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107TH CONGRESS
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H. R. 4

To enhance energy conservation, research and development and to provide for security and diversity in the energy supply for the American people, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 27, 2001

Mr. TAUZIN (for himself, Mr. THOMAS, Mr. HANSEN, and Mr. OXLEY) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Science, Ways and Means, Resources, Education and the Workforce, Transportation and Infrastructure, the Budget, and Financial Services, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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A BILL

To enhance energy conservation, research and development and to provide for security and diversity in the energy supply for the American people, and for other purposes.

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

SEC. 1. SHORT TITLE AND TABLE OF CONTENTS.

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

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

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

TITLE I—ENERGY CONSERVATION

Subtitle A—Reauthorization of Federal Energy Conservation Programs

SEC. 101. AUTHORIZATION OF APPROPRIATIONS.

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

(1) By inserting ''(a)'' before ''Appropriations''.

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

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

''(1) Energy Policy and Conservation Act, including section 256(d)(42 U.S.C. 6276(d)) (promote

export of energy efficient products), sections 321 through 346 (42 U.S.C. 6291–6317) (appliances program).

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

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

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

Subtitle B—Federal Leadership in Energy Conservation

SEC. 121. FEDERAL FACILITIES AND NATIONAL ENERGY SECURITY.

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

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

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

"(1) fiscal year 1995 is at least 10 percent;

"(2) fiscal year 2000 is at least 20 percent;

"(3) fiscal year 2005 is at least 30 percent;

"(4) fiscal year 2010 is at least 35 percent;

"(5) fiscal year 2015 is at least 40 percent; and

"(6) fiscal year 2020 is at least 45 percent,

less than the energy consumption per gross square foot of its Federal buildings in use during fiscal year 1985.

To achieve the reductions required by this paragraph, an agency shall make maximum practicable use of energy efficiency products and services and unconventional and renewable energy resources, using guidelines issued by the Secretary under subsection (d) of this section.''.

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

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

''(e) STUDIES.—To assist in developing the guidelines issued by the Secretary under subsection (d) and in furtherance of the purposes of this section, the Secretary shall conduct studies to identify and encourage the production and marketing of energy efficiency products and services and unconventional and renewable energy resources. To conduct such studies, and to provide grants

to accelerate the use of unconventional and renewable energy, there are authorized to be appropriated to the Secretary $20,000,000 for each of the fiscal years 2003 through 2010.''.

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

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

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

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

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

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

(1) In section 543(a)—

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

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

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

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

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

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

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

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

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

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

(3) In section 548(b)(1)(A)—

(A) by striking ''copy of the''; and

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

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

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

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

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

when equivalent products do not exist, are impractical, or do not meet the agency mission requirements.

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

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

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

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

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

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

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

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

"(A) Cost.

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

"(C) Energy management potential.

"(D) Energy savings.

"(E) Utility contract aggregation.

"(F) Savings from operations and maintenance.

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

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

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

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

(1) In subsection (a)—

(A) by inserting "in accordance with guidelines established by and" after "to the Secretary,";

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

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

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

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

(2) In subsection (b)—

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

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

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

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

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

"(c) AGENCY REPORTS TO CONGRESS.—Each agency shall annually report to the Congress, as part of the agency's annual budget request, on all of the agency's activities implementing any Federal energy management requirement.".

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

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

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

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

"(A) increasing energy and water conservation, and

"(B) using renewable energy sources; and

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

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

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

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

"(3)(A) In the case of an energy savings contract or energy savings performance contract providing for energy savings through the construction and operation of one or more buildings or facilities to replace one or more existing

buildings or facilities, benefits ancillary to the purpose of such contract under paragraph (1) may include savings resulting from reduced costs of operation and maintenance at such replacement buildings or facilities when compared with costs of operation and maintenance at the buildings or facilities being replaced, established through a methodology set forth in the contract.

