Energy Policy Act of 2002

Senate Amendment 2917
Section by Section Analysis

Section 1. Short title. Provides a short title for the entire Act--the "Energy Policy Act of 2002".

Sec. 2. Table of contents. Provides a detailed table of contents for the Act.

DIVISION A–RELIABLE AND DIVERSE POWER GENERATION AND TRANSMISSION

TITLE I–REGIONAL COORDINATION

Sec. 101. Policy on regional coordination. Makes it U.S. policy to encourage States to coordinate, on a regional basis, State energy policies and planning for energy infrastructure.

Sec. 102. Federal support for regional coordination. Provides for the Department of Energy (DOE) to give technical assistance to States for such regional energy coordination, and establishes an annual conference on regional energy coordination involving federal agencies, State and regional energy organizations, and representatives of State, local, and tribal governments.

TITLE II–ELECTRICITY

Subtitle A–Amendments to the Federal Power Act

Sec. 201. Definitions. Amends definitions of "electric utility" and "transmitting utility" in the Federal Power Act.

Sec. 202. Electric utility mergers. Strengthens Federal Energy Regulatory Commission (FERC) jurisdiction over mergers to include mergers of holding companies that own utilities, mergers of generation-only utilities, and acquisitions of natural gas companies by electric companies.

Sec. 203. Market-based rates. Clarifies that FERC may allow market-based rates, and that in doing so it shall consider a number of factors.

Sec. 204. Refund effective date. Allows the refund effective date under section 206 of the Federal Power Act to begin at the time of filing of a complaint.

Sec. 205. Transmission interconnections. Ensures that generators will be able to interconnect to the transmission system.

Sec. 206. Open access transmission by certain utilities. Provides a consistent approach nationwide to interstate transmission of electricity by allowing FERC to ensure that transmission service rates charged by unregulated transmitting utilities to others are comparable to what they charge themselves, and that terms and conditions are comparable to those required of other utilities. Utilities selling less than 4 million megawatt-hours of electricity per year or that do not own transmission facilities necessary for the nationwide interconnected transmission system (e.g., a small rural electric cooperative) are exempt.

Sec. 207. Electric reliability standards. Meets the widely recognized need for consistent and stronger rules to protect the reliability of the national electric grid by authorizing FERC to establish and enforce, with deference to the North American Electric Reliability Council or other such organizations, and to Regional Transmission Organizations, mandatory standards to ensure the reliability of the transmission system.

Sec. 208. Market transparency rules. Helps consumers, State public utility commissions, and buyers and sellers of electricity to receive timely information on wholesale electricity markets by requiring FERC to establish an electronic system to provide information about the availability and price of wholesale electric energy and transmission services.

Sec. 209. Access to transmission by intermittent generators. Removes a major barrier to the use of renewable sources of electricity generation by requiring transmitting utilities to provide service for intermittent generators, such as wind, at rates and terms that do not penalize the generator for scheduling deviations by use of imbalance penalties.

Sec. 210. Enforcement. Extends the current civil penalty authority in the Federal Power Act to include violations of any of the Act's provisions, while repealing the ineffective criminal penalty authorities in the Act.

Subtitle B – Amendments to the Public Utility Holding Company Act

Repeals the Public Utility Holding Company Act of 1935 (PUHCA) and provides for federal and State access to holding company books and records.

Subtitle C – Amendments to the Public Utility Regulatory Policies Act of 1978

Sec. 241. Real-time pricing standard. Requires States to consider a standard for real-time pricing of electricity.

Sec. 242. Adoption of additional standards. Requires States to consider standards for competitive access to the distribution grid, competitive pricing of service, and simplified standard contracts for interconnection; for interconnection of distributed generation to the distribution grid; for minimum fuel and technology diversity; and for fossil fuel efficiency.

Sec. 243. Technical assistance. Authorizes the Secretary of Energy to provide technical assistance to the States to implement their responsibilities under section 242.

Sec. 244. Cogeneration and small power production purchase and sale requirements. Repeals mandatory purchase and sale requirements and ownership limitations under the Public Utility Regulatory Policies Act of 1978.

Sec. 245. Net metering. Requires electric suppliers to provide net metering services for on-site generators fueled by renewable energy resources and fuel cells. Grants a small utility exemption from the requirement.

Subtitle D – Consumer Protections

Sec. 251. Information disclosure. Requires the Federal Trade Commission to issue rules providing for the disclosure to consumer of price, additional charges, and (as feasible) the type of electric generation and environmental emissions produced in generating the electricity sold.

Sec. 252. Consumer privacy. Requires the Federal Trade Commission to issue rules protecting the privacy of consumer information obtained in connection with sale or delivery of electricity.

Sec. 253. Unfair trade practices. Requires the Federal Trade Commission to prohibit "slamming" and "cramming" in electricity sales to consumers.

Sec. 254. Applicable procedures. Clarifies that the Federal Trade Commission shall use notice and comment rulemaking procedures under the Administrative Procedure Act for rules issued under this subtitle.

Sec. 255. Federal Trade Commission enforcement. Provides that violations of rules under this subtitle will be treated as violations of section 18 of the Federal Trade Commission Act.

Sec. 256. State authority. Clarifies that States retain their current authorities with respect to topics covered in this subtitle.

Sec. 257. Application of subtitle. Clarifies that this subtitle applies only to utilities with total sales of electricity (for purposes other than resale) over 500 million kilowatt-hours per calendar year.

Sec. 258. Definitions. Defines terms used in the subtitle.

Subtitle E – Renewable Energy and Rural Construction Grants

Sec. 261. Renewable energy production incentive. Reauthorizes and reforms incentive program available to municipal and cooperative utilities for producing electricity from renewable energy sources.

Sec. 262. Assessments of renewable energy resources. Requires periodic assessments of renewable energy resources available in the United States.

Sec. 263. Federal purchase requirement. Requires that a certain percentage–3 percent in fiscal year (FY) 2002 increasing to 7.5 percent in FY 2010–of the total electricity purchased by the federal government be generated by a renewable energy source.

Sec. 264. Rural construction grants. Provides for grants for construction or modernization of electricity systems in rural and remote communities and tribal colleges and universities.

Sec. 265. Renewable portfolio standard. Uses a program of flexible and tradeable credits to requires each retail supplier to use any of a broad array of renewable energy technologies to generate specified annual percentages of electricity sold. The percentages, which are in addition to any renewable generation currently in existence, would ramp up from 2.5 percent in 2005 to 10 percent in 2020.

Sec. 266. Renewable energy on federal lands. Requires the Secretaries of Energy, Agriculture, and the Interior to develop a cost-share demonstration program for the development of wind and solar energy on federal lands.

TITLE III–HYDROELECTRIC RELICENSING

Sec. 301. Alternative mandatory conditions and fishways. Require agencies to adopt, under section 4(e) and section 18 of the Federal Power Act, an alternative condition proposed by an applicant for a hydroelectric relicensing project if the agency head determines that the proposed condition provides no less protection to the environment and will either cost less to implement or result in improved operation of the project, as compared to the condition deemed necessary by the agency.

Sec. 302. Charges for tribal lands. Requires annual charges required under section 10 of the Federal Power Act to be fixed before new or original licenses for projects involving tribal lands in Indian reservations can be issued.

