decreasing the dependence of the US on foreign energy supplies; improving the energy security of the US; and decreasing the environmental impact of energy-related activities.

Sec. 903. This section provides for some definitions of terms in this title of the Act.

Subtitle A – ENERGY EFFICIENCY

Sec. 911. Energy Efficiency. The Secretary shall conduct programs of energy efficiency in consideration of outlined objectives. Such programs will include advanced, cost-effective technologies. This section outlines the appropriations allocated to the Secretary through year 2013. There are limitations placed on the funds.

Sec. 921. Next Generation Lighting Initiative. This section includes definitions and instructions for the Secretary to carry out an initiative through competitively selected awards. Preference can be given to some participants, and there is prescribed cost sharing. The Secretary

has some rights over the intellectual property developed.

Sec. 913. National Building Performance Initiative. Not later than 90 days after the date of enactment of this Act, the Director of the Office of Science and Technology Policy shall establish an interagency group to develop a national building performance initiative. Not later than 1 year after enactment of this Act, that group must submit a plan to Congress. This section describes the formation of that group and the role of the Department of Energy.

Sec. 914. Building Standards. Not later than 120 days after the date of enactment of this Act, the Secretary must enter into an agreement with the National Institute of Building Sciences to conduct an assessment of whether current voluntary consensus standards and rating systems for high performance buildings are consistent with the current technological state of the art. Grants and technical assistance must be established by the Secretary.

Sec. 915. Secondary Electric Vehicle Battery Use Program. The Secretary must establish and conduct a program for the secondary use of batteries. This section outlines the administration of the program. No later than 180 days after the date of the enactment of this Act, the Secretary must solicit proposals to demonstrate this secondary use. This section outlines the selection of proposals process, limitations, and criteria.

Sec. 916. Energy Efficiency Science Initiative. The Secretary must establish an Energy Efficiency Science Initiative for grants to be competitively awarded for research related to energy efficiency. A report is due to Congress in conjunction with the annual budget request of the President.

Sec. 917. Advanced Energy Efficiency Technology Transfers Centers. Not later than 18 months after the date of enactment of this Act, the Secretary must make grants to nonprofit institutions, State and local governments, or universities to establish a geographically dispersed network of Advanced Energy Efficiency Technology Transfer Centers. This section outlines the activities and the application process for such centers.

Subtitle B- DISTRIBUTED ENERGY AND ELECTRIC ENERGY SYSTEMS

Sec. 921. Distributed Energy and Electric Energy Systems. The Secretary must carry out programs to improve the reliability and efficiency of distributed energy resources and systems. This subtitle describes the activities. This section outlines the authorization of appropriations for other sections below.

Sec. 922. High Power Density Industry Program. The Secretary shall research high power density facilities and related technologies.

Sec. 923. Micro-Cogeneration Energy Technology. The Secretary must make competitive, merit-based grants to consortia for the development of micro-cogeneration energy technology. This section dictates the uses the consortia will explore.

Sec. 924. Distributed Energy Technology Demonstration Programs. This section gives the Secretary the authority to provide financial assistance to coordinating consortia. The Secretary is instructed to establish a program to develop working models of small scale portable power devices.

Sec. 925. Electric Transmission and Distribution Programs. The Secretary is instructed to establish a program to ensure the reliability, efficiency, and environmental integrity of electric transmission and distribution systems. The section outlines the requirements for the program. Furthermore, the Secretary must establish an initiative focused on power delivery using components incorporating high temperature superconductivity. The section outlines the goals of this initiative. The Secretary must also establish a transmission and distribution grid planning and operations initiative.

Subtitle C – RENEWABLE ENERGY

Sec. 931. Renewable Energy. The Secretary is directed to conduct programs outlined in this subtitle. Specifically, there should be projects developed regarding solar energy, wind energy, geothermal energy, hydropower and other miscellaneous projects. This section authorizes the appropriations for such projects. The Secretary shall conduct an analysis and evaluation on renewable energy technologies.

Sec. 932. Bioenergy Program. The Secretary is instructed to conduct a program regarding biofuels and bioproducts and carry out a project on integrated biorefinery.

Sec. 933. Low-Cost Renewable Hydrogen and Infrastructure for Vehicle Propulsion. A program will be developed by the Secretary to determine the feasibility of using hydrogen propulsion in light-weight vehicles and the integration of the associated hydrogen production infrastructure using off-the-shelf components.

Sec. 934. Concentrating Solar Power Research Program. The Secretary shall conduct a program to evaluate the potential for concentrating solar power for hydrogen production. This section provides for the administration and assessment of the program. Not later than 5 years after the date of enactment of this Act, the Secretary shall report to Congress on the results.

Sec. 935. Renewable Energy in Public Buildings. The Secretary shall establish a program for the demonstration of innovative technologies for solar and other renewable energy sources in buildings owned or operated by State or local government. This section limits the federal funding of the project and outlines the requirements.

Subtitle D – AGRICULTURAL BIOMASS RESEARCH AND DEVELOPMENT PROGRAMS.

Sec. 941. Amendments to the Biomass Research and Development Act of 2000. This provision amends Section 303 of the Biomass Research and Development Act of 2000 to insert a

definition of biobased fuel, biobased product, demonstration and national laboratory. Other sections of the Act are also amended to make small amendments regarding terms. Section 307 of the Act is amended by adding a new provision regarding the objectives of the biomass research and development initiative, and gives the Secretaries of Energy and Agriculture, in consultation with the Administrator of the EPA, the instruction to direct research and development towards certain areas. The section outlines the eligibility for grants and indicates the requirements for general administration. The section outlines the distribution of funding and availability of matching funds and repeals the sunset provision of Section 311 of the Biomass Research and Development Act of 2000.

Sec. 942. Production Incentives for Cellulosic Biofuels. This section requires the Secretary, in conjunction with others, to establish an incentive program for the production of cellulosic biofuels. This sets out the basis and amount for incentives, as well as the first reverse auction procedures. This section authorizes the appropriation for the program.

Sec. 943. Procurement of Biobased Products. This section amends section 9001 of the Farm Security and Rural Investment Act of 2002 to include a new section regarding the procuring agency, and procurement in general. It further amends section 9002 by adding a provision that not later than 90 days after the date of enactment of this Act, the Architect of the Capitol and others shall must establish procedures that apply the requirements of this section and send them to procurement for the Capitol Complex. The Architect of the Capitol is instructed to establish a program of public education regarding its use of biobased products.

Sec. 944. Small Business Bioproduct Marketing and Certification Grants. The Secretary is instructed to make grants for the biobased product marketing and certification for outlined purposes. This section authorizes an appropriation, including matching funds.

Sec. 945. Regional Bioeconomy Development Grants. The Secretary shall make grants available for outlined purposes. This section authorizes an appropriation, including matching funds. It further outlines the requirements for a regional bioeconomy development association grant.

Sec. 946. Preprocessing and harvesting Demonstration Grants. The Secretary of Agriculture shall make grants available to enterprises owned by agricultural producers for the outlined purposes. No more than 5 demonstration projects per fiscal year are to be funded. This section authorizes an appropriation for such project.

Sec. 947. Education and Outreach. The Secretary of Agriculture shall establish an outreach program on biobased fuels and biobased products. This section authorizes an appropriation for the project.

Sec. 948. Reports. Not later than 1 year after the date of enactment of the Act, the Secretary of Agriculture must report to House and Senate committees describing the economic potential for the U.S. of widespread production and use of commercial and industrial biobased products through 2025.

Subtitle E – NUCLEAR ENERGY

Sec. 951. Nuclear Energy. The Secretary shall conduct programs of civilian nuclear energy, with consideration for outlined objectives. Appropriations are authorized for core programs and nuclear infrastructure and facilities, but no funds may be used to decommission the Fast Flux Test Facility.

Sec. 952. Nuclear Energy Research Programs. The Secretary shall carry out a Nuclear Energy Research Initiative for R&D related to nuclear energy, and develop a nuclear energy systems support program, including a Nuclear Power 2010 Program and a Generation IV Nuclear Energy Systems Initiative. This section outlines the administration requirements for the programs. This section also requires the Secretary to carry out research to examine designs for high temperature reactors capable of producing large-scale quantities of hydrogen.

Sec. 953. Advanced Fuel Cycle Initiative. The Secretary shall conduct an advanced fuel recycling technology program to evaluate proliferation-resistant fuel recycling and transmutation technologies that minimized environmental and public health and safety impacts as an alternative to aqueous reprocessing technologies deployed as of the date of enactment of this Act. There shall be annual review of the project, and a report shall be submitted each year as part of the annual budget submission of the Department.

Sec. 954. University Nuclear Science and Engineering Support. The Secretary is instructed to conduct a program to invest in human resources and infrastructure in the nuclear sciences. The section outlines the requirements of the program and includes interaction with the laboratories of universities. It is the intention of this section to support the strengthening of university research.

Sec. 955. Department of Energy Civilian Nuclear Infrastructure and Facilities. The Secretary is instructed to operate and maintain certain programs, including radiological facilities management, isotope production and facilities management. This section outlines the duties of the Secretary and instructs the Secretary to develop a comprehensive plan for the facilities at the Idaho National Lab. Not later than 1 year after the date of enactment of this Act, the Secretary shall transmit the plan to Congress.

Sec. 956. Security of Nuclear Facilities. The Secretary is instructed to conduct a program on cost-effective technologies for increasing the safety of nuclear facilities from natural phenomena and deliberate attacks.

Sec. 957. Alternative to Industrial Radioactive Sources. Not later than August 1, 2006, the Secretary shall report to Congress the results of a survey of industrial applications of large radioactive sources. This section outlines the administration and plan.