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

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

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

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

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

"(ii) the increased efficient use of existing energy sources by solar and ground source geothermal resources, cogeneration or heat recovery (including by the use of a Stirling heat engine), excluding any cogeneration process for other than a federally owned building or buildings or other federally owned facilities; or

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

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

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

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

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

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

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

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

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

"(B) a water conservation measure that improves water efficiency, is life cycle cost effective, and involves water conservation, water re-

cycling or reuse, improvements in operation or maintenance efficiencies, retrofit activities, or other related activities, not at a Federal hydroelectric facility.''.

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

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

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

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

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

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

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

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

''(6) A utility incentive program may include a contract or contract term for a reduction in the energy, from a base cost established through a methodology set forth in such a contract, that would otherwise be utilized in one or more federally owned buildings or other federally owned facilities by reason of the construction or operation of one or more replacement buildings or facilities, as well as benefits ancillary to the purpose of such contract or contract term, including savings resulting from reduced costs of operation and maintenance at new or additional buildings or facilities when compared with the costs of operation and maintenance at existing buildings or facilities.

''(7) Federal agencies are encouraged to participate in State or regional demand side reduction programs, including those operated by wholesale market institutions such as independent system operators, regional transmission organizations and other entities. The availability of such programs, and the savings resulting from such

participation, should be included in the evaluation of energy options for Federal facilities.''.

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

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

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

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

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

(c) MODIFIED STANDARDS.—The Secretary of Energy may establish, after appropriate notice and comment, revised standards providing for reduced energy consumption or increased energy efficiency of central air conditioners and heat pumps acquired by the Federal Govern-

ment, but may not establish standards less rigorous than those established by subsection (b).

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

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

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

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

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

SEC. 125. ADVANCED BUILDING EFFICIENCY TESTBED.

(a) ESTABLISHMENT.—The Secretary of Energy shall establish an Advanced Building Efficiency Testbed program for the development, testing, and demonstration of advanced engineering systems, components, and materials to enable innovations in building technologies. The program shall evaluate government and industry building efficiency concepts, and demonstrate the ability of next generation buildings to support individual and organizational productivity and health as well as flexibility and technological change to improve environmental sustainability.

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

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of En-

ergy to carry out this section $18,000,000 for fiscal year 2002, to remain available until expended, of which $6,000,000 shall be provided to the lead university described in subsection (b), and the remainder shall be provided equally to each of the other participants referred to in subsection (b).

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

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

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

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

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

SEC. 128. CAPITOL COMPLEX.

(a) ENERGY INFRASTRUCTURE.—The Architect of the Capitol, building on the Master Plan Study completed in July 2000, shall commission a study to evaluate the energy infrastructure of the Capital Complex to determine how the infrastructure could be augmented to become more energy efficient, using unconventional and renewable

energy resources, in a way that would enable the Complex to have reliable utility service in the event of power fluctuations, shortages, or outages.

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

Subtitle C—State Programs

SEC. 131. AMENDMENTS TO STATE ENERGY PROGRAMS.

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

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

(b) STATE ENERGY EFFICIENCY GOALS.—Section 364 of the Energy Policy and Conservation Act (42 U.S.C. 6324) is amended by inserting ''Each State energy conservation plan with respect to which assistance is made

available under this part on or after the date of the enactment of Energy Advancement and Conservation Act of 2001, shall contain a goal, consisting of an improvement of 25 percent or more in the efficiency of use of energy in the State concerned in the calendar year 2010 as compared to the calendar year 1990, and may contain interim goals.'' after ''contain interim goals.''.

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

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

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

SEC. 133. AMENDMENTS TO WEATHERIZATION ASSISTANCE PROGRAM.

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

$325,000,000 for fiscal year 2003, $400,000,000 for fiscal year 2004, and $500,000,000 for fiscal year 2005''.

SEC. 134. LIHEAP.

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

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

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

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

SEC. 135. HIGH PERFORMANCE PUBLIC BUILDINGS.