Sec. 303. Disposition of hydroelectric charges. Provides for a portion of funds arising from fees charged for hydroelectric licenses to be used for protection of water resources on the public lands on which the project is located, or where the headwaters of the waterway serving the projects are located. Encourages use of the funds for the benefit of local communities within or near the public lands on which the project is located.

Sec. 304. Annual licenses. Provides that, beginning with the fourth consecutive annual license granted to a project, FERC must begin interagency consultation and publication of its reasons why continued annual licenses (as opposed to a standard license) is needed. Beginning with the seventh consecutive annual license, FERC must submit a report to Congress.

Sec. 305. Enforcement. Provides that the FERC must enforce all mandatory conditions and fishway prescriptions imposed by the resource agencies (i.e., Department of the Interior, the Department of Commerce, and the Department of Agriculture) if they place direct and discernible duties on the licensee.

Sec. 306. Establishment of hydroelectric relicensing procedures. Provides for the development of coordinated regulations and procedures governing hydroelectric relicensing among FERC, the Department of the Interior, the Department of Commerce, and the Department of Agriculture, and for FERC to establish deadlines for certain of its procedures, as well as ensuring overall coordination of activities under the relicensing process.

Sec. 307. Relicensing study. Requires the FERC and the resource agencies to jointly study relicenses issued since 1994, to determine how long it has taken to issue them, the additional costs to licensees, any difference in generating capacity, environmental benefits achieved, and litigation arising from the relicensing process. The purpose is to examine the extensive data from this group of relicensings to determine where problems and bottlenecks in the relicensing process actually exist.

Sec. 308. Data collection procedures. Requires the FERC, the Department of the Interior, the Department of Commerce, and the Department of Agriculture to jointly develop procedures to ensure complete and accurate information concerning time and cost to parties in hydroelectric relicensing processes.

TITLE IV–INDIAN ENERGY

Sec. 401. Comprehensive Indian Energy Program. Establishes a comprehensive Indian energy program at the DOE to assist tribes in meeting their energy needs and expanding opportunities to develop energy resources on tribal lands. The section provides for a grant program and a loan guarantee program

for Indian energy development. It also provides that federal agencies may give a preference to purchasing Indian energy.

Sec. 402-403. Office of Indian Energy Policy and Programs. Establishes an Office of Indian Energy Policy and Programs within the DOE. Includes conforming amendments.

Sec. 404. Siting energy facilities on tribal lands. Allows an Indian tribe to lease directly land and rights-of-way for energy facilities, without case-by-case review by the Secretary of the Interior, if the tribe develops, and the Secretary approves, tribal regulations, and the term of the agreement does not exceed 30 years.

Sec. 405. Indian Mineral Development Act review. Requires the Secretary of the Interior to undertake a review and make recommendations regarding tribal opportunities under the Indian Mineral Development Act.

Sec. 406. Renewable energy study. Requires the Secretary of Energy to report on energy consumption and renewable energy development potential on Indian land, including identification of barriers to the development of renewable energy on tribal land.

Sec. 407. Federal power marketing administrations. Authorizes the Bonneville Power Administration and the Western Area Power Administration to provide technical assistance to Indian tribes seeking to use high-voltage transmission lines for the delivery of electrical power, and requires a study of power allocation to tribes by those power administrations.

Sec. 408. Feasibility study of combined wind and hydropower demonstration project. Requires the Secretary of Energy, in coordination with the Secretary of the Interior and the Army Corps of Engineers, to conduct a feasibility study of developing a demonstration project that would use wind energy generated by Indian tribes and hydropower generated by the Army Corps of Engineers on the Missouri River to supply firming power to the Western Area Power Administration.

TITLE V–NUCLEAR POWER

Subtitle A–Price-Anderson Act Reauthorization

Sec. 501. Short title. Provides a short title for the subtitle.

Sec. 502. Extension of Department of Energy indemnification authority. Extends the DOE's authority to indemnify its contractors indefinitely.

Sec. 503. Department of Energy liability limit. Increases the maximum amount of DOE contractor indemnification from $9.43 billion under current law to $10 billion.

Sec. 504. Incidents outside the United States. Increases the limit on liability for nuclear incidents outside of the United States from $100 million to $500 million.

Sec. 505. Reports. Updates the reporting requirement in existing law to require the DOE and the Nuclear Regulatory Commission to submit reports on the need to continue Price-Anderson in 2008.

Sec. 506. Inflation adjustment. Requires the Secretary of Energy to adjust the amount of indemnification it provides to its contractors for inflation every 5 years.

Sec. 507. Civil penalties. Repeals provisions in existing law that exempt specific contractors from civil penalties and allow the Secretary of Energy to waive civil penalties for contractors that are nonprofit educational institutions. Instead, nonprofit contractors are subject to civil penalties up to the amount of its contract fee.

Sec. 508. Effective date. Makes the amendments applicable to nuclear accidents occurring after the date of enactment.

Subtitle B–Miscellaneous Provisions

Sec. 511. Uranium sales. Imposes limitations on the sale of uranium from the DOE's stockpile.

Sec. 512. Reauthorization of thorium reimbursement. Increases the authorization for the DOE to reimburse Kerr-McGee Chemical LLC for the cost of cleaning up thorium wastes generated pursuant to federal contracts from $140 million to $365 million.

Sec. 513. Fast Flux Test Facility. Prohibits the DOE from reactivating the Fast Flux Test Facility for atomic energy defense activities, space-related missions, or other nuclear programs that could be carried out at existing operating facilities.

DIVISION B–DOMESTIC OIL AND GAS PRODUCTION AND TRANSPORTATION

TITLE VI–OIL AND GAS PRODUCTION

Sec. 601. Permanent authority to operate the Strategic Petroleum Reserve. Permanently authorizes the operation of the Strategic Petroleum Reserve (SPR) and the ability of the United States to cooperate, through the International Energy Agency, with other oil-consuming nations to plan for and respond to any potential oil supply disruption.

Sec. 602. Federal onshore leasing programs for oil and gas. To facilitate timely access to oil and gas on public lands, authorizes additional funding to ensure adequate personnel at the Department of the Interior, so that required environmental reviews related to oil and gas production on public lands otherwise available for leasing can be completed expeditiously.

Sec. 603. Oil and gas lease acreage limitations. Responds to consolidation in the domestic oil and gas industry by altering the acreage cap for oil and gas leases on federal lands so that producing leases are not included in the existing Statewide acreage limitation. This provides an incentive for producers to keep domestic acreage in production or to turn the leases over to another operator who will.

Sec. 604. Orphaned and abandoned wells on federal lands. Requires the Secretary of the Interior, in cooperation with the Secretary of Agriculture and the States, to carry out a program to ensure the remediation and closure of orphaned and abandoned oil and gas wells on lands administered by the Secretary of the Interior and the U.S. Forest Service.

Sec. 605. Orphaned and abandoned oil and gas well program. Requires the Secretary of Energy to establish a program to provide technical assistance to oil and gas-producing States to address the environmental problems caused by orphaned and abandoned oil and gas exploration and production sites.

Sec. 606. Offshore development. Allows the Minerals Management Service to suspend operations for offshore subsalt leases to allow the lessee to further analyze geologic or geophysical data when the suspension is necessary to prevent waste caused by the drilling of unnecessary wells, and to maximize recovery of hydrocarbon resources under the lease.

Sec. 607. Coalbed methane study. Directs the National Academy of Sciences to conduct a study on the effects of coalbed methane production on water and surface resources, and requires a subsequent report from the Secretary of the Interior on the report, its findings, and recommended funding levels to address the effects of coalbed methane production on surface and water resources.