Subtitle F – FOSSIL ENERGY

Sec. 961. Fossil Energy. The Secretary is instructed to create a program in fossil energy with the goal of improving the efficiency, effectiveness and environmental performance of fossil energy production, upgrading, conversion, and consumption. This section outlines the objectives of such program and authorizes the appropriations through fiscal year 2012. There are limitations on the funds.

Sec. 962. Coal and Related Technologies Program. The Secretary is instructed to conduct a program regarding coal and power systems, including programs to facilitate production and generation of coal-based power through outlined methods. The Secretary must identify cost and performance goals for coal based technologies during calendar years 2008, 2010, 2012, 2016 and each fiscal year beginning after September 30, 2021. This section outlines the administration of the program. Furthermore, the Secretary is instructed to establish a program to test and develop technologies to control and remove mercury emissions for subbituminous coal mined in the Powder River Basin and for Fort Union lignite coals.

Sec. 963. Carbon Capture Research and Development Program. The Secretary is instructed to carry out a 10-year carbon capture program to develop carbon dioxide capture technologies on combustion-based systems. This section outlines the objectives and authorizes the appropriations for the program.

Sec. 964. Research and Development for Coal Mining Technologies. The Secretary shall create a program for research and development on coal mining technologies. This section outlines the need to cooperate with Federal agencies, coal producers, trade associations, equipment manufacturers and institutions of higher education with mining engineering departments. This section outlines the program requirements.

Sec. 965. Oil and Gas Research Programs. The Secretary shall conduct a program on exploration and production of oil and gas, including gas hydrates, reservoir life and extension, transportation and distribution infrastructure, ultraclean fuels, heavy oil, oil shale, and tar sands, and related environmental research.

Sec. 966. Low-Volume Oil and Gas Reservoir Research Program. The Secretary shall establish a program to maximize the productive capacity of marginal wells and reservoirs. This section outlines provisions for data collection, as well as a provision for the Secretary to award a grant to an organization of States to conduct an annual study of low-volume natural gas reservoirs.

Sec. 967. Complex Well Technology Testing Facility. The Secretary is instructed to establish a Complex Well Technology Testing Facility at the Rocky Mountain Oilfield Testing Center to increase the range of extended drilling technologies.

Sec. 968. Methane Hydrate Research. The Methane Hydrate Research and Development Act of 2000 is amended by this section. It includes findings by Congress, definitions, and a general description of the methane hydrate research and development program. This section also provides requirements for grants, contracts, cooperative agreements,

interagency funds transfer agreements and field work proposals.

Subtitle G – SCIENCE

Sec. 971. Science. The Secretary shall conduct programs regarding high energy physics, nuclear physics, biological and environmental research, basic energy sciences, advanced scientific computing research and fusion energy sciences. This section authorizes the appropriations for such activities. There is an additional appropriation for integrated bioenergy research and development programs.

Sec. 972. Fusion Energy Sciences Program. Not later than 180 days after the date of enactment of this Act, the Secretary must submit a plan to Congress regarding outlined issues, specifically the costs and schedules for the design and implementation of facilities for the testing of fusion materials.

Sec. 973. Catalysis Research Program. The Secretary is instructed to support a program in catalysis science. This section outlines the components of the program and the duties of the Office of Science. Not later than 3 years after the date of enactment of the Act, the Secretary must enter into an arrangement with the National Academy of Sciences to review the program and submit a report to Congress.

Sec. 974. Hydrogen. The Secretary is instructed to conduct a program of fundamental R&D in support of all the programs authorized under title VIII. This section dictates the methods to be used.

Sec. 975. Solid State Lighting. The Secretary shall conduct a program of fundamental research on solid state lighting in support of the Next Generation Lighting Initiative under section 912.

Sec. 976. Advanced Scientific Computing for Energy Missions. The Secretary shall conduct an advanced scientific computing R&D program that includes activities related to applied mathematics and activities authorized by the Department of Energy High-End Computing Revitalization Act of 2004, which is amended to outline the general responsibilities and to authorize appropriations to carry out this section.

Sec. 977. Systems Biology Program. The Secretary shall establish a program in microbial and plant systems biology, protein science, and computational biology to support the energy, national security and environmental missions of the Department.

Sec. 978. Fission and Fusion Energy Materials Research Program. The Secretary shall establish a R&D program on material science issues presented by advanced fission reactors and the fusion energy program of the Department. This section outlines the required administration of the program.

Sec. 979. Energy and Water Supplies. The Secretary is instructed to create a program

to address energy-related issues and address water-related issues associated with the provision of adequate supplies, optimal management and efficient use of energy as well as assess the effectiveness of existing programs.

Sec. 980. Spallation Neutron Source. This section provides for definitions and requires the Secretary to submit as part of the annual budget process a report on the Spallation Neutron Source project.

Sec. 981. Rare Isotope Accelerator. The Secretary is instructed to construct and operate a Rare Isotope Accelerator, and is to commence construction no later than September 30, 2008. This section authorizes the appropriations for this construction.

Sec. 982. Office of Scientific and Technical Information. The Secretary is instructed to maintain information for the public regarding collections of scientific and technological information resulting from R&D activities supported by the Department.

Sec. 983. Science and Engineering Education Pilot Program. The Secretary must award a grant to a Southeastern U.S. consortium of major research universities that currently advances science and education by partnering with National Laboratories to establish a regional pilot program of its SEEK-16 program for enhancing scientific, technological, engineering, and mathematical literacy, creativity and decision-making.

Sec. 984. Energy Research Fellowships. The Secretary is to establish a postdoctoral fellowship program, as well as senior research fellowships. The general requirement of the fellowships is outlined in this section.

Sec. 984A. Science and Technology Scholarship Program. The Secretary is authorized under this section to establish a Science and Technology Scholarship Program to award scholarships to help recruit and prepare students for careers in the Department and National Labs. There is a service requirement for recipients.

Subtitle H- INTERNATIONAL COOPERATION

Sec. 985. Western Hemisphere Energy Cooperation. The Secretary is directed to carry out a program to promote cooperation on energy issues with countries of the Western Hemisphere. This section outlines allowable activities and the desire for participation by institutions of higher education. This section authorizes the appropriations for such a program.

Sec. 986. Cooperation Between U.S. and Israel. This section includes the findings of Congress regarding the agreement between the US and Israel to establish a framework for collaboration in energy R&D. Not later than 90 days after the date of enactment of this Act, the Secretary shall submit to House and Senate committees a report that describes outlined items.

Sec. 986A. International Energy Training. The Secretary, in consultation with other Secretaries, shall coordinate training and outreach efforts for international commercial energy

markets in countries with developing and restructuring economies. This section includes components of such training and authorizes the appropriations needed for such efforts.

Subtitle I – RESEARCH ADMINISTRATION AND OPERATIONS

Sec. 987. Availability of Funds. Funds allocated under this Act remain available until expended.

Sec. 988. Cost Sharing. The Secretary shall require cost-sharing for R&D projects initiated after the date of enactment of this section. This section outlines the cost sharing expectations, including the ability for the Secretary to reduce the amount, calculations of the amounts of cost-sharing, repayment of the federal share and certain exclusions.

Sec. 989. Merit Review of Proposals. This section allows the award of funds after an impartial review of the scientific and technical merit of proposals by the Department. This section outlines the qualifications for competition.

Sec. 990. External Technical Review of Departmental Programs. This establishes the National Energy Research and Development Advisory Boards or in the alternative, the Secretary may designate an existing advisory board to fulfill the outlined responsibilities. This section outlines the membership, meeting requirements and goals.

Sec. 991. National Laboratory Designation. After the enactment of this Act, the Secretary may not designate a facility as a National Laboratory if it is not listed in section 2(3) as a National Laboratory.

Sec. 992. Report on Equal Employment Opportunity Practices. Not later than 12 months after the date of enactment of this Act, the Secretary shall report to Congress on the equal employment opportunity practices of the National Labs.

Sec. 993. Strategy and Plan for Science and Energy Facilities and Infrastructure. The Secretary is directed to develop and implement a strategy for facilities and infrastructure. The requirements and contents of the strategy are outlined in this section. It requires a report to Congress by the Secretary when the budget request is submitted to the President.

Sec. 994. Strategic Research Portfolio Analysis and Coordination Plan. The Secretary is instructed to periodically review all of the science and technology activities of the Department.

Sec. 995. Competitive Award of Management Contracts. This section prohibits the use of funds to award a management and operating contract for a National Lab unless it is competitively awarded or a waiver is granted on a case by case basis. This waiver authority granted to the Secretary cannot be delegated.

Sec. 996. Western Michigan Demonstration Project. The Administrator of the EPA

shall conduct a demonstration project to address the effect of transported ozone and ozone precursors in Southwestern Michigan. This section outlines the requirements of the program.

Sec. 997. Artic Engineering Research Center. The Secretary of Transportation shall provide annual grants to a university located adjacent to the Arctic Energy Office to establish and operate a university research center to be headquartered in Fairbanks and known as the “Arctic Engineering Research Center.” This section outlines the purposes and objectives of the center and authorizes a grant through 2011 to the institution.

Sec. 998. Barrow Geophysical Research Facility. The Secretary of Commerce, in consultation with others, is instructed to establish a joint research facility in Barrow, Alaska to support scientific research activities in the Arctic. This section authorizes the appropriation for such a project.

Subtitle J- ULTRA-DEEPWATER AND UNCONVENTIONAL NATURAL GAS AND OTHER PETROLEUM RESOURCES

Sec. 999A. Program Authority. The Secretary shall carry out a program regarding technologies for ultra-deepwater and unconventional natural gas and other petroleum resource exploration and production.