(a) PROGRAM ESTABLISHMENT AND ADMINISTRATION.—

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

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

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

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

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

(3) GRANTS TO ASSIST UNITS OF LOCAL GOVERNMENT.—Grants under paragraph (2)(A) for new public buildings shall be used to achieve energy efficiency performance that reduces energy use at least 30 percent below that of a public building con-

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

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

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

(4) OTHER GRANTS.—

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

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

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

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

(iv) collecting and monitoring data and information pertaining to the high performance public building projects.

(B) GRANTS TO PROMOTE PARTICIPATION.—Grants under paragraph (2)(C) may be used for promotional and marketing activities, including facilitating private and public financing, promoting the use of energy service companies, working with public building users, and communities, and coordinating public benefit programs.

(5) IMPLEMENTATION.—

(A) PLANS.—A grant under paragraph (2)(A) shall be provided only to a unit of local government that, in consultation with its State office of energy, has developed a plan that the State energy office determines to be feasible and appropriate in order to achieve the purposes for which such grants are made.

(B) SUPPLEMENTING GRANT FUNDS.—State energy offices shall encourage qualifying units of local government to supplement their grant funds with funds from other sources in the implementation of their plans.

(b) ALLOCATION OF FUNDS.—

(1) IN GENERAL.—Except as provided in paragraph (3), funds appropriated to carry out this section shall be provided to State energy offices.

(2) PURPOSES.—Except as provided in paragraph (3), funds appropriated to carry out this section shall be allocated as follows:

(A) Seventy percent shall be used to make grants under subsection (a)(2)(A).

(B) Fifteen percent shall be used to make grants under subsection (a)(2)(B).

(C) Fifteen percent shall be used to make grants under subsection (a)(2)(C).

(3) OTHER FUNDS.—The Secretary of Energy may retain not to exceed $300,000 per year from amounts appropriated under subsection (c) to assist State energy offices in coordinating and implementing the Program. Such funds may be used to develop reference materials to further define the principles and criteria to achieve high performance public buildings.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy to carry out this section such sums as may be necessary for each of the fiscal years 2002 through 2010.

(d) REPORT TO CONGRESS.—The Secretary of Energy shall conduct a biennial review of State actions implementing this section, and the Secretary shall report to Congress on the results of such reviews. In conducting such reviews, the Secretary shall assess the effectiveness of the calculation procedures used by the States in establishing eligibility of units of local government for funding under this section, and may assess other aspects of the State program to determine whether they have been effectively implemented.

(e) DEFINITIONS.—For purposes of this section:

(1) HIGH PERFORMANCE PUBLIC BUILDING.—The term ''high performance public building'' means

a public building which, in its design, construction, operation, and maintenance, maximizes use of unconventional and renewable energy resources and energy efficiency practices, is cost-effective on a life cycle basis, uses affordable, environmentally preferable, durable materials, enhances indoor environmental quality, protects and conserves water, and optimizes site potential.

(2) RENEWABLE ENERGY.—The term ''renewable energy'' means energy produced by solar, wind, geothermal, hydroelectric, or biomass power.

(3) UNCONVENTIONAL AND RENEWABLE ENERGY RESOURCES.—The term ''unconventional and renewable energy resources'' means renewable energy, hydrogen, fuel cells, cogeneration, combined heat and power, heat recovery (including by use of a Stirling heat engine), and distributed generation.

Subtitle D—Energy Efficiency for Consumer Products

SEC. 141. ENERGY STAR PROGRAM.

(a) AMENDMENT.—The Energy Policy and Conservation Act (42 U.S.C. 6201 and following) is amended by inserting the following after section 324:

"SEC. 324A. ENERGY STAR PROGRAM.