Sec. 608. Fiscal policies to maximize recovery of domestic oil and gas resources. Requires an evaluation of the impact existing federal and State tax and royalty policies have on development of domestic oil and gas resources and development of alternative policies that might help optimize recovery of domestic resources while ensuring environmental protection.

Sec. 609. Strategic Petroleum Reserve. Directs that the SPR be filled to its current capacity, requires a report on infrastructure bottlenecks that might impede drawdowns from the SPR, and requires recommendations for increasing the capacity of the SPR.

TITLE VII – NATURAL GAS PIPELINES

Subtitle A–Alaska Natural Gas Pipeline

Sec. 701. Short title. Provides a short title for the subtitle.

Sec. 702. Findings. Contains Congressional findings on the need to construct a natural gas pipeline from the Alaskan North Slope to United States markets.

Sec. 703. Purposes. Establishes the purposes of the subtitle: to expedite the approval of projects to bring Alaska natural gas to U.S. consumers, to assure that open access is provided to any pipeline, and to provide a federal financial incentive for the expeditious development of a commercial project.

Sec. 704. Issuance of certificate of public convenience and necessity. Establishes an expedited process for FERC to consider and act on any application to construct a pipeline to transport Alaska natural gas pursuant to Section 7 of the Natural Gas Act. This process would provide an alternative to the process currently available under the Alaska Natural Gas Transportation Act of 1976, but would not affect the rights of any party to proceed under that Act. Two types of applications are contemplated. One type would cover the U.S. portion of a natural gas pipeline system that would transport Alaska natural gas from the North Slope of Alaska to Alberta, Canada. The second type would cover the U.S. portion of a natural gas pipeline system that would transport the Alaska natural gas from the Alberta Hub to consumers in the United States. The Alaska to Alberta segment is completely undeveloped, while the Alberta to lower 48 segment could incorporate a substantial existing pipeline infrastructure. In recognition of these differences, the legislation provides a streamlined market-based approval process for the Alaska to Alberta segment and the normal Natural Gas Act process for the lower 48 segment. Applicants for certificates to construct an Alaska project would be required to have a contract to transport Alaska natural gas that is destined for use in the contiguous United States. Such a contract would substitute for the public need finding typically required under the Natural Gas Act and would allow the FERC to consider each application on a stand-alone basis. All other requirements for issuing a certificate, including environmental laws and rates, charges and terms and conditions of service would apply. Applications for certificates to construct projects in the contiguous States would be handled under the traditional standards and procedures of Section 7 of the Natural Gas Act. This section also assures that the FERC takes into account competitive effects on the exploration, development and production of natural gas in Alaska and ensure access to all shippers. Finally, the section provides for expediting federal actions relating to any Alaska natural gas transportation system.

Sec. 705. Environmental reviews. Requires a separate environmental impact statement (EIS) for each proposed project. Designates the FERC as the lead agency for all EIS's. Establishes an 18-month deadline for completion of the EIS. The FERC is directed to issue an order on the application within 60 days of the final EIS.

Sec. 706. Federal coordinator. Establishes the Office of Federal Coordinator for Alaska Natural Gas Transportation projects to coordinate the activities of federal agencies in order to expedite the projects.

Sec. 707. Judicial review. Provides the U.S. Court of Appeals for the District of Columbia with exclusive jurisdiction for claims arising under this subtitle and provides a deadline for filing claims.

Sec. 708. Loan guarantee. Provides a financial incentive for parties to work expeditiously to file a application for approval to construct a pipeline. Federal loan guarantees may cover up to 80 percent of any loan to build the pipeline (and a total loan of up to $10 billion), provided that the applications for certificates to move forward with the project are filed prior to 6 months after the date of enactment of this Act.

Sec. 709. Study of alternate means of construction. If no applications for certificates are filed under section 708 within the required time frame, the Secretary of Energy is directed to conduct a study of alternative approaches to constructing the Alaska gas pipeline, including the feasibility of establishing a government corporation to construct the project.

Sec. 710. Savings clause. Clarifies that the existing certificates, permits, leases, rights-of-way, or other decisions pursuant to the Alaska Natural Gas Transportation Act of 1976 are not affected by this subtitle.

Sec. 711. Clarification of authority to amend terms and conditions to meet current project requirements. Clarifies the authority under the Alaska Natural Gas Transportation Act of 1976 to amend the current certificates, permits, leases, rights-of-way, or other decisions relating to the pipeline.

Sec. 712. Definitions. Defines terms used in this subtitle.

Sec. 713. Sense of the Senate. Urges the sponsors of any Alaska pipeline project to use North American steel and to negotiate a project labor agreement.

Subtitle B–Operating Pipelines

Sec. 721. Application of Historic Preservation Act to operating pipelines. Prevents an operating natural gas pipeline from being placed on the National Register of Historic Places (which might delay safety upgrades or other improvements to the pipeline), unless the pipeline is abandoned or the owner consents to the listing.

Sec. 722. Environmental reviews. Provides for the development of an interagency memorandum of understanding to expedite environmental review and permitting of pipeline projects.

DIVISION C–DIVERSIFYING ENERGY DEMAND AND IMPROVING EFFICIENCY

TITLE VIII–FUELS AND VEHICLES

Subtitle A--CAFE Standards and Related Matter

Sec. 801. Average fuel economy standards for passenger automobiles and light trucks. Requires the National Highway Transportation Safety Administration (NHTSA), within 18 months of enactment, to issue annual fuel economy standards for model year (MY) 2005-2013 that will result in each manufacturer's overall light duty fleet (cars and light trucks) CAFE being 35 mpg by 2013. The car and truck fleets will remain separate until after MY 2010, when NHTSA will have the authority to combine them into one category. NHTSA must pace the increases to ensure that by 2010 each manufacturer's passenger car CAFE is at least 32.2 mpg, and its light truck fleet is at least 26.3 mpg. In no year may either the light truck or passenger car CAFE drop below the current standards: 27.5 for cars and 20.7 for light trucks. If the rulemaking is not issued on time, default annual fuel economy standards applicable beginning in MY 2005 would be established instead. The section also directs the Secretary of Transportation to issue a rulemaking that will define light trucks to include passenger vehicles up to 10,000 lbs., beginning in MY 2007. The provision would not bring in every vehicle between 8,500 and 10,000 lbs., but utilizes exemptions already provided in the EPA Tier II regulations (definition of "medium duty passenger vehicle"). This keeps out the big utility pickups, but takes in the over 8,500 lb. "super-size" versions of passenger SUVs on which the government currently cannot obtain fuel economy data. Finally, the section authorizes appropriations of $25 million per year to NHTSA to implement these requirements.

Sec. 802. Fuel economy truth in testing. Directs EPA to conduct an ongoing examination of the accuracy of EPA's fuel economy testing under the CAFE program compared to actual performance of those vehicles by the average driver. The Administrator would be required to submit annually a report of the findings and recommendations and develop a plan for reducing the discrepancy between the compliance performance and the real world fuel economy experienced by consumers to 5 percent by 2015.

Sec. 803. Ensuring safety of passenger automobiles and light trucks. Directs NHTSA to issue rulemakings on safety standards for rollover crashes (including roof crush resistance, improved seat structure, and safety belts), aggressivity, and vehicle compatibility to plug current real holes in auto safety.