Sec. 999B. Ultra-Deepwater and Unconventional Onshore Natural Gas and Other Petroleum Research and Development Program. The Secretary is instructed to maximize the value of natural gas and other petroleum resources of the US by increasing the supply of such resources through reducing the cost and increasing the efficiency of exploration for and production of such resources while improving safety and minimizing environmental impacts.

Sec. 999C. Additional Requirements for Awards. This section outlines the requirements for a demonstration project, including the amount of flexibility in locating the project and outlines the agreement regarding intellectual property.

Sec. 999D. Advisory Committees. Not later than 270 days after the date of enactment of this Act, the Secretary must establish advisory committees to be known as the Ultra-Deepwater Advisory Committee and the Unconventional Resources Technology Advisory Committee. This section outlines the requirements for membership, the duties and compensation.

Sec. 999E. Limits on Participation. No award can be given to any entity that meets the outlined categories.

Sec. 999F. Sunset. Authority under this subtitle terminates on September 30, 2014.

Sec. 999G. Definitions. This section outlines the definitions to be used in this subtitle.

Sec. 999H. Funding. This section allows the deposit of \$50,000,000 into the Ultra-

Deepwater and Unconventional Natural Gas and Other Petroleum Research Fund after certain distributions are considered. This section includes authority for the Secretary to obligate such funds and outlines the allocations. This section authorizes the appropriation from fiscal year 2007 through 2016.

TITLE X - DEPARTMENT OF ENERGY MANAGEMENT

Sec. 1001. Improved technology transfer of energy technologies. Secretary shall appoint a Technology Transfer Coordinator, and establish a Technology Transfer Working Group, qualifications and duties outlined. Secretary must submit plan to Congress every year.

Sec. 1002. Technology Infrastructure Program. Secretary shall establish a Technology Infrastructure Program to improve the ability of National Laboratories and single-purpose research facilities to support departmental missions, encouraging exchange of scientific and technological expertise. Program requirements and criteria outlined. Appropriations of \$10,000,000 authorized for each of fiscal years 2006 through 2008.

Sec. 1003. Small business advocacy and assistance. Secretary requires Director of each National Laboratory to designate a small business advocate to increase participation of small business concerns and report to Director on how to improve participation and establish a Small Business Assistance Program to assist small business concerns in becoming more effective and efficient. Appropriations authorized under this section \$5,000,000 for each of fiscal years 206 through 2008.

Sec. 1004. Outreach. Secretary shall ensure that each program authorized by this Act shall include an outreach component to provide information to those affected.

Sec. 1005. Relationship to other laws. Secretary shall carry out all activities authorized by this Act in accordance to the applicable provisions of federal law.

Sec. 1006. Improved coordination and management of civilian science and technology programs. Establish position of Under Secretary for Science, appointed by President. Criteria and duties outlined. Establishment of additional assistant secretary position. Establishment of General Counsel in the department.

Sec. 1007. Other transactions authority. Gives Secretary additional transaction authority.

Sec. 1008. Prizes and achievement in grand challenges of science and technology. Establish award program for cash prizes in recognition of breakthroughs in research, development, demonstration and commercial application that can potentially apply to mission of the Department. Requirements for submission outlined. Freedom Prize will be awarded for technologies that reduce the dependence of the United States on imported oil. Appropriations authorized for \$10,000,000 for first program and \$5,000,000 for Freedom Prize.

Sec. 1009. Technical corrections. Various revisions and technical corrections for various acts.

Sec. 1010. University collaboration. Secretary must transmit report to Congress examining feasibility of collaborations between major universities for energy projects.

Sec. 1011. Sense of Congress. Secretary should develop and implement more stringent procurement and inventory controls to prevent waste and fraud. Inspector General should closely review purchase card purchases.

TITLE XI - PERSONNEL AND TRAINING

Sec. 1101. Workforce trends and traineeship grants. Secretary shall monitor and report on trends in the workforce of skilled technical personnel and electric power and transmission engineers, and report any shortages. Secretary may also establish programs to enhance training for a workforce where a shortage is identified. Appropriations authorized for this section \$20,000,000 for each of fiscal years 2006 through 2008.

Sec. 1102. Educational programs in science and mathematics. Secretary shall use not less than 0.3 percent of the amount made available to the Department for research, development, demonstration and commercial application for fiscal year 2006 and each fiscal year thereafter to carry out activities authorized by this part, such as summer internships and educational training. Secretary shall conduct a study with the National Academy of Public Administration.

Sec. 1103. Training guidelines for nonnuclear electric energy industry personnel. Secretary will develop model personnel training guidelines to support reliability and safety of the nonnuclear electric system.

Sec. 1104. National Center for Energy Management and Building Technologies. Secretary shall support activities of National Center for Energy Management and Building Technologies to carry out research to improve energy efficiency.

Sec. 1105. Improved access to energy-related scientific and technical careers. Secretary will give priority to encourage students from underrepresented groups to pursue careers in science and technology and will partner with historically black colleges, Hispanic-serving institutions and tribal colleges.

Sec. 1106. National Power Plant Operations Technology and Educational Center. Secretary shall establish a National Power Plant Operations Technology and Education Center to address the need for training and educating certified operators and technicians for the electric power industry.

TITLE XII -- ELECTRICITY

Sec. 1201. Short title. This title may be cited as the “Electricity Modernization Act of 2005.”

Subtitle A - Reliability Standards

Sec. 1211. Electric Reliability Standards. FERC shall have jurisdiction over all users, owners, and operators of the bulk power system. FERC will certify an Electric Reliability Organization (“ERO”) that meets certain conditions. While only the ERO can develop reliability standards, the language provides both the ERO and the Commission with the ability to enforce reliability standards. The ERO may delegate its enforcement authority to a regional entity. Federal agencies shall expedite approvals for access to transmission or distribution facilities on Federal lands to allow owners or operators of such facilities to comply with reliability standards pertaining to vegetation management or service restoration.

Subtitle B - Transmission Infrastructure Modernization

Sec. 1221. Siting of Interstate Electric Transmission Facilities. FERC is authorized to issue a permit to construct or modify a transmission facility in a national interest electric transmission corridor established by DOE if a State is without authority or fails to approve the request within a year. For authorization on Federal lands, the DOE shall act as the lead agency for purposes of coordinating all applicable Federal authorizations and related environmental reviews. Appeals are to be filed with the President, who may then issue the authorization. The consent of Congress is given for 3 or more States to enter into an interstate compact establishing regional transmission siting agencies.

Sec. 1222. Third-Party Finance. WAPA and SWPA may participate with third parties in upgrades of existing transmission facilities owned by WAPA or SWPA or in new facilities in states in which WAPA or SWPA operate.

Sec. 1223. Advanced Transmission Technologies. FERC shall encourage the deployment of advanced transmission technologies.

Sec. 1224. Advanced Power System Technology Incentive Program. The Secretary is authorized to establish an advanced power system technology incentive program that will support the deployment of certain advanced power system technologies. Funds will be used by the Secretary to make incentive payments to eligible owners or operators of advanced power system technologies. Subject to funds available, the Secretary shall pay the owner of an advanced power system technology facility 1.8 cents per kilowatt-hour and an additional 0.7 cents per kilowatt-hour for a security and assured power facility.

Subtitle C - Transmission Operation Improvements

Sec. 1231. Open Nondiscriminatory Access. FERC may require an unregulated transmitting utility to provide transmission services at rates comparable to what it charges itself

and on terms and conditions comparable to those under which it provides transmission services to itself. Unregulated utilities that sell not more than 4,000,000 megawatt hours of electricity per year are exempt.

Sec. 1232. Federal Utility Participation in Transmission Organizations. The Federal Power Marketing Administrations and TVA are authorized to participate in RTOs. However, the PMAs and TVA may not abrogate any contract or treaty obligations.

Sec. 1233. Native Load Service Obligation. Any load-serving entity is entitled to use its firm transmission rights or equivalent tradable or financial rights to the extent required to meet its service obligation and such rights are transferable. Nothing in the section affects methodologies employed for allocations of transmission rights by RTOs, except that if an RTO never allocated rights as of January 1, 2005 and that RTO applies to FERC to change its methodology, FERC shall exercise its authority in a manner consistent with the Act and that takes into account the policies expressed in this section to the extent the associated generation ownership or power purchase arrangements remain in effect. If an ISO in the Western Interconnection had not allocated transmission rights to a load-serving entity, the ISO may not convert the load-serving entity's firm transmission rights without its consent except where the load-serving entity has voluntarily joined the ISO.

Sec. 1234. Study on the Benefits of Economic Dispatch. The Secretary of Energy shall conduct a study on economic dispatch procedures currently used by electric utilities. The results of the study will be reported to Congress and the states within 90 days of enactment of the Energy Bill and on a yearly basis thereafter.

Sec. 1235. Protection of Transmission Contracts in the Pacific Northwest. Nothing in the Act confers on FERC the authority to require an entity located in the Pacific Northwest that holds firm transmission rights to convert those rights.

Sec. 1236. Sense of Congress Regarding Locational Installed Capacity Mechanism. FERC should carefully consider the States' objections to the locational installed capacity mechanism in New England pending before FERC.

Subtitle D - Transmission Rate Reform

Sec. 1241. Transmission Infrastructure Investment. FERC is required to establish by rule incentive-based rate treatments for transmission facilities, including recovery for costs to comply with reliability standards and costs related to transmission infrastructure development. FERC shall also provide incentives to each utility that joins a transmission organization. FERC shall ensure that any costs recoverable may be recovered through the transmission rates charged by the utility or transmission organization.