"(a) IN GENERAL.—There is established at the Department of Energy and the Environmental Protection Agency a program to identify and promote energy-efficient products and buildings in order to reduce energy consumption, improve energy security, and reduce pollution through labeling of products and buildings that meet the highest energy efficiency standards. Responsibilities under the program shall be divided between the Department of Energy and the Environmental Protection Agency consistent with the terms of agreements between the two agencies. The Administrator and the Secretary shall—

"(1) promote Energy Star compliant technologies as the preferred technologies in the marketplace for achieving energy efficiency and to reduce pollution;

"(2) work to enhance public awareness of the Energy Star label; and

"(3) preserve the integrity of the Energy Star label.

For the purposes of carrying out this section, there is authorized to be appropriated for fiscal years 2002 through 2006 such sums as may be necessary, to remain available until expended.

"(b) STUDY OF CERTAIN PRODUCTS AND BUILDINGS.—Within 180 days after the date of enactment of

this section, the Secretary and the Administrator, consistent with the terms of agreements between the two agencies (including existing agreements with respect to which agency shall handle a particular product or building), shall determine whether the Energy Star label should be extended to additional products and buildings, including the following:

"(1) Air cleaners.

"(2) Ceiling fans.

"(3) Light commercial heating and cooling products.

"(4) Reach-in refrigerators and freezers.

"(5) Telephony.

"(6) Vending machines.

"(7) Residential water heaters.

"(8) Refrigerated beverage merchandisers.

"(9) Commercial ice makers.

"(10) School buildings.

"(11) Retail buildings.

"(12) Health care facilities.

"(13) Homes.

"(14) Hotels and other commercial lodging facilities.

"(15) Restaurants and other food service facilities.

"(16) Solar water heaters.

"(17) Building-integrated photovoltaic systems.

"(18) Reflective pigment coatings.

"(19) Windows.

"(20) Boilers.

"(21) Devices to extend the life of motor vehicle oil.

"(c) COOL ROOFING.—In determining whether the Energy Star label should be extended to roofing products, the Secretary and the Administrator shall work with the roofing products industry to determine the appropriate solar reflective index of roofing products.".

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents of the Energy Policy and Conservation Act is amended by inserting after the item relating to section 324 the following new item:

"Sec. 324A. Energy Star program.".

SEC. 142. LABELING OF ENERGY EFFICIENT APPLIANCES.

(a) STUDY.—Section 324(e) of the Energy Policy and Conservation Act (42 U.S.C. 6294(e)) is amended as follows:

(1) By inserting "(1)" before "The Secretary, in consultation".

(2) By redesignating paragraphs (1) and (2) as subparagraphs (A) and (B), respectively.

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

''(2) The Secretary shall make recommendations to the Commission within 180 days of the date of enactment of this paragraph regarding labeling of consumer products that are not covered products in accordance with this section, where such labeling is likely to assist consumers in making purchasing decisions and is technologically and economically feasible.''.

(b) NONCOVERED PRODUCTS.—Section 324(a)(2) of the Energy Policy and Conservation Act (42 U.S.C. 6294(a)(2)) is amended by adding the following at the end:

''(F) Not later than one year after the date of enactment of this subparagraph, the Commission shall initiate a rulemaking to prescribe labeling rules under this section applicable to consumer products that are not covered products if it determines that labeling of such products is likely to assist consumers in making purchasing decisions and is technologically and economically feasible.

''(G) Not later than three months after the date of enactment of this subparagraph, the Commission shall initiate a rulemaking to consider the effectiveness of the current consumer products labeling program in assisting consumers in making purchasing decisions and improving en-

ergy efficiency and to consider changes to the label that would improve the effectiveness of the label. Such rulemaking shall be completed within 15 months of the date of enactment of this subparagraph.''.

SEC. 143. APPLIANCE STANDARDS.