Sec. 804. HOV exception. Permits states to provide for exceptions to HOV restrictions for certain hybrids.

Sec. 805. Credit trading program. Authorizes NHTSA, with EPA technical assistance, to develop a CAFE credit trading program to allow flexibility in complying with annual CAFE standards issued by NHTSA and encourage manufacturers to exceed the standards. The system would allow sale or transfer of credits accrued after the date of enactment, allowing trading between manufacturers and among a

manufacturer's vehicle fleets. Operation of the trading system would require elimination of carryback credits (borrowing from the future) after MY 2006, but would allow the 3-year carryforward credits to continue.

Sec. 806. Green labels for fuel economy. Directs EPA to establish a Green label for car models that meet certain environmental criteria in order to provide consumers information on the fuel economy and other environmental benefits of vehicles, and allow useful comparisons among models. Information to be considered in addition to fuel economy are the greenhouse gas and other emissions expected over the life of the vehicle. The bill would direct the Secretary to establish a "FuelStar" rating system designed to encourage the manufacture and sale of high fuel economy vehicles.

Sec. 807. Light truck challenge. Requires the Secretary of Transportation to issue a 2-year "challenge" competitive contract to consortium to design a new multiple fuel (including fuel cell) hybrid electric vehicle and bring it to production. The consortium must use an existing vehicle and the product must meet the following criteria: it must increase fuel economy by 50 percent, retain power, not increase cost by more than 10 percent. Would include 2 grants of $10 million each.

Sec. 808. Secretary of Transportation to certify benefits. Requires the Secretary of Transportation, in consultation with the Administrator of the EPA, to annually certify and report to Congress the annual reduction in US consumption of petroleum used for vehicle fuel and the annual reduction in greenhouse gas emissions attributable to the implementation of the average fuel economy standards imposed under the act.

Sec. 809. Department of Transportation engineering award program. Establishes engineering prizes modeled on NASA's "X Prizes" to the company that produces the first vehicle 50 percent over MY 2000 achievements in the following categories: (1) the first large domestic SUV, van, or pickup to reach 30 mpg; (2) the first midsized SUV, van or pickup to achieve 35 mpg; and (3) the first small SUV, van or pickup to achieve 40 mpg The qualifying vehicle must be part of a manufacturer's domestic fleet and vehicle must meet all applicable environmental and safety standards. In addition, the first automobile manufacturer whose domestic fleet is certified by the Secretary of Transportation to have achieved a fuel economy average of 37 mpg shall receive a manufacturer's award in recognition of its commitment to meeting the goals of reducing US dependence on imported oil and cutting greenhouse gases and other harmful emissions.

Sec. 810. Cooperative technology agreements, Funds will be provided for cooperative research and development agreements (CRADAs) between DOT or EPA and the automotive industry for commercializing fuel economy technology that will provide fuel economy increases in any class of vehicles of 55 percent over applicable MY 2000 levels.

Subtitle B–Alternative and Renewable Fuels

Sec. 811. Increased use of alternative fuels by federal fleets. Requires federal fleets with alternative fuel capability to use alternative fuels for at least 50 percent of the total annual volume of fuel used in such vehicles by 2003 and 75 percent of the total annual volume of fuel used by 2005.

Sec. 812. Exception to HOV passenger requirements for alternative fuel vehicles. Permits State highway agencies to allow alternative fuel vehicles to utilize High Occupancy Vehicle (HOV) lanes on highways regardless of number of passengers carried.

Sec. 813. Data collection. Authorizes the Energy Information Administration to collect data on production and consumption of renewable fuels, so that markets and policy makers are better informed concerning availability and cost of such fuels.

Sec. 814. Green school bus pilot program. Establishes a pilot program to make competitive grants to demonstrate the commercial application of alternative-fuel and ultra-low sulfur diesel school buses. Grants under this program could be used to supply up to 85 percent of the cost of each bus, and up to 15 percent of the cost of necessary alternative fuel infrastructure.

Sec. 815. Fuel cell bus development and demonstration program. Authorizes a pilot program to develop and demonstrate fuel cell-powered school buses.

Sec. 816. Authorization of appropriations. Authorizes $40 million in FY 2002 for the programs under section 814 and 815, with increasing authorizations to $80 million in FY 2006.

Sec. 817. Biodiesel fuel use credits. Allows biodiesel fuel use credits to be counted as alternative fuel fleet credits under the Energy Policy Act of 1992.

Sec. 818. Renewable content of motor fuel. Requires that the Environmental Protection Agency mandate that an increasing amount of renewable fuel (including ethanol and biodiesel) be blended into gasoline, starting with 2 billion gallons per year in 2003 and increasing to 5 billion gallons per year in 2012. In 2013 and thereafter, the percentage use of ethanol remains the same as in 2012. Refiners and blenders who use a greater amount of ethanol can earn tradeable credits that expire after 1 year, if not used or traded. A mechanism for States to request EPA to lower the national ethanol requirement is also provided.

Sec. 819. Neighborhood electric vehicles. Includes zero-emission, low-speed electric vehicles in the definition of alternative fuel vehicles under the Energy Policy Act of 1992.

Subtitle C–Federal Reformulated Fuels

Authorizes funds for remediation of groundwater contamination from methyl tertiary butyl ether (MTBE), bans the use of MTBE within 4 years after the date of enactment of this subtitle, allows Governors to waive the oxygen content requirement of fuel under the Clean Air Act in their respective States, requires a study of ethyl tertiary butyl ether, and provides for grants to merchant producers of MTBE to convert production facilities to other fuel additives.

Subtitle D – Additional Fuel Efficiency Measures

Sec. 831. Fuel economy of the federal fleet of automobiles. Requires the head of each agency to determine the average fuel economy of all automobiles in the agency's fleet of automobiles, thereby establishing a baseline for this section. Requires that the procurement of new automobiles be managed so that, by September 30, 2003, the average fuel economy of new automobiles in the agency's fleet is at least 1 mile per gallon higher than the baseline. Further requires that the average fuel economy of new automobile be not less than 3 miles per gallon higher than the baseline by September 30, 2005. This section does not apply to vehicles designed for combat-related missions, law enforcement work, or emergency rescue work.

Sec. 832. Assistance for State programs to retire fuel-inefficient motor vehicles. Authorizes DOE to provide grants to States to carry out incentive programs to scrap or repair (on a voluntary basis) cars and light trucks with poor vehicle fuel efficiency.

Sec. 833. Truck idling. Requires the Secretary of Energy, in consultation with the Secretary of Transportation, to study the potential fuel savings from long-duration idling of heavy-duty truck engines, and allows the Secretary of Energy to issue regulations requiring the installation of idling reduction systems.

TITLE IX–ENERGY EFFICIENCY AND ASSISTANCE TO LOW INCOME CONSUMERS

Subtitle A--Low Income Assistance and State Energy Programs

Sec. 901. Increased funding for Low Income Home Energy Assistance Program (LIHEAP), weatherization assistance, and State energy grants. Increases the annual authorization for the LIHEAP grant program to $3.4 billion; the authorization for emergency funds to $1 billion and the authorization for training and technical assistance to $750 thousand through FY 2005. Provides annual authorizations for the weatherization program of $325 million for FY 2003 increasing to $500 million in FY 2005.