Sec. 1242. Funding New Interconnection and Transmission Upgrades. FERC may approve a participant funding plan that allocates costs related to transmission upgrades or new generator interconnection without regard to whether the applicant is a member of an RTO.

Subtitle E - Amendments to PURPA

Sec. 1251. Net Metering and Additional Standards. States are required to consider the adoption of standards relating to net metering, fuel sources, and fossil fuel generation efficiency.

Sec. 1252. Smart Metering. States are required to consider the adoption of a smart metering standard. DOE is directed to encourage smart metering.

Sec. 1253. Cogeneration and Small Power Production Purchase and Sale Requirements. PURPA is modified to provide that a utility would be relieved from its “must buy” and “must sell” obligations if certain conditions are met. Nothing in the subsection affects the rights or remedies under existing contracts in effect or pending approval. The Commission will also issue a rule within 180 days revising the criteria for new qualifying cogeneration facilities seeking to sell electricity. The ownership limitation is eliminated.

Sec. 1254. Interconnection. States shall consider the adoption of an interconnection standard.

Subtitle F - Repeal of PUHCA

Sec. 1261 - 1277. Repeal of PUHCA. PUHCA is repealed and replaced with enhanced authority for FERC and the States with respect to books and records. A person that is a holding company solely with respect to one or more qualifying facilities, exempt wholesale generators, or foreign utility companies is exempt from Federal books and records authority. The effective date is six months after the date of enactment, except that FERC is required 4 months after the date of enactment to promulgate rules to implement the language.

Subtitle G - Market Transparency, Enforcement, and Consumer Protection

Sec. 1281. Electricity Market Transparency. FERC is directed to facilitate price transparency in electric energy markets. FERC may issue rules for the dissemination of information about the availability and prices of wholesale electric energy and transmission service.

Sec. 1282. False Statements. No entity may knowingly report false information relating to the price of electricity sold at wholesale or the availability of transmission capacity.

Sec. 1283. Market Manipulation. It shall be unlawful to use any manipulative or deceptive devices in contravention of FERC rules.

Sec. 1284. Enforcement. Complaint provision expanded to allow electric utilities to file complaints and to allow complaints to be filed against transmitting utilities, with corresponding changes to investigations and Commission review provisions. FERC penalty authority is

increased to \$1,000,000 and civil penalty authority is increased to \$1,000,000 for violations of any provisions under Part II.

Sec. 1285. Refund Effective Date. The refund effective date is changed to begin on the date of the filing of a complaint.

Sec. 1286. Refund Authority. Refund authority is expanded to include large municipal utilities that voluntarily make short-term sales.

Sec. 1287. Consumer Privacy and Unfair Trade Practices. The Federal Trade Commission may issue rules relating, to privacy, slamming, and cramming.

Sec. 1288. Authority of Court to Prohibit Individuals From Serving as Officers, Directors, and Energy Traders. In an enforcement action, a court may prohibit a person who is accused of providing false information from acting as an officer or director of a utility or engaging in the business of purchasing or selling electricity or transmission services.

Sec. 1289. Merger Review Reform. Section 203 is amended: (1) to increase the monetary threshold for filing an application under this section to \$10,000,000; (2) to provide FERC with jurisdiction over the acquisition of generation facilities used for interstate wholesale sales and over which FERC has jurisdiction for ratemaking purposes; (3) to clarify that the merging of holding companies or holding companies and a transmitting utility or electric utility company is subject to Section 203; (4) to add the requirement that the merger not result in cross-subsidization of a non-utility associate company or pledge or encumbrance of utility assets for the benefit of an associate company unless consistent with the public interest; and (5) to require FERC to adopt procedures for the expeditious consideration of merger applications. The effective date for the amendments is 6 months after the date of enactment of the Act. The amendments made by this section shall not apply to any section 203 application filed on or before the date of enactment.

Sec. 1290. Relief for Extraordinary Violations. For any contract entered into in the Western Interconnection prior to June 20, 2001, where a seller has had its market based rate authority revoked, the Commission shall have the authority to determine that termination payments for power not delivered is not permitted or is otherwise unlawful.

Subtitle H - Definitions

Sec. 1291. Definitions. Various definition changes to reflect changes to the Federal Power Act.

Subtitle I - Technical and Conforming Amendments

Sec. 1292. Conforming amendments.

Subtitle J - Economic Dispatch

Sec. 1298. Economic Dispatch. FERC shall convene joint boards on a regional basis to study constrained economic dispatch for the various market regions.

TITLE XIII – ENERGY POLICY TAX INCENTIVES

Subtitle A—Electricity Infrastructure

Sec. 1301. Extension and modification of renewable electricity production credit. Extends section 45 production tax credit (“PTC”) for qualifying facilities placed-in-service by two years (through December 31, 2007). Existing qualifying facilities include: wind facilities; closed-loop biomass facilities; open-loop biomass facilities; geothermal facilities; small irrigation power facilities; landfill gas facilities; and trash combustion facilities. The section does not extend the PTC in-service date for solar facilities and refined coal facilities. This section expands definition of “qualified energy resources” to include: (a) “qualified hydropower production,” which encompasses (i) incremental power from an existing hydroelectric dam and (ii) any power produced from a previously nonhydroelectric dam to which turbines or other generating devices are added after enactment of this bill so long as there is no enlargement of the amount of water diverted; and (b) Indian coal, which is coal produced from reserves owned by an Indian Tribe or held in trust by the U.S. for an Indian Tribe or its members as of June 14, 2005. Indian coal produced at Indian coal production facilities will receive an additional \$1.50 per ton credit, to be increased to \$2.00 per ton after 2009.

Sec. 1302. Application of section 45 credit to agricultural cooperatives. Allows eligible cooperatives to elect to pass any portion of the PTC credit to their patrons, based on the amount of business done by that patron that year. An eligible cooperative is defined as a cooperative organization that is owned more than 50 percent by agricultural producers or entities owned by agricultural producers. Provision is effective for the taxable year ending following the date of enactment.

Sec. 1303. Clean renewable energy bonds. Provision creates new category of tax credit bonds called Clean Renewable Energy Bonds (“CREBs”). Qualified issuers can issue CREBs and purchasers receive an income tax break instead of receiving interest payments on the bonds from the qualified issuers. 95 percent of proceeds from sales of CREBS must be used to finance capital expenditures incurred for facilities qualifying for tax credit under section 45. Qualified issuers include governmental bodies (including Indian tribal governments) and mutual or cooperative electric companies. Provision is effective for bonds issued after December 31, 2005.

Sec. 1304. Treatment of income of certain electric cooperatives. The rules for tax-exempt electric cooperatives require that 85 percent of the cooperative’s income consists of amounts collected from members of the cooperative to meet load losses and expenses of providing service to its members (85/15 test). This section makes permanent exemptions to this requirement for income from: (1) transmission or distribution sales pursuant to an open-access transmission tariff or, in the case of transmission, a FERC-approved independent transmission

provider agreement (unless that sale is to a member); (2) sales to end-users served by distribution facilities not owned by the cooperative or its members; (3) generation facilities not owned or leased by the cooperative or its members; (4) any nuclear decommissioning transactions; and (5) any asset exchange or conversion transaction.

Sec. 1305. Dispositions of transmission property to implement FERC restructuring of policy. Provides that a electric utility that sells their transmission assets to a FERC-approved independent transmission company qualifies for an 8-year recognition period to pay the tax on any gain from the sale, for any such sales through the end of 2007.

Sec. 1306. Credit for production from advanced nuclear power facilities. Establishes a production tax credit (PTC) for new “advanced” nuclear power facilities. Credit amount is 1.8 cents per kWh for electricity produced over an 8-year period from its in-service date. The credit amount cannot exceed the facility’s allocation of the national limit on this provision (6,000 MW), or the nameplate capacity of the facility. This provision applies to all nuclear facilities with reactor designs approved by the NRC beginning in 1994, or a substantially similar design approved prior to that date, and placed in service following enactment of the bill through 2020.

Sec. 1307. Credit for investment in clean coal facilities. Establishes two clean coal investment credits: first, a “qualifying advanced coal project credit” equal to 20% of investment for integrated gasification combined cycle (IGCC) projects and 15% of investment for other advanced coal-based projects that produce electricity, and second, a “qualifying gasification project credit,” equal to 20% of investment in a gasification project.

For the advanced coal-based ITC, the Secretary shall establish application criteria within 180 days after the date of enactment, and the applicant will have 3 years from that date to submit the application. The application will be accepted if the applicant demonstrates that the project will be a new generating facility or retrofit to an old electric generating facility, the input for which is at least 75 percent coal, has nameplate capacity of at least 400 MW, the majority of the output is reasonably expected to be acquired, and the applicant has ownership or control of the site. The applicant then has 2 years to obtain all necessary environmental permits and to have a turbine contract in order to be eligible for certification. Aggregate credits are limited to \$800 million for IGCC and \$500 million for other advanced technologies, and eligible IGCC property is limited to that part of the project necessary for the gasification of coal. Further, IGCC projects must be certified in relatively equal amounts between bituminous, sub-bituminous, and lignite. The Secretary of Energy has the power to re-evaluate and re-distribute credits after 6 years.

Gasification projects qualifying for the credit must convert a solid or liquid product from coal, petroleum residue, biomass, or other materials recovered for their energy value into a synthesis gas composed primarily of carbon monoxide and hydrogen. This credit also requires certification following establishment of a certification program by DOE, and certifications will only be issued for a ten-year period beginning October 1, 2005. Criteria for consideration in awarding gasification certifications include: financial viability without further federal assistance, whether a market exists for the products of the proposed project; and the fuels from the

gasification technology will comprise at least 90% of total fuels.