(a) STANDARDS FOR HOUSEHOLD APPLIANCES IN STANDBY MODE.—(1) Section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295) is amended by adding at the end the following:

''(u) STANDBY MODE ELECTRIC ENERGY CONSUMPTION BY HOUSEHOLD APPLIANCES.—(1) In this subsection:

''(A) The term 'household appliance' means any device that uses household electric current, operates in a standby mode, and is identified by the Secretary as a major consumer of electricity in standby mode, except digital televisions, digital set top boxes, digital video recorders, any product recognized under the Energy Star program, any product that was on the date of enactment of this Act subject to an energy conservation standard under this section, and any product regarding which the Secretary finds that the expected additional cost to the consumer of purchasing such product as a result of complying with a standard established under this section is not

economically justified within the meaning of subsection (o).

"(B) The term 'standby mode' means a mode in which a household appliance consumes the least amount of electric energy that the household appliance is capable of consuming without being completely switched off (provided that, the amount of electric energy consumed in such mode is substantially less than the amount the household appliance would consume in its normal operational mode).

"(C) The term 'major consumer of electricity in standby mode' means a product for which a standard prescribed under this section would result in substantial energy savings as compared to energy savings achieved or expected to be achieved by standards established by the Secretary under subsections (o) and (p) of this section for products that were, at the time of enactment of this subsection, covered products under this section.

"(2)(A) Except as provided in subparagraph (B), a household appliance that is manufactured in, or imported for sale in, the United States on or after the date that is 2 years after the date of enactment of this subsection shall not consume in standby mode more than 1 watt.

"(B) In the case of analog televisions, the Secretary shall prescribe, on or after the date that is 2 years after the date of enactment of this subsection, in accordance with subsections (o) and (p) of section 325, an energy conservation standard that is technologically feasible and economically justified under section 325(o)(2)(A) (in lieu of the 1 watt standard under subparagraph (A)).

"(3)(A) A manufacturer or importer of a household appliance may submit to the Secretary an application for an exemption of the household appliance from the standard under paragraph (2).

"(B) The Secretary shall grant an exemption for a household appliance for which an application is made under subparagraph (A) if the applicant provides evidence showing that, and the Secretary determines that—

"(i) it is not technically feasible to modify the household appliance to enable the household appliance to meet the standard;

"(ii) the standard is incompatible with an energy efficiency standard applicable to the household appliance under another subsection; or

"(iii) the cost of electricity that a typical consumer would save in operating the household appliance meeting the standard would not equal the increase in the price of the household appliance that

would be attributable to the modifications that would be necessary to enable the household appliance to meet the standard by the earlier of—

"(I) the date that is 7 years after the date of purchase of the household appliance; or

"(II) the end of the useful life of the household appliance.

"(C) If the Secretary determines that it is not technically feasible to modify a household appliance to meet the standard under paragraph (2), the Secretary shall establish a different standard for the household appliance in accordance with the criteria under subsection (l).

"(4)(A) Not later than 1 year after the date of enactment of this subsection, the Secretary shall establish a test procedure for determining the amount of consumption of power by a household appliance operating in standby mode.

"(B) In establishing the test procedure, the Secretary shall consider—

"(i) international test procedures under development;

"(ii) test procedures used in connection with the Energy Star program; and

"(iii) test procedures used for measuring power consumption in standby mode in other countries.

"(5) FURTHER REDUCTION OF STANDBY POWER CONSUMPTION.—The Secretary shall provide technical assistance to manufacturers in achieving further reductions in standby mode electric energy consumption by household appliances.

"(v) STANDBY MODE ELECTRIC ENERGY CONSUMPTION BY DIGITAL TELEVISIONS, DIGITAL SET TOP BOXES, AND DIGITAL VIDEO RECORDERS.—The Secretary shall initiate on January 1, 2007 a rulemaking to prescribe, in accordance with subsections (o) and (p), an energy conservation standard of standby mode electric energy consumption by digital television sets, digital set top boxes, and digital video recorders. The Secretary shall issue a final rule prescribing such standards not later than 18 months thereafter. In determining whether a standard under this section is technologically feasible and economically justified under section 325(o)(2)(A), the Secretary shall consider the potential effects on market penetration by digital products covered under this section, and shall consider any recommendations by the FCC regarding such effects.".