Sec. 902. State energy programs. Provides an annual authorization for State energy conservation programs of $100 million in FY 2003 increasing to $125 million in FY 2005. Amends planning requirements and goals.

Sec. 903. Energy efficient schools. Establishes a program of grants to the States for the renovation or construction of elementary and secondary school buildings to achieve improved energy efficiency. Authorizes funding through FY 2006.

Sec. 904. Low income community energy efficiency pilot program. Authorizes $10 million per year for a 3-year competitive program of grants to community development corporations for energy efficiency and renewable energy projects in low income urban and rural communities. Community development corporations are locally controlled public/private partnerships that work with low income communities to attract capital and create jobs.

Subtitle B - Federal Energy Efficiency

Sec. 911. Energy management requirements. Changes the baseline for measuring federal energy performance from 1985 to 2000 and requires a 20 percent improvement by fiscal year 2011.

Sec. 912. Energy use measurement and accountability. Requires federal buildings to be metered or sub-metered by October 1, 2004 and requires agencies to develop plans to use real-time electricity consumption data to reduce energy costs and consumption.

Sec. 913. Federal building performance standards. Directs the Secretary to establish revised energy efficiency performance standards for new federal buildings.

Sec. 914. Procurement of energy efficient products. Requires that federal agencies purchase efficient energy consuming products (Energy Star rated or FEMP designated).

Sec. 915. Repeal of energy savings performance contract sunset. Provides for continued use of energy savings performance contracts.

Sec. 916. Energy savings performance contract definitions. Expands the definition of energy savings to include a reduction in water costs; permits the use of energy savings performance contracts for replacement facilities; defines "energy or water conservation measure".

Sec. 917. Review of energy savings performance contract program. Provides for report to Congress identifying obstacles that prevent the full utilization of the ESPC program and opportunities to increase program flexibility and effectiveness.

Sec. 918. Federal Energy Bank. Authorizes the establishment of a fund or "bank" within the Treasury Department from which federal agencies could borrow money for investment in energy efficiency projects. Funding for the bank would be subject to appropriations.

Sec. 919. Energy and water savings in Congressional buildings. Directs the Architect of the Capitol to develop and implement an energy and water conservation strategy for Congressional buildings. Includes a requirement that state-of-the-art energy efficiency technologies be used in the Capitol Visitors Center.

Subtitle C--Industrial Efficiency and Consumer and Commercial Products

Sec. 921. Voluntary commitments to reduce industrial energy intensity. Authorizes the Secretary of Energy to enter into voluntary agreements with industry sectors or individual companies to reduce the energy consumed per unit of production in the industrial process by a minimum of 2.5 percent a year.

Sec. 922. Authority to set standards for commercial products. Provides authority for the Secretary to establish energy conservation standards for commercial products.

Sec. 923. Additional definitions. Defines terms to be used in the appliance standards provisions that follow.

Sec. 924. Additional test procedures. Prescribes test procedures for exit signs and transformers and directs the Secretary to prescribe testing procedures for ceiling fans, vending machines and commercial refrigerators.

Sec. 925. Energy labeling. Directs the Federal Trade Commission to consider changes to improve the effectiveness of energy labels on consumer products. Directs the Secretary to prescribe labeling requirements for the products added by this subtitle.

Sec. 926. Energy Star program. Provides statutory authority for the Energy Star program.

Sec. 927. Energy conservation standards for central air conditioners and heat pumps. Enacts a SEER 13 energy conservation standard for central air conditioning units and central air conditioning heat pumps, with transition provisions.

Sec. 928. Energy conservation standards for additional consumer and commercial products. Establishes an expedited rulemaking for standards for energy consumed in the standby mode of battery chargers and external power supplies and a process for determining whether efficiency standards should be established for the standby mode of other appliances. Requires rulemakings to develop standards for ceiling fans, vending machines, commercial refrigerators and freezers, and unit heaters. Legislates standards for exit signs, torchiere lamps, and low-voltage dry-type transformers.

Sec. 929. Consumer education on energy efficiency benefits of air conditioning, heating, and ventilation maintenance. Authorizes a public education program on energy savings benefits of maintenance of air conditioning, heating and ventilation systems.

Subtitle D--Housing Efficiency

Sec. 931. Capacity building for energy efficient, affordable housing. Requires activities that provide energy efficient, affordable housing and residential energy conservation measures under the HUD Demonstration Act.

Sec. 932. Increase of Community Development Block Grant public services cap for energy conservation and efficiency activities. Increases the amount of assistance for providing public services involving energy conservation or efficiency by 10 percent.

Sec. 933. FHA mortgage insurance incentives for energy efficient housing. Changes the amount that property value covered by mortgage insurance may be increased due to the installation of a solar energy system from 20 percent to 30 percent.

Sec. 934. Public Housing Capital Fund. Modifies Fund to include certain improvements to energy efficiency.

Sec. 935. Grants for energy-conserving improvements for assisted housing. Provides that grants for certain multifamily housing projects may include certain improvements to energy efficiency.

Sec. 936. North American Development Bank. Amends NAFTA Implementation Act to encourage U.S. Board members to encourage the Bank to finance projects related to clean and efficient energy, including energy conservation.

DIVISION D–INTEGRATION OF ENERGY POLICY AND CLIMATE CHANGE POLICY

TITLE X–CLIMATE CHANGE POLICY FORMULATION

Subtitle A–Global Warming

Sec. 1001. Sense of the Congress on global warming. Provides findings and the Sense of Congress that the Unites States should demonstrate international leadership and responsibility in mitigating the health, environmental, and economic threats posed by global warming.

Subtitle B–Climate Change Strategy

Develops a national focus for climate change response for the United States by establishing a National Office of Climate Change Response in the Executive Office of the President to develop a U.S. climate change response strategy. Establishes and interagency task force to serve as the primary mechanism for agencies to work together to develop and implement national climate change policy. Establishes an Office of Climate Change Technology in the DOE, with a $4.75 billion research and development budget over the period of FY 2002 to FY 2011. Establishes an independent review board to monitor the development and implementation of national climate change response strategy. Authorizes the establishment of other climate-change-related offices in other federal agencies, as necessary.

Subtitle C–Science and Technology Policy

Sec. 1031. Global climate change in the Office of Science and Technology Policy. Requires a focus on global climate change in the Office of Science and Technology Policy through amendments to the National Science and Technology Policy, Organization, and Priorities Act of 1976.

Sec. 1032. Establishment of Associate Director for Global Climate Change. Amends the National Science and Technology Policy, Organization, and Priorities Act of 1976 to add a fifth Associate Director in the Office of Science and Technology Policy, and require that one of the Associate Directors have a focus on global climate change science and technology. This Associate Director would coordinate the development of research goals and budgets for the U.S. Global Change Research Program.

Subtitle D – Miscellaneous Provisions

Sec. 1041. Additional information for regulatory review. Requires information on greenhouse gas emissions in connection with a Statement of Energy Effects under Executive Order 13211.

Sec. 1042. Greenhouse gas emissions from federal facilities. Requires the Secretaries of Energy, Agriculture and Commerce and the Administrator of the Environmental Protection Agency to develop and publish a methodology for preparing estimates of annual net greenhouse gas emission from all Federal facilities.

TITLE XI–NATIONAL GREENHOUSE GAS DATABASE

Sec. 1101. Purposes. Provides purposes of title.

Sec. 1102. Definitions. Provides definitions used in the title.