Projects cannot receive credits under both the advanced coal program and the gasification project program.

Sec. 1308. Electric transmission property treated as 15-year property. Shortens the existing recovery period for electricity transmission and distribution assets, and related land improvements, from 20 to 15 years. For purposes of the provision, transmission at 69kv or greater, the original use of which commences with the taxpayer after April 11, 2005, will qualify for the new recovery period. The provision does not apply to any property which the taxpayer or a related party had entered into a binding contract for the construction thereof or self-constructed on or before April 11, 2005.

Sec. 1309. Expansion of amortization for certain atmospheric pollution control facilities in connection with plans first placed in service after 1975. Provides a 7-year recovery period for the cost of certain certified air pollution control facilities used in connection with an electric generation plant which is primarily coal-fired and which was not in operation before January 1, 1976.

Sec. 1310. Modifications to special rules for nuclear decommissioning costs. Modifies the amount of deductible funds a taxpayer may transfer into a nuclear decommissioning reserve fund. This section removes the limitation that the amount of funds paid into the fund in a given taxable year not surpass the amount of decommissioning costs included in the taxpayer's cost-of-service rate revenues for that taxable year, and instead limits it to the "ruling amount" that the Secretary determines allowable for that facility. The ruling amount is modified to include total decommissioning costs over the estimated useful life of the plant.

Sec. 1311. 5-year net operating loss carryover for certain losses. Allows a taxpayer to claim a net operating loss carryback to each of the 5 years preceding the taxable year of such loss to the extent that such loss is equal to no more than 20 percent of the sum of electric transmission capital expenditures and pollution control capital expenditures for the taxable year preceding the taxable year in which such election is made. Applies to losses incurred in 2003, 2004 and 2005, and the election can be made in tax years 2006 through 2008.

Subtitle B—Domestic Fossil Fuel Security

Sec. 1321. Extension of credit for producing fuel from a nonconventional source for facilities producing coke or coke gas. Adds a production credit for qualified facilities that produce coke or coke gas in the amount of \$3.00 per barrel-of-oil equivalent (adjusted for inflation from base year 2004), not to exceed 4,000 barrels per day. Qualified facilities must have been placed in service before January 1, 1993, or after June 30, 1998, and before January 1, 2010. The production credit may be claimed beginning on the later of January 1, 2006, or the date such facility is placed in service and ending on the date which is four years after such period began. The credit expires in January 1, 2010 or four years after the facility was placed in service, whichever is later.

Sec. 1322. Modification of credit for producing fuel from a nonconventional source.

The provision makes the \$3.00 per barrel-of-oil equivalent credit for producing fuel from a non-conventional source part of the general business credit, so that unused credits may be carried back one year and forward 20 years.

Sec. 1323. Temporary expensing for equipment used in refining of liquid fuels.

Allows taxpayers to expense 50 percent of the cost of refinery investments which increase the capacity of an existing refinery by at least 5 percent or increase the throughput of qualified fuels (e.g., oil from shale and tar sands) by at least 25 percent. Cooperatives may apportion the immediate depreciation among member patrons. To qualify, facilities must be placed in service following enactment of this bill and before January 1, 2012.

Sec. 1324. Pass through to owners of deduction for capital costs incurred by small refiner cooperatives in complying with Environmental Protection Agency sulfur regulations. The American Jobs Creation Act of 2004 included a provision to allow taxpayers a deduction for certain costs involved with investments to comply with EPA low sulfur diesel regulations. This section allows a cooperative this deduction through to its member patrons if it elects to do so. This section is effective as if it was enacted with the American Jobs Creation Act of 2004.

Sec. 1325. Natural gas distribution lines treated as 15-year property. Shortens existing law that gas distribution lines must be depreciated over 20 years to a depreciation period of 15 years for any gas distribution lines the original use of which occurred after April 11, 2004 and before January 1, 2011. This section does not apply to any property for which the taxpayer entered into a binding contract for the construction thereof or self-constructed on or before April 11, 2005.

Sec. 1326. Natural gas gathering lines treated as 7-year property. Establishes a statutory seven-year recovery period and a class life of 14 years for natural gas gathering lines, the original use of which commences with the taxpayer after April 11, 2005. In addition, no adjustment will be made to the allowable amount of depreciation with respect to this property for purposes of computing a taxpayer's alternative minimum taxable income. This section does not apply to any property for which the taxpayer entered into a binding contract for the construction thereof or self-constructed on or before April 11, 2005.

Sec. 1327. Arbitrage rules not to apply to prepayments for natural gas. Creates a safe harbor exception to the general rule that tax-exempt bond-financed prepayments violate the arbitrage restrictions requiring a rebate of arbitrage profits to the Government. The exception applies to qualified natural gas supply contracts to acquire natural gas for resale by a governmental-owned utility if the amount of gas to be purchased does not exceed the sum of: (1) the average annual natural gas purchased by customers of the utility within the service area during a 5-year testing period (including that gas used to generate electricity); and (2) the amount of natural gas that is used to transport natural gas to the governmental utility during that year, subject to certain adjustments. Prepayments for natural gas are also not subject to the private

loan financing test. This provision would apply to all contracts issued after the date of enactment.

Sec. 1328. Determination of small refiner exception to oil depletion deduction.

Increases the amount of daily refining operations a producer may undergo and still qualify as an independent producer for this purpose, from 50,000 barrels on any day in the taxable year during which independent producer status is claimed to 75,000 barrels per day. The section also changes the refinery limitation on actual daily production to an average daily production for the taxable year, and applies to taxable years ending after the enactment of this bill.

Sec. 1329. Amortization of geological and geophysical expenditures. Allows geological and geophysical expenses paid or incurred in connection with oil and gas exploration in the United States to be amortized over two years, beginning on the date on which the expense was incurred. In the case property for which geological or geophysical expenses were incurred is abandoned during the two-year amortization period, any remaining basis may no longer be recovered but the amortization deduction will continue. The provision is effective for geological and geophysical costs paid or incurred in taxable years beginning after the date of enactment.

Subtitle C—Conservation and Energy Efficiency Provisions

Sec. 1331. Energy efficient commercial buildings deduction. Allows a deduction for commercial buildings that reduce annual energy consumption by 50 percent compared to a determined standard. The deduction equals the cost of energy efficient property installed during construction, with a maximum deduction of \$1.80 per square foot of the building. A partial deduction of \$0.60 per square foot is allowed for building subsystems (e.g., cooling systems, lighting systems). This section is effective for property or subsystems placed in service between December 31, 2005 and January 1, 2008.

Sec. 1332. Credit for construction of new energy efficient homes. Provides credit to an eligible contractor for construction of a qualified new energy-efficient home. The credit is either \$1,000 or \$2,000 per home and applies to manufactured homes meeting Energy Star Standards and other homes meeting a 50% standard. Effective for homes purchased before January 1, 2008.

Sec. 1333. Credit for certain nonbusiness energy property. Individuals receive a credit against tax imposed in a given taxable year for: (1) 10 percent of the amount paid for qualified energy efficiency improvements; and (2) the amount of residential energy property expenditures; both types are subject to a lifetime limit. Effective for property placed in service between December 31, 2005 and January 1, 2008.

Sec. 1334. Credit for energy efficient appliances. Establishes tax credit for the manufacture of efficient dishwashers, clothes washers, and refrigerators. Credits vary depending on the efficiency of the unit. Effective for appliances manufactured in 2006 and 2007.

Sec. 1335. Credit for residential energy efficient property. Individuals can receive a

tax credit in the amount of 30% of property expenditures on qualifying photovoltaic, solar water heating, and fuel cell property expenditures, subject to a taxable year limit. Credit applies to property placed in service after December 31, 2005 and prior to January 1, 2008.

Sec. 1336. Credit for business installation of qualified fuel cells and stationary microturbine power plants. Provides businesses a 30% energy credit for purchase of qualified fuel cell power plants with a nameplate capacity of 0.5 kilowatt, subject to the limitation that the credit may not exceed \$500 for each 0.5 kilowatt of capacity. Also provides businesses a 10% credit for purchase of qualifying stationary microturbine power plants that are not involved in the telephone service business. Credit applies between December 31, 2005 and January 1, 2008.

Sec. 1337. Business solar investment tax credit. Provides a 30 percent credit for purchase of qualifying solar energy property. Credit applies between December 31, 2005 and January 1, 2008.

Subtitle D—Alternative Motor Vehicles and Fuels Incentives

Sec. 1341. Alternative motor vehicle credit. Starting December 31, 2005, permits a tax credit equal to the sum of the fuel cell motor vehicle credit, the advanced lean burn technology motor vehicle credit, the hybrid motor vehicle credit and the alternative fuel motor vehicle credit. **Fuel cell vehicle credit:** Base credit that depends upon the weight class of the vehicle and in the case of automobiles or light trucks, an additional credit that depends upon the rated fuel economy of the vehicle compared to a base fuel economy. **Advanced lean-burn technology vehicle and hybrid vehicle credit:** Sum of: a fuel economy credit amount that varies with the rated fuel economy of the vehicle and a conservation credit based on the estimated lifetime fuel savings of a qualifying vehicle. **Alternative fuel vehicle credit:** The amount of the credit is equal to the percentage of the incremental costs of any new qualified alternative fuel (compressed natural gas, liquefied natural gas, liquefied petroleum gas, hydrogen or any liquid containing at least 85% methanol) vehicle placed in service by during the taxable year.