(2) Section 325(o)(3) of the Energy Policy and Conservation Act (42 U.S.C. 6295(n)(1)) is amended by inserting at the end of the paragraph the following: "Notwithstanding any provision of this part,

the Secretary shall not amend a standard established under subsection (u) or (v) of this section.''.

(b) STANDARDS FOR NONCOVERED PRODUCTS.—Section 325(m) of the Energy Policy and Conservation Act (42 U.S.C. 6295(m)) is amended as follows:

(1) Inserting ''(1)'' before ''After''.

(2) Inserting the following at the end:

(2) ''Not later than one year after the date of enactment of the Energy Advancement and Conservation Act of 2001, the Secretary shall conduct a rulemaking to determine whether consumer products not classified as a covered product under section 322(a)(1) through (18) meet the criteria of section 322(b)(1) and is a major consumer of electricity. If the Secretary finds that a consumer product not classified as a covered product meets the criteria of section 322(b)(1), he shall prescribe, in accordance with subsections (o) and (p), an energy conservation standard for such consumer product, if such standard is reasonably probable to be technologically feasible and economically justified within the meaning of subsection (o)(2)(A). As used in this paragraph, the term 'major consumer of electricity' means a product for which a standard prescribed under this section would result in substantial aggregate energy savings as compared to energy savings achieved or expected to be achieved by standards estab-

lished by the Secretary under paragraphs (o) and (p) of this section for products that were, at the time of enactment of this paragraph, covered products under this section.''.

(c) CONSUMER EDUCATION ON ENERGY EFFICIENCY BENEFITS OF AIR CONDITIONING, HEATING AND VENTILATION MAINTENANCE.—Section 337 of the Energy Policy and Conservation Act (42 U.S.C. 6307) is amended by adding the following new subsection after subsection (b):

''(c) HVAC MAINTENANCE.—For the purpose of ensuring that installed air conditioning and heating systems operate at their maximum rated efficiency levels, the Secretary shall, within 180 days of the date of enactment of this subsection, develop and implement a public education campaign to educate homeowners and small business owners concerning the energy savings resulting from regularly scheduled maintenance of air conditioning, heating, and ventilating systems. In developing and implementing this campaign, the Secretary shall consider support by the Department of public education programs sponsored by trade and professional and energy efficiency organizations. The public service information shall provide sufficient information to allow consumers to make informed choices from among professional, licensed (where State or local licens-

ing is required) contractors. There are authorized to be appropriated to carry out this subsection $5,000,000 for fiscal years 2002 and 2003 in addition to amounts otherwise appropriated in this part.''.

(d) EFFICIENCY STANDARDS FOR FURNACE FANS, CEILING FANS, AND COLD DRINK VENDING MACHINES..—

(1) DEFINITIONS.—Section 321 of the Energy Policy and Conservation Act (42 U.S.C. 6291) is amended by adding the following at the end thereof:

''(32) The term 'residential furnace fan' means an electric fan installed as part of a furnace for purposes of circulating air through the system air filters, the heat exchangers or heating elements of the furnace, and the duct work.

''(33) The terms 'residential central air conditioner fan' and 'heat pump circulation fan' mean an electric fan installed as part of a central air conditioner or heat pump for purposes of circulating air through the system air filters, the heat exchangers of the air conditioner or heat pump, and the duct work.

''(34) The term 'suspended ceiling fan' means a fan intended to be mounted to a ceiling outlet box, ceiling building structure, or to a vertical rod sus-

pended from the ceiling, and which as blades which rotate below the ceiling and consists of an electric motor, fan blades (which rotate in a direction parallel to the floor), an optional lighting kit, and one or more electrical controls (integral or remote) governing fan speed and lighting operation.

"(35) The term 'refrigerated bottled or canned beverage vending machine' means a machine that cools bottled or canned beverages and dispenses them upon payment.".