Sec. 1103. Establishment of memorandum of agreement. Requires the President, through the Chairman of the Council on Environmental Quality, to direct the Department of Energy, Department of

Commerce, Department of Agriculture, Department of Transportation, and Environmental Protection Agency to enter into a memorandum of agreement on each agency's responsibilities for helping to establish the National Greenhouse Gas Database.

Sec. 1104. National Greenhouse Gas Database. Provides a framework and time line for establishment of the National Greenhouse Gas Database, comprising mandatory reporting of greenhouse gas emissions from entities with a facility that emits more than 10,000 metric tons of carbon dioxide equivalent per year, and a voluntary registry for greenhouse gas reductions.

Sec. 1105. Repot on statutory changes and harmonization. Requires a report to Congress from the President within 3 years identifying statutory changes needed to this Act or other Acts to improve the accuracy or operation of the greenhouse gas database.

Sec. 1106. Measurement and verification. Requires development of comprehensive measurement and verification methods to ensure consistent and technically accurate record of greenhouse gas emissions.

Sec. 1107. Independent review. Requires reviews by the GAO and the National Acadmy of Sciences of the database.

Sec. 1108. Authorization of appropriations. Authorizes appropriations such sums as may be necessary to carry out the title.

DIVISION E–ENHANCING RESEARCH, DEVELOPMENT, AND TRAINING

TITLE XII–ENERGY RESEARCH AND DEVELOPMENT PROGRAMS

Establishes the framework for a comprehensive energy research, development and deployment program to reduce energy intensity by 1.9 percent each year through 2020, to reduce total consumption by 8 quadrillion Btu by 2020 from otherwise expected levels, and to reduce carbon dioxide emissions from expected levels by 166 million metric tons by 2020.

Subtitle A–Energy Efficiency

Sec. 1211. Enhanced energy efficiency research and development. Authorizes funding from $700 million in FY 2003 to $983 million in FY 2006 for DOE energy-efficient housing, industrial energy efficiency, and transportation energy efficiency programs.

Sec. 1212. Energy efficiency science initiative. Authorizes the energy efficiency science initiative, an existing joint program between the Assistant Secretary for Energy Efficiency and Renewable Energy and the Office of Science.

Sec. 1213. Next generation lighting initiative. Establishes consortium modeled on SEMATECH to research and develop the next generation of white-light emitting diodes for ultra-efficient lighting applications. Additional authorizations of $50 million each of fiscal years 2003 through 2011 are provided.

Sec. 1214. Railroad efficiency. Establishes a public-private research partnership to improve railroad locomotive technologies by increasing fuel economy, reducing emissions, improving safety, and lowering costs. Additional authorizations of $60 million in FY 2003 and $70 million in FY 2004 are provided.

Subtitle B–Renewable Energy

Sec. 1221. Enhanced renewable energy research and development. Authorizes funding from $500 million in FY 2003 to $733 million in FY 2006 for DOE wind power, photovoltaics, solar thermal, biomass and biofuel, geothermal, hydrogen, hydropower, and electric energy systems and storage programs.

Sec. 1222. Bioenergy programs. Authorizes biopower energy systems and biofuels programs.

Sec. 1223. Hydrogen research and development. Reauthorizes and amends the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990.

Subtitle C–Fossil Energy

Sec. 1231. Enhanced fossil energy research and development. Authorizes funding from $485 million in FY 2003 to $558 million in FY 2006 for coal, oil, natural gas, and transportation fuels programs.

Sec. 1232. Power plant improvement initiative. Authorizes $200 million per year from FY 2003 to FY 2011 for demonstrations of carbon sequestration, gasification, and other technologies to improve the environmental performance of coal-based electricity generation.

Sec. 1233. Research and development for advanced safe and efficient coal mining technologies. Establishes a cooperative research partnership to pursue R&D priorities identified in the technology roadmaps from the Mining Industry of the Future Program. Authorizations of $12 million in FY 2003 and $15 million in FY 2004 are provided, with 20 percent to be spent at universities.

Sec. 1234. Ultra-deepwater and unconventional resource exploration and production technologies. Establishes a program of research, development, and demonstration of ultra-deepwater resource exploration and production technologies, including the development of next-generation architectures for ultra-deepwater resource production. Establishes a program to maximize the ability to

recover unconventional onshore natural gas resources. Provides for the flexibility to use consortia of industry and universities to manage research and development activities under this section.

Sec. 1235. Research and development for new natural gas transportation technologies. Authorizes a five-year R&D program for natural gas transportation and distribution infrastructure and for distributed energy resources using natural gas.

Sec. 1236. Authorization of appropriations for Office of Arctic Energy. Authorizes appropriations for the Office of Arctic Energy in DOE, which was created under section 3197 of the National Defense Authorization Act for Fiscal Year 2001 to undertake R&D on energy technology for arctic regions.

Subtitle D–Nuclear Energy

Sec. 1241. Enhanced nuclear energy research and development. Authorizes funding for nuclear energy R&D programs ($100 million in FY 2003 to $130 million in FY 2006) and for supporting infrastructure in the DOE complex ($200 million in FY 2003 to $212 million in FY 2006).

Sec. 1242. University nuclear science and engineering support. Special program to maintain the university-based investment and infrastructure in departments of nuclear sciences and nuclear engineering, including support for university research reactors. Authorized levels range from $33 million in FY 2003 to $50.1 million in FY 2006.

Sec. 1243. Nuclear energy research initiative. Authorizes grants for research relating to nuclear energy.

Sec. 1244. Nuclear energy plant optimization. Authorizes grants to improve nuclear energy plant reliability, availability, and productivity, with a 50 percent cost-share by industry.

Sec. 1245. Nuclear energy technology development program. Authorizes the Nuclear Energy Technology Development Program to develop a technology roadmap for new nuclear energy powerplants, including a study of Generation IV reactors.

Subtitle E–Fundamental Energy Science

Sec. 1251. Enhanced programs in fundamental energy science. Authorizes funding for programs in the DOE Office of Science (except for climate change science, separately authorized below) from $3.785 billion in FY 2003 to $5.0 billion in FY 2006.

Sec. 1252. Nanoscale science and engineering research. From within the total authorization for the Office of Science, a special focus program on nanoscience and nanoengineering for energy applications is

authorized, including special centers and instrumentation grants. Authorized levels grow from $270 million in FY 2003 to $330 million in FY 2006.

Sec. 1253. Advanced scientific computing for energy missions. DOE civilian high-performance computing program, focused on "grand challenges" in computation related to energy missions, and "collaboratories" of scientists across the country, is authorized from within the total authorization for the Office of Science, at $285 million in FY 2003 to $320 million in FY 2006.

Sec. 1254. Fusion energy sciences program and planning. Fusion energy sciences program is authorized for FY 2003, and planning reports on a U.S. burning plasma experiment and a return of U.S. participation in the International Thermonuclear Experimental Reactor (ITER) are required by 2004.

Subtitle F–Energy, Safety, and Environmental Protection

Sec. 1261. Critical energy infrastructure protection research and development. Authorizes a program to include analysis of energy infrastructure interdependencies, probabilistic risk assessment of unconventional and terrorist threats, incident tracking and trend analysis tools, and integrated multi-sensor, warning, and mitigation technologies to detect, integrate, and localize events affecting energy infrastructure. An annual authorization of $25 million for FY 2003 to $28 million in FY 2006 is provided.