Sec. 1342. Credit for installation of alternative fueling stations. Permits a 30% credit for the cost of installing clean-fuel vehicle refueling property to be used in business or installed at the principal residence of the taxpayer. This provision is effective for property in service as of December 31, 2005; and terminates in the case of hydrogen fueling stations on December 31, 2014, and for other property, December 31, 2009.

Sec. 1343. Reduced motor fuel excise tax on certain mixtures of diesel fuel. A special tax rate of 19.7 cents per gallon is provided for diesel fuel blended with at least 14% water into a diesel-water fuel emulsion to reflect the reduced Btu content per gallon resulting from the water. Claims for refunds based on the incentive rate may be filed quarterly if a taxpayer can claim at least \$750. This section is effective January 1, 2006.

Sec. 1344. Extension of excise tax provisions and income tax credit for biodiesel. Extends the 50 cents per gallon income tax credit, excise tax credit, and payment provisions for

using biodiesel fuel in a qualified biodiesel mixture for sale or not in a mixture for use as a fuel, through December 31, 2008.

Sec. 1345 Small agri-biodiesel producer credit. Adds to the biodiesel fuels credit a small agri-biodiesel producer credit of 10 cents per gallon for up to 15 million gallons of agri-biodiesel produced by small producers with annual capacity not exceeding 60 million gallons. Effective for taxable years following the date of enactment through December 31, 2008.

Sec. 1346. Renewable diesel. Renewable diesel will be treated in the same manner as the biodiesel credits with a credit rate of \$1.00 per gallon instead of 50 cents per gallon. Under the provision renewable diesel means diesel fuel derived from biomass using a thermal depolymerization process. Cooperatives may apportion the credit for a given taxable year among patrons based on value of business done in that year.

Sec. 1347. Modification of small ethanol producer credit. Increases the limit on production capacity to qualify for a small ethanol producers credit from 30 million to 60 million gallons, effective for taxable years after date of enactment.

Sec. 1348. Sunset of deduction for clean-fuel vehicles and certain refueling property. Termination date is changed from December 31, 2006 to December 31, 2005.

Subtitle E—Additional Energy Tax Incentives

Sec. 1351. Expansion of research credit. Provision expands the 20% research and development tax credit to include taxpayers' expenditures to qualified research consortia with respect to energy-related research.

Sec. 1352. National Academy of Sciences study and report. Directs the Treasury Secretary to enter into an agreement with the National Academy of Sciences no later than 60 days after enactment of the bill to conduct a study of the health, environmental, security, and infrastructure costs and benefits associated with production and consumption of energy.

Sec. 1353. Recycling study. Directs the Treasury Secretary, in consultation with the Secretary of Energy, to conduct a study to determine and quantify the energy savings achieved through recycling activities, including that of electronic waste, and to identify tax incentives to carry out this incentive. A report of the study must be given to Congress no later than one year after the date of enactment of the bill.

Subtitle F—Revenue Raising Provisions

Sec. 1361. Oil Spill Liability Trust Fund financing rate. Reinstates the Oil Spill Liability Trust Fund tax financing rate. The financing rate will apply on April 1, 2006, or at a later date when the Secretary estimates that the unobligated balance in the Oil Spill Liability Trust fund will be less than \$2 billion. The tax shall not apply if the Secretary estimates the unobligated balance in the Oil Spill Liability Trust fund to be more than \$2.7 billion. The tax

shall not apply after December 31, 2014.

Sec. 1362. Extension of Leaking Underground Storage Tank Trust Fund financing rate. The LUST Trust Fund tax is extended at the current rate through September 30, 2011, effective October 1, 2005. Dyed fuel is also subject to the LUST tax and without refund.

Sec. 1363. Modification of recapture rules for amortizable section 197 intangibles. This provision modifies the recapture rules for amortizable section 197 intangibles. Under the provision, if multiple section 197 intangibles are sold or disposed of in a single transaction or series of transactions, the seller must calculate recapture as if all of the section 197 intangibles were a single asset. Thus, any gain on the sale or disposition of the intangibles is recaptured as ordinary income to the extent of ordinary depreciation deductions previously claimed on any of the section 197 intangibles.

Sec. 1364. Clarification of tire excise tax. Clarifies that a super single tire is not designed to steer the vehicle, and is made effective as if included in the 2004 JOBS Act.

TITLE XIV -- MISCELLANEOUS

Subtitle A - In General

Sec. 1401. Sense of Congress on Risk Assessments. In assessing risks to human health and the environment from energy activities, sound and objective scientific practices should be used.

Sec. 1402. Energy Production Incentives. A State may provide to any entity a credit against any tax or fee owed under State law or other tax incentive for electricity from coal mined in the State and such action taken by the State would be considered to be a reasonable regulation of commerce.

Sec. 1403. Regulation of Certain Oil Used in Transformers. Vegetable oil made from soybeans and used in electric transformers shall not be regulated under the Edible Oil Regulatory Reform Act.

Sec. 1404. Petrochemical and Oil Refinery Facility Health Assessment. The Secretary shall conduct a study of the health impacts to persons living in proximity to petrochemical and oil refinery facilities.

Sec. 1405. National Priority Project Designation. The President shall annually designate organizations that have advanced renewable energy technology.

Sec. 1406. Cold Cracking. The Secretary shall conduct a study of the application of radiation to petroleum to refine petroleum products, with the object of increasing the economic yield from each barrel of oil.

Sec. 1407. Oxygen-Fuel. The Secretary shall establish a program on oxygen-fuel systems.

Subtitle B - Set America Free

Sec. 1421-1422. Short Title; Purpose. The purpose of the Set America Fee Act is to establish the United States Commission on North American Energy Freedom to make recommendations for a coordinated North American energy policy to achieve energy self-sufficiency by 2025 for Canada, Mexico, and the U.S.

Sec. 1423. United States Commission on North American Energy Freedom. The Commission shall be composed of 16 members appointed by the President, with members from the U.S., Canada, and Mexico. The Commission may secure information from any governmental agency or may employ staff experts and consultants, and staff shall be selected from qualified citizens of Canada, Mexico, and the U.S. Within 12 months after the effective date of the Act, the Commission shall submit a report to Congress and the President of its findings and recommendations regarding North American energy freedom. There is authorized to be appropriated \$10 million for the 2 fiscal-year period beginning with fiscal year 2005.

Sec. 1424. North American Energy Freedom Policy. After receiving the report from the Commission, the President shall submit to Congress a statement of proposals for a national policy to achieve North American energy freedom by 2025.

TITLE XV – ETHANOL AND MOTOR FUELS

Subtitle A – General Provisions

SEC. 1501 – RENEWABLE CONTENT OF GASOLINE. Amends the Clean Air Act by adding definitions and directing the Administrator of EPA to promulgate regulations to ensure that gasoline contains a certain proportion of renewable fuel. Proportions of renewable fuel added to gasoline will be determined by the Administrator from 2013 forward based upon review of data from years 2006 through 2012, during which time the applicable volume of renewable fuel is set in the statute. Regulations must also provide credits for refining, blending, or importing gasoline with a greater quantity of renewable fuel, and allow that those credits may be transferred. Similarly, deficits can be carried over to the following year.

SEC. 1502 – FINDINGS. Congress finds that, since 1979, the fuel industry responded to laws that required MTBE additives to gasoline with investments in production and delivery systems.

SEC. 1503 – CLAIMS FILED AFTER ENACTMENT. Any claims relating to MTBE may be removed to United States District Court.

SEC. 1504 – ELIMINATION OF OXYGEN CONTENT REQUIREMENT FOR REFORMULATED GASOLINE. This section strikes the requirement regarding oxygen content for reformulated

gasoline, beginning on the date of enactment for States that have received waivers under section 209(b) of the Clean Air Act and for all other States 270 days from the date of enactment of the Act. Amends the Clean Air Act to require regulations for standards for toxic air pollutants from use of reformulated gasoline by refineries or importers.

SEC. 1505 – PUBLIC HEALTH AND ENVIRONMENTAL IMPACTS OF FUELS AND FUEL ADDITIVES. Amends the Clean Air Act to include a requirement that the Administrator of EPA conduct a study and report on the effects and feasibility of using substitutes for MTBE in gasoline and ethanol-blended reformulated gasoline.

SEC. 1506 – ANALYSES OF MOTOR VEHICLE FUEL CHANGES. Within 4 years, the Administrator of the EPA must analyze the changes in air quality due to the additives found in this Act.

SEC. 1507 – ADDITIONAL OPT-IN AREAS UNDER REFORMULATED GASOLINE PROGRAM . States may petition for extension from requirements based upon an insufficient supply of reformulated gasoline.

SEC. 1508 – DATA COLLECTION. Requires the Administrator of the EPA to conduct a survey or renewable fuels demand in the motor vehicle market.

SEC. 1509 – FUEL SYSTEM REQUIREMENTS HARMONIZATION STUDY. Requires a joint study of Federal, State, and local requirements for motor vehicle fuels, and submit a report with recommendations to improve air quality, reduce costs, and increase supply.

SEC. 1510 – COMMERCIAL BYPRODUCTS FROM MUNICIPAL SOLID WASTE AND CELLULOSIC BIOMASS LOAN GUARANTEE PROGRAM. Establishes a program of loan guarantees for construction of municipal waste processing and conversion facilities.

SEC. 1511 – RENEWABLE FUEL. Provides loan guarantees for projects to demonstrate the feasibility of producing cellulosic biomass ethanol or sucrose-derived ethanol.