Sec. 1262. Pipeline integrity, safety, and reliability research and development. Authorizes a pipeline safety research and development program to ensure the integrity of natural gas and hazardous liquid pipelines.

Sec. 1263. Research and demonstration for remediation of groundwater from energy activities. A research and demonstration program for remediation of groundwater contaminated by energy activities is authorized at $10 million per year for FY 2003 through FY 2006.

TITLE XIII--CLIMATE CHANGE-RELATED RESEARCH AND DEVELOPMENT

Subtitle A–Department of Energy Programs

Authorizes DOE climate change science research programs from FY 2003 through FY 2006 and provides conforming amendments to the Federal Nonnuclear Research and Development Act of 1974.

Subtitle B--Department of Agriculture Programs

Authorizes Department of Agriculture basic and applied research, and development and demonstration projects, related to carbon sequestration in soils.

Subtitle C–Clean Energy Technology Exports Program

Sec. 1321. Clean energy technology exports program. Establishes an interagency working group to coordinate and promote U.S. government efforts to open overseas energy markets and transfer U.S. clean energy technology to developing countries, and countries in transition, that are expected to experience, over the next 20 years, the most significant growth in energy production and associated greenhouse gas emissions. Requires an annual report describing technology, policy, and market opportunities for international development, demonstration, and deployment of clean energy technology. Requires all U.S. government entities supporting activities in the energy and environment sectors of such countries to support the transfer of U.S. clean energy technology to the maximum extent practicable.

Sec. 1322. International energy technology deployment program. Authorizes an International Energy Technology Deployment Program–a pilot program to provide financial assistance in the form of loans or loan guarantees to qualifying deployment projects in developing countries and countries in transition.

Subtitle D–Climate Change Science and Information

Part I – Amendments to the Global Change Research Act of 1990

Sec. 1331. Amendment of Global Change Research Act of 1990. Clarifies that amendments in this part are to the Global Change Research Act of 1990.

Sec. 1332. Changes in definitions. Redefines the "Committee" referred to in this Act as the Committee on Climate and Environmental Sciences.

Sec. 1333. Change in committee name. Renames the Committee on Earth and Environmental Sciences as the Committee on Climate and Environmental Sciences.

Sec. 1334. Change in National Global Change Research Plan. Adds a research element to the National Global Change Research Plan to develop predictive tools for planning and decision making purposes. Directs that information should be readily usable by local, State, and federal policymakers. The Plan should also provide recommendations for establishing a common assessment and modeling framework for research and operations to assess the vulnerability of ecosystems and human society to climate change. In addition, the Act calls for the USGCRP to develop a strategic research plan for the 10-year period beginning in 2002.

Sec. 1335. Integrated program office. Establishes the Integrated Program Office for the Global Change Research Program in the Office of Science and Technology Policy, which is responsible (in conjunction with the Committee) for: interagency coordination and integration of programs; ensuring federal programs and activities under the Program meet goals and objectives of the strategic plan; ensuring budget and program recommendations are communicated to the President; and reviewing and providing

recommendations on annual appropriations requests from federal agencies participating in the program. The Integrated Program Office shall consist of one representative of each federal agency participating in the program, and shall be headed by the Associate Director for Climate Change Science and Technology in the OSTP.

Part II–National Climate Services and Monitoring

Sec. 1341. Amendment of National Climate Program Act. Clarifies that amendments in this part are of the National Climate Program Act.

Sec. 1342. Changes in findings. Amends findings in National Climate Program Act.

Sec. 1343. Tools for regional planning. Adds a program element to develop methods to improve modeling, prediction, and assessment capabilities to guide national, regional, and local planning and decision-making on land use, water hazards, and related issues.

Sec. 1344. Authorization of appropriations. Authorizes appropriations for FY 2002 through FY 2004.

Sec. 1345. National Climate Service plan. Directs the Secretary of Commerce to submit a plan of action to Congress for the National Climate Service within one year of enactment of this Act. The plan is to provide recommendations and funding estimates for: 1) a national center for operational climate monitoring and prediction with the capability to monitor and adjust observing systems as necessary, 2) a national climate observing system, 3) establishment of a nationally coordinated modeling strategy, including a national climate modeling center that will provide a dedicated capability for high-end climate modeling; 4) modeling and assessment capabilities to predict regional and local climate changes and impacts, 5) coordination with the private sector, 6) long-term development and maintenance of climate products and efficient access to relevant climate data; and 7) mechanisms to coordinate with federal agencies, State and local entities, and the academic community.

Sec. 1346. International Pacific research and cooperation. Authorizes the Secretary of Commerce, in cooperation with NASA, to study climate variability in the Asia-Pacific region.

Sec. 1347. Reporting on trends. Authorizes the Secretary of Commerce to establish an atmospheric monitoring and verification program for greenhouse gases. Requires an annual report on levels and trends.

Part III–Ocean and Coastal Observing System

Sec. 1351. Ocean and coastal observing system. Requires the President, through the National Ocean Research Leadership Council, to establish and maintain an ocean and coastal observing system to provide continuous, real-time observations. The Council is required to submit an implementation plan to Congress within 6 months after enactment of this Act, and is also tasked with coordinating federal ocean observing

activities and working with potential users of the system to make effective use of its capabilities. In addition, the Council is responsible for approving standards and protocols for administration of the system.

Sec. 1352. Authorization of appropriations. Provides authorization levels for FY 2003 through FY 2006.

Subtitle E–Climate Change Technology

Sec. 1361. NIST greenhouse gas functions. Directs the National Institute of Standards and Technology (NIST) to develop measurements, calibrations, standards, and technologies that will enable reduced production of greenhouse gases.

Sec. 1362. Development of new measurement technologies. Requires the Secretary of Commerce to initiate an interagency effort to develop standards and measurement technologies to calculate greenhouse gas emissions and reductions from agriculture, forestry, and other land use practices; non-CO2 greenhouse gas emissions from transportation; and greenhouse gas emissions from facilities or sources using remote sensing technology.

Sec. 1363. Enhanced environmental measurements and standards. Requires the Director of NIST to establish a research program on global climate change standards and processes to provide scientific and technical knowledge applicable to the reduction of greenhouse gases. Directs the NIST Director to utilize the skills of the National Measurement Laboratories to improve the accuracy of measurements that will permit better understanding of industrial processes and associated greenhouse gas emissions. The National Measurement Laboratories will also conduct research into manufacturing processes and building performance standards that may reduce greenhouse gas emissions. This section also directs the National Voluntary Laboratory Accreditation Program to include calibration or test standards and related methods and protocols for accreditation in measuring the production of greenhouse gases.

Sec. 1364. Technology development and diffusion. Enables the NIST Director, through the Advanced Technology Program, to hold a thematic competition to develop and commercialize technologies to address global climate change by reducing greenhouse gas emissions and atmospheric concentrations. Directs the NIST Director, through the Manufacturing Extension Partnership Program, to develop a program to support the implementation of "green" manufacturing technologies.

Subtitle F–Climate Adaptation and Hazards Prevention

Part I–Assessment and Adaptation

Sec. 1371. Regional climate assessment and adaptation program. Directs the Secretary of Commerce, in coordination with appropriate federal, State, and local governmental entities, to establish a Climate Vulnerability and Adaptation Program to perform regional vulnerability assessments and develop

preparedness plans to address a broad array of national safety, ecological, and economic impacts related to increased climate variability. The Secretary of Commerce is to make appropriate information and technologies available through the Global Disaster Information Network to assist efforts to reduce loss of life and property.

Sec. 1372. Coastal vulnerability and adaptation. Requires the Secretary of Commerce to conduct regional assessments of the vulnerability of coastal areas to hazards associated with climate change, climate variability, and sea level rise, including an evaluation of social, physical, and economic impacts. Within three years of enactment of the Act, the Secretary of Commerce should submit to Congress a National Coastal Adaptation Plan that recommends national and regional strategies for adapting to coastal impacts associated with climate change, with particular attention to areas of special need such as the Arctic and small island states. Provides for financial assistance to eligible States to implement such plans through Coastal Adaptation Grants that require a graduated State match (growing to 1 to 1 by the fourth year).

Part II–Forecasting and Planning Pilot Programs

Sec. 1381. Remote sensing pilot projects. Establishes a program of NASA/NOAA grants to use remote sensing and other geospatial information to forecast and plan for adaptation to coastal zone and land use changes that may result as a consequence of global climate change or climate variability.

Sec. 1382. Database establishment. Directs the NOAA Coastal Services Center to establish and maintain an electronic, internet-accessible database of the results of each pilot project funded under section 1381.

Sec. 1383. Definitions. Provides definitions used in this part.

Sec. 1384. Authorization of appropriations. Authorizes appropriations for FY 2002 through FY 2006.

TITLE XIV–MANAGEMENT OF DOE SCIENCE AND TECHNOLOGY PROGRAMS

Sec. 1401. Definitions. Provides definitions used in the title.

Sec. 1402. Availability of funds. Provides that authorized funds remain available to DOE until expended.

Sec. 1403. Cost sharing. Requires cost-sharing of applied technology projects (20 percent) and demonstration projects (50 percent), but not basic research.

Sec. 1404. Merit review of proposals. Requires independent merit review of all R&D proposals prior to award.

Sec. 1405. External technical review of Departmental programs. Mandates the creation and use of external technical advisory committees for DOE science and technology programs. Where such panels already exist, they remain in use.

Sec. 1406. Improved coordination and management of civilian science and technology programs. Creates an Under Secretary for Energy and Science to oversee and coordinate DOE civilian energy R&D. Renames the Director of the Office of Science as the Assistant Secretary for Science. Provides for an additional Assistant Secretary so that this level of leadership can be applied to DOE nuclear energy technology programs.

Sec. 1407. Improved coordination of technology transfer activities. Re-establishes a central focus for technology transfer policy and coordination in the DOE.

Sec. 1408. Technology infrastructure program. Establishes a program to improve the technology partnering capabilities of the DOE National Laboratories.

Sec. 1409. Small business advocacy and assistance. Requires DOE National Laboratories and facilities to establish more effective outreach to small and minority businesses.

Sec. 1410. Other transactions. Gives DOE more flexible procurement authorities already enjoyed by the Defense Advanced Research Projects Agency (DARPA) and NASA.

Sec. 1411. Mobility of scientific and technical personnel. Requires DOE to study ways to facilitate flows of scientists and engineers among National Laboratories.

Sec. 1412. National Academy of Sciences report. Requires study by the National Academy of obstacles to accelerating the innovation cycle for energy technology.

Sec. 1413. Report on technology readiness and barriers to technology transfer. Requires a report on technology readiness of energy technologies being funded by the DOE and a report on barriers to technology transfer between the DOE and other technology performers.

TITLE XV– PERSONNEL AND TRAINING

Sec. 1501. Workforce trends and traineeship grants. Requires DOE to maintain cognizance of workforce trends in energy areas and provides authority to establish traineeship grants to help alleviate shortages in particular areas.

Sec. 1502. Postdoctoral and senior research fellowships in energy research. Authorizes the Secretary to establish postdoctoral fellowships and senior research fellowships to attract and retain outstanding scientists and engineers in energy research and development.

Sec. 1503. Training guidelines for electric energy industry personnel. Requires the Secretary of Energy to work with utilities and unions to create model guidelines for training to support increased electricity reliability.

Sec. 1504. National Center on Energy Management and Building Technologies. Authorizes the establishment of the center, which provides training to improve building energy efficiency.

Sec. 1505. Improved access to energy-related scientific and technical careers. Amends the Department of Energy Science Education Enhancement Act to give priority to activities that are designed to encourage women and minority students to pursue scientific and technical careers. Creates partnerships between DOE National Laboratories and historically Black colleges and universities, Hispanic-serving institutions, and tribal colleges.

DIVISION F–TECHNOLOGY ASSESSMENT AND STUDIES

TITLE XVI–TECHNOLOGY ASSESSMENT

Sec. 1601. National Science and Technology Assessment Service. Amends the National Science and Technology Policy, Organization, and Priorities Act of 1976 to add provisions creating a Science and Technology Assessment Service. The Service is to provide ongoing science and technology assessment advice to Congress. The Service would have a Congressional Board and a Director and receive administrative support from the Library of Congress. Assessment work would be performed using the services of experts selected in consultation with the National Research Council.

TITLE XVII–STUDIES

Sec. 1701. Regulatory reviews. Requires each federal agency to report to Congress within one year and at least every five years necessary changes to regulations to remove barriers to market entry for energy-efficient technologies and processes.

Sec. 1702. Assessment of dependence of Hawaii on oil. Requires the Secretary of Energy to conduct a study that assess the economic risk posed by the dependence of Hawaii on oil as its principal source of energy, and the feasibility of increasing the contribution of renewable sources to the overall energy requirements of Hawaii and of using liquified natural gas as a source of energy to supplement oil.

Sec. 1703. Study of siting an electric transmission system on Amtrak right-of-way. Requires the Secretary of Energy to contact with Amtrak to study the feasibility of building and operating a new electric transmission system on Amtrak right-of-way in the Northeast Corridor.

DIVISION G – ENERGY INFRASTRUCTURE SECURITY

TITLE XVIII – CRITICAL ENERGY INFRASTRUCTURE

Subtitle A–Department of Energy Programs

Sec. 1801. Definitions. Provides definitions used in the title.

Sec. 1802. Role of the Department of Energy. Amends the Department of Energy Organization Act to clarify that energy infrastructure security is part of DOE's mission.

Sec. 1803. Critical energy infrastructure programs. Authorizes the Secretary of Energy to establish programs of financial, technical, and administrative assistance related to critical energy infrastructure security, consistent with overall national infrastructure security plans of the President.

Sec. 1804. Advisory committee on energy infrastructure security. Establishes a broad-based advisory committee to review DOE policy and activities to improve energy infrastructure security.

Sec. 1805. Best practices and standards for energy infrastructure security. Authorizes the Secretary to support private-sector efforts to develop best practices and standards for energy infrastructure security.

Subtitle B–Department of Interior Programs

Sec. 1811. Outer Continental Shelf energy infrastructure security. Establishes an Outer Continental Shelf Energy Infrastructure Security Program to be administered by the Secretary of the Interior. Under this program, states in proximity to leased OCS tracts (Alaska, Alabama, California, Florida, Louisiana, Mississippi and Texas) and political subdivisions will receive funding based on OCS oil and gas production to carry out activities pursuant to approved plans to secure critical OCS energy infrastructure facilities from human or natural threats, or to meet public service or transportation needs to maintain the safety and operation of critical OCS energy infrastructure facilities.