SEC. 1512 – CONVERSION ASSISTANCE FOR CELLULOSIC BIOMASS, WASTE-DERIVED ETHANOL, APPROVED RENEWABLE FUELS. Provides grants to merchant producers of cellulosic biomass ethanol, waste-derived ethanol, and approved renewable fuels to assist building production facilities.

SEC. 1513 – BLENDING OF COMPLIANT REFORMULATED GASOLINES. Amends the Clean Air Act to provide that, under certain circumstances, it is not a violation for a gasoline retailer to blend ethanol-blended and non-ethanol-blended reformulated gasoline.

SEC. 1514 – ADVANCED BIOFUEL TECHNOLOGIES PROGRAM. Establishes the “Advanced Biofuel Technologies Program” to demonstrate advanced technologies for production of alternative transportation fuels.

SEC. 1515 – WASTE-DERIVED ETHANOL AND BIODIESEL. Adds definition of biodiesel to

the Energy Policy Act of 1992.

SEC. 1516 – SUGAR ETHANOL LOAN GUARANTEE PROGRAM. Provides loan guarantees for commercial demonstration projects for ethanol derived from sugarcane products.

Subtitle B – Underground Storage Tank Compliance

SEC. 1521 – SHORT TITLE. This title may be cited as the “Underground Storage Tank Compliance Act of 2005.”

SEC. 1522 – LEAKING UNDERGROUND STORAGE TANKS. Provides for distribution of funds for costs of cooperative agreements with States for corrective actions, administrative expenses, and enforcement pertaining to underground storage of waste.

SEC. 1523 – INSPECTION OF UNDERGROUND STORAGE TANKS. For any tank that has not been inspected since 1998, it must be inspected within 2 years and then every 3 years thereafter.

SEC. 1524 – OPERATOR TRAINING. Within 2 years, the Administrator and the States must publish guidelines specifying training requirements for persons responsible for on-site operations and emergencies of underground storage tanks.

SEC. 1525 – REMEDIATION FROM OXYGENATED FUEL ADDITIVES. Provides funds for corrective actions related to release of fuel containing an oxygenated fuel additive presenting a threat to humans or the environment.

SEC. 1526 – RELEASE PREVENTION, COMPLIANCE, AND ENFORCEMENT. Requires a State compliance report listing the location and owner of each underground storage tank not in compliance.

SEC. 1527 – DELIVERY PROHIBITION. In 2 years, it will be unlawful to deliver regulated substance into an underground storage facility determined to be ineligible for such a delivery.

SEC. 1528 – FEDERAL FACILITIES. Provides that the Federal government must comply with all regulations and law pertaining to underground storage and waives immunity for violations. Each Federal agency that operates or owns an underground storage facility must submit a compliance strategy report.

SEC. 1529 – TANKS ON TRIBAL LANDS. The Administrator of EPA must create a strategy within 1 year to deal with leaking underground storage tanks on Indian lands, and submit a report within 2 years on the status of implementation and enforcement of this Act’s underground storage laws.

SEC. 1530 – ADDITIONAL MEASURES TO PROTECT GROUNDWATER. In 18 months, States receiving funds under this subtitle shall install secondary containment for tanks and piping if it is within 1,000 feet of a community water system or any potable drinking water well. Also

establishes certification and other requirements for manufacturers and installers of underground storage tanks for piping.

SEC. 1531 – AUTHORIZATION OF APPROPRIATIONS. Provides appropriations for the underground storage subtitles.

SEC. 1532 – CONFORMING AMENDMENTS

SEC. 1533 – TECHNICAL AMENDMENTS

Subtitle C – Boutique Fuels

SEC. 1541 – REDUCING THE PROLIFERATION OF BOUTIQUE FUELS. Provides circumstances under which the Administrator may temporarily waive control or prohibition regarding the use of a fuel or fuel additive. Also limits the number of alternative fuels that states may include in their implementation plan.

TITLE XVI -- CLIMATE CHANGE

Subtitle A - National Climate Change Technology Deployment

Sec. 1601. Greenhouse Gas Intensity Reducing Technology Strategies. Not later than 180 days after the date of enactment of the section, the President shall establish a Committee on Climate Change Technology (“Committee”) to coordinate Federal climate change activities and reports. Not later than 18 months after enactment of the section, the Committee shall submit to the Secretary and the President a national strategy to promote greenhouse gas intensity reduction technologies. Not later than 180 days after the establishment of the Committee, the Secretary shall establish within DOE the Climate Change Technology Program to assist the Committee and to carry out the programs authorized by the section. The Secretary shall make an inventory of greenhouse gas reducing technologies and shall submit such a report to Congress. The Secretary may establish a Climate Change Technology Advisory Committee to identify barriers to greenhouse gas intensity reducing technologies and shall submit a report to the Committee on findings and recommendations. Based on all reports received by the Committee, it shall develop recommendations that would provide for the removal of barriers to the commercialization and deployment of greenhouse gas intensity reducing technologies and practices. Not less than 18 months after the date of enactment of the section, the Committee shall submit a report to the President and Secretary identifying barriers to the deployment of greenhouse gas intensity reducing technologies and a plan for demonstration projects, and shall update every 5 years. The Secretary shall develop standards for calculating greenhouse gas intensity. The Secretary shall support demonstration projects to increase the reduction of greenhouse gas intensity.

Subtitle B - Climate Change Technology Deployment in Developing Countries

Sec. 1611. Climate Change Technology Deployment in Developing Countries. The Global Environmental Protection Assistance Act of 1989 is amended by adding language that

provides for the Department of State to act as the lead agency for integrating into United States foreign policy the goal of reducing greenhouse gas intensity in developing countries. The Secretary shall estimate the greenhouse gas intensity for 25 developing countries and shall establish baselines for developing countries and track the progress for reducing greenhouse gas intensity. The Secretary shall provide assistance to developing countries for reducing greenhouse gas intensity. The Secretary of Energy shall identify technologies suitable for transfer to, deployment in, and commercialization in the developing countries and shall report to Congress. The United States Trade Representative shall identify trade-relations barriers to export greenhouse gas intensity reducing technologies and negotiate for the removal of those barriers. A Greenhouse Gas Intensity Reducing Technology Export Initiative shall be established to promote the export of greenhouse gas intensity reducing technologies. The Secretaries of State and Energy and the Agency for International Development shall provide assistance for demonstration projects in at least 10 eligible countries.

TITLE XVII - INCENTIVES FOR INNOVATIVE TECHNOLOGIES

Sec. 1701. Definitions. This section defines “Commercial Technology,” “Cost,” “Eligible Project,” “Guarantee,” and “Obligation” for purposes of this title.

Sec. 1702. Terms and Conditions. This section establishes terms and conditions under which the Secretary of Energy will make loan guarantees.

Sec. 1703. Eligible Projects. The Secretary of Energy may make loan guarantees under this section only for projects that: (1) avoid, reduce, or sequester air pollutants or anthropogenic emissions of greenhouse gases; and (2) employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the loan guarantee is issued. Projects from the following categories will be eligible for those loan guarantees: (1) Renewable energy systems; (2) Advanced fossil energy technology (including coal gasification meeting specified criteria); (3) Hydrogen fuel cell technology for residential, industrial, or transportation applications; (4) Advanced nuclear energy facilities; (5) Carbon capture and sequestration practices and technologies; (6) Efficient electrical generation, transmission, and distribution technologies; (7) Efficient end-use energy technologies; (8) Production facilities for fuel efficient vehicles; (9) Pollution control equipment; and (10) Refineries, meaning facilities at which crude oil is refined into gasoline.

Sec. 1704. Authorization of Appropriations. Appropriations are authorized in such sums as are necessary to provide the cost of loan guarantees under this title.

TITLE XVIII -- STUDIES

Sec. 1801. Study on Inventory of Petroleum and Natural Gas Storage. The Secretary of Energy shall conduct a study on petroleum and natural gas storage capacity and operational inventory levels, nationwide and by major geographical regions. The Secretary of Energy must submit a report to Congress on the results of the study no later than 1 year after the date of

enactment of this Act.

Sec. 1802. Study of Energy Efficiency Standards. The Secretary of Energy shall contract with the National Academy of Sciences for a study to examine the goals of energy efficiency standards and make a report to Congress within 1 year after the date of enactment of this Act.

Sec. 1803. Telecommuting Study. The Secretary of Energy, in consultation with others, shall conduct a study of the energy conservation implications of the widespread adoption of telecommuting by Federal employees.

Sec. 1804. LIHEAP Report. The Secretary of Health and Human Services shall transmit a report to Congress on how LIHEAP could be used more effectively to prevent loss of life from extreme temperatures, no later than 1 year after the date of enactment of this Act.

Sec. 1805. Oil Bypass Filtration Technology. The Secretary of Energy and the Administrator of the Environmental Protection Agency shall conduct a joint study of the benefits of oil bypass filtration technology and examine the feasibility of use in Federal motor vehicle fleets.

Sec. 1806. Total Integrated Thermal Systems. The Secretary of Energy shall conduct a study of the benefits of total integrated thermal systems.

Sec. 1807. Report on Energy Integration With Latin America. The Secretary of Energy shall submit an annual report concerning the status of energy export development in Latin America and the Federal government's efforts to promote energy integration with Latin America.

Sec. 1808. Low-Volume Gas Reservoir Study. The Secretary of Energy shall make a grant to an organization of oil and gas producing States, for conducting an annual study of low-volume natural gas reservoirs.

Sec. 1809. Investigation of Gasoline Prices. Not later than 90 days after the date of enactment of this Act, the FTC shall conduct an investigation to determine if the price of gasoline is being artificially manipulated by reducing refinery capacity or any other form of market manipulation or price gouging practices.

Sec. 1810. Alaska Natural Gas Pipeline. Not later than 180 days after the date of enactment of this Act, and every 180 days thereafter until the Alaska natural gas pipeline commences operation, the FERC shall submit a report to Congress describing the progress made in licensing and constructing the pipeline and any issue impeding that progress.

Sec. 1811. Coal Bed Methane Study. The Secretary of the Interior, in consultation with the EPA, shall enter into an arrangement under which the National Academy of Sciences shall conduct a study on the effect of coalbed natural gas production on surface and ground water

resources in the States of Montana, Wyoming, Colorado, New Mexico, North Dakota and Utah. The National Academy of Sciences will submit the findings and recommendations of the study to the Secretary of the Interior and Administrator of the EPA within 12 months after the date of enactment of this Act. The Secretary of the Interior and Administrator of the EPA shall report to Congress within 6 months after receiving the study.

Sec. 1812. Backup Fuel Capability Study. The Secretary shall conduct a study of the effect of obtaining and maintaining liquid and other fuel backup capability at gas-fired power generation facilities and other gas-fired industrial facilities, and submit a report to Congress not later than 1 year after the date of enactment of this Act.

Sec. 1813. Indian Land Rights-of-Way. The Secretary and Secretary of the Interior shall jointly conduct a study of issues regarding energy rights-of-way on tribal land and submit a report to Congress no later than 1 year after the date of enactment of this Act.

Sec. 1814. Mobility of Scientific and Technical Personnel. Not later than 2 years after the date of enactment of this section, the Secretary shall transmit a report to Congress identifying any policies or procedures of a contractor operating a National Laboratory or single purpose research facility that create disincentives to the transfer of scientific and technical personnel.

Sec. 1815. Interagency Review of Competition in the Wholesale and Retail markets for Electric Energy. A task force of 5 members will conduct a study and analysis of competition within the wholesale and retail market for electric energy in the U.S. and submit a report to Congress no later than 1 year after the date of enactment of this Act.

Sec. 1816. Study of Rapid Electrical Grid Restoration. The Secretary shall conduct a study of the benefits of using mobile transformers and mobile substations to rapidly restore electric service to areas subjected to blackouts as a result of equipment failure, natural disasters, acts of terrorism or war, and submit a report to the President and Congress no later than 1 year after the date of enactment of this Act.

Sec. 1817. Study of Distributed Generation. The Secretary, in consultation with FERC, shall conduct a study of the potential benefits of cogeneration and small power production. No later than 18 months after the date of enactment of this Act, the Secretary shall complete the study, provide opportunity for public comment and submit the report to the President and Congress.

Sec. 1818. Natural Gas Supply Shortage Report. Not later than 180 days after the date of enactment of this Act, the Secretary shall submit to Congress a report on natural gas supplies and demand.

Sec. 1819. Hydrogen Participation Study. Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a report evaluating methodologies to ensure the widest participation practicable in setting goals and milestones under the hydrogen

program.

Sec. 1820. Overall Employment in a Hydrogen Economy. The Secretary shall study the likely effects of a transition to a hydrogen economy on overall employment in the U.S., and no later than 18 months after the date of this Act, submit to Congress a report of the findings, conclusions and recommendations.

Sec. 1821. Study of Best Management Practices for Energy Research and Development Programs. The Secretary shall arrange with the National Academy of Public Administration to conduct a study to assess management practices for research, development and demonstration projects, and submit a report to Congress no later than 18 months after the date of enactment of this Act.

Sec. 1822. Effect of Electrical Contaminants on Reliability of Energy Production Systems. Not later than 180 days after the date of enactment of this Act, the Secretary shall enter into a contract with the National Academy of Sciences to determine the effect that electrical contaminants may have on the reliability of energy production systems.

Sec. 1823. Alternative Fuels Reports. Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress reports on the potential for each of biodiesel and hythane to become major, sustainable, alternative fuels.

Sec. 1824. Final Action on Refunds for Excessive Charges. FERC shall seek to conclude its investigation into the unjust or unreasonable charges incurred by California during the 2000-2001 electricity crisis and seek to ensure that refunds are paid to the State of California and submit a report to Congress by December 31, 2005 describing its actions taken on this issue.

Sec. 1825. Fuel Cell and Hydrogen Technology Study. As soon as practicable after the date of enactment of this Act, the Secretary shall enter into a contract with the National Academy of Sciences and the National Research Council to study fuel cell technologies that provide a budget roadmap for the development of fuel cell technologies and the transition from petroleum to hydrogen in a significant percentage of the vehicles sold by 2020. Not later than 120 days after the date of enactment of this Act, the Secretary shall submit a report to Congress.

Sec. 1826. Passive Solar Technologies. The Secretary shall study the range of leveled costs of avoided electricity for passive solar technologies as well as the quantity of electricity displaced, the projected energy savings and incentives. Not later than 120 days after the date of enactment of this Act, the Secretary shall submit a report to Congress describing the results.

Sec. 1827. Study of Link Between Energy Security and Increases in Vehicle Miles Traveled. The Secretary shall arrange with the National Academy of Sciences to conduct a study to assess the implications of energy use and efficiency on land development patterns in the US, and not later than 2 years after the date of enactment of this Act, the National Academy of Sciences shall submit a report to the Secretary and Congress.

Sec. 1828. Science Study on Cumulative Impacts of Multiple Offshore Liquefied Natural Gas Facilities. The Secretary shall study and compile existing science to determine the risks or benefits presented by cumulative impacts of multiple offshore liquefied natural gas facilities reasonably assumed to be constructed in an area of the Gulf of Mexico using the open-rack vaporization system.

Sec. 1829. Energy and Water Saving Measures in Congressional Buildings. The Architect of the Capitol shall study the energy infrastructure of the Capitol complex to determine how to augment the infrastructure to become more energy efficient. \$2,000,000 for each fiscal year 2006 through 2010 is appropriated to the Architect of the Capitol to carry out this provision.

Sec. 1830. Study of Availability of Skilled Workers. The Secretary shall arrange with the National Academy of Sciences to study the short and long term availability of skilled workers to meet the energy and mineral security requirements of the U.S., and the Secretary shall submit a report to Congress no later than 2 years after the date of enactment of this Act.

Sec. 1831. Review of Energy Policy Act of 1992 Programs. Not later than 180 days after the date of enactment of this section, the Secretary of Energy shall complete a study to determine the effects that titles III, IV, and V of the Energy Policy Act of 1992 have had on the development of alternative fueled vehicle technology, the availability of that technology in the market and the cost of alternative fueled vehicles.

Sec. 1832. Study on the Benefits of Economic Dispatch. The Secretary of Energy shall conduct a study on the procedures currently used to perform economic dispatch, identifying possible revisions to those procedures and the potential benefits to customers if economic dispatch procedures were revised to improve the ability of non-utility generation resources to offer their output for inclusion in economic dispatch. Not later than 90 days after the date of enactment of this Act, and on a yearly basis thereafter, the Secretary of Energy shall submit a report to Congress and the States on the results.

Sec. 1833. Renewable Energy on Federal Land. Not later than 90 days after the date of enactment of this Act, the Secretary of the Interior shall contract with the National Academy of Sciences to study the potential of developing wind, solar, and ocean energy resources on Federal land and assess any Federal law relating to the development of those resources and recommend statutory and regulatory mechanisms for developing those resources.

Sec. 1834. Increased Hydroelectric Generation at Existing Federal Facilities. The Secretaries of the Interior, Energy and Army shall jointly conduct a study of the potential for increasing electric power production for increasing electric power production capability at federally owned or operated water regulation, storage or conveyance facilities. No later than 18 months after the date of enactment of this Act, the Secretaries shall submit a report to various House and Senate Committees.

Sec. 1835. Split-Estate Federal Oil and Gas Leasing and Development Practices. The Secretary of the Interior shall, in consultation with affected private surface owners and the

oil and gas industry, review the current policies and practices with respect to management of Federal subsurface oil and gas development activities and their effects on the privately owned surface. Not later than 18 days after the date of enactment of this Act, the Secretary of the Interior shall report the results of the review to Congress.

Sec. 1836. Resolution of Federal Resource Development Conflicts in the Powder River Basin. The Secretary of the Interior shall review Federal and State laws to resolve any conflict related to the Powder River Basin between the development of Federal coal and the development of Federal and non-Federal coalbed methane. No later than 180 days after the date of enactment of this Act, the Secretary of the Interior shall submit a report to Congress.

Sec. 1837. National Security Review of International Energy Requirements. The Secretary in consultation with the Secretaries of Defense and Homeland Security shall study the growing energy requirements of the People's Republic of China and the implications of such growth. Not later than 120 days after the date of enactment of this Act, the Secretaries of Energy and Defense shall report to the President and Congress on the findings.

Sec. 1838. Used Oil Re-Refining Study. The Secretary in consultation with the Administrator of the EPA shall study the energy and environmental benefits of the re-refining use of lubricating oil and report to Congress within 90 days after enactment of this Act.

Sec. 1839. Transmission System Monitoring. Within 6 months after the date of enactment of this Act, the Secretary and FERC shall study and report to Congress on the steps to be taken to establish a system to make available to all transmission system owners and RTOs within the Eastern and Western Interconnections real-time information on the functional status of all transmission lines within such Interconnections.

Sec. 1840. Report Identifying and Describing the Status of Potential Hydropower Facilities. Not later than 90 days after the date of enactment of this Act, the Secretary of the Interior shall submit to House and Senate committees a report identifying and describing the status of potential hydropower facilities.