(2) TESTING REQUIREMENTS.—Section 323 of the Energy Policy and Conservation Act (42 U.S.C. 6293) is amended by adding the following at the end thereof:

"(f) ADDITIONAL CONSUMER PRODUCTS.—The Secretary shall within 18 months after the date of enactment of this subsection prescribe testing requirements for residential furnace fans, residential central air conditioner fans, heat pump circulation fans, suspended ceiling fans, and refrigerated bottled or canned beverage vending machines. Such testing requirements shall be based on existing test procedures used in industry to the extent practical and reasonable. In the case of residential furnace fans, residential central air conditioner fans, heat pump circulation fans, and suspended ceiling fans, such test procedures

shall include efficiency at both maximum output and at an output no more than 50 percent of the maximum output.''.

(3) STANDARDS FOR ADDITIONAL CONSUMER PRODUCTS.—Section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295) is amended by adding the following at the end thereof:

''(w) RESIDENTIAL FURNACE FANS, CENTRAL AIR AND HEAT PUMP CIRCULATION FANS, SUSPENDED CEILING FANS, AND VENDING MACHINES.—(1) The Secretary shall, within 18 months after the date of enactment of this subsection, assess the current and projected future market for residential furnace fans, residential central air conditioner and heat pump circulation fans, suspended ceiling fans, and refrigerated bottled or canned beverage vending machines. This assessment shall include an examination of the types of products sold, the number of products in use, annual sales of these products, energy used by these products sold, the number of products in use, annual sales of these products, energy used by these products, estimates of the potential energy savings from specific technical improvements to these products, and an examination of the cost-effectiveness of these improvements. Prior to the end of this time period, the Secretary shall hold an initial scoping workshop to discuss and receive input to

plans for developing minimum efficiency standards for these products.

"(2) The Secretary shall within 24 months after the date on which testing requirements are prescribed by the Secretary pursuant to section 323(f), prescribe, by rule, energy conservation standards for residential furnace fans, residential central air conditioner and heat pump circulation fans, suspended ceiling fans, and refrigerated bottled or canned beverage vending machines. In establishing these standards, the Secretary shall use the criteria and procedures contained in subsections (l) and (m). Any standard prescribed under this section shall apply to products manufactured 36 months after the date such rule is published.".

(4) LABELING.—Section 324(a) of the Energy Policy and Conservation Act (42 U.S.C. 6294(a)) is amended by adding the following at the end thereof:

"(5) The Secretary shall within 6 months after the date on which energy conservation standards are prescribed by the Secretary for covered products referred to in section 325(w), prescribe, by rule, labeling requirements for such products. These requirements shall take effect on the same date as the standards prescribed pursuant to section 325(w).".

(5) COVERED PRODUCTS.—Section 322(a) of the Energy Policy and Conservation Act (42 U.S.C. 6292(a)) is amended by redesignating paragraph (19) as paragraph (20) and by inserting after paragraph (18) the following:

"(19) Beginning on the effective date for standards established pursuant to subsection (v) of section 325, each product referred to in such subsection (v).".

Subtitle E—Energy Efficient Vehicles

SEC. 151. HIGH OCCUPANCY VEHICLE EXCEPTION.

(a) IN GENERAL.—Notwithstanding section 102(a)(1) of title 23, United States Code, a State may, for the purpose of promoting energy conservation, permit a vehicle with fewer than 2 occupants to operate in high occupancy vehicle lanes if such vehicle is a hybrid vehicle or is fueled by an alternative fuel.

(b) HYBRID VEHICLE DEFINED.—In this section, the term "hybrid vehicle" means a motor vehicle—

(1) which draws propulsion energy from onboard sources of stored energy which are both—

(A) an internal combustion or heat engine using combustible fuel; and

(B) a rechargeable energy storage system;

(2) which, in the case of a passenger automobile or light truck—

(A) for 2002 and later model vehicles, has received a certificate of conformity under section 206 of the Clean Air Act (42 U.S.C. 7525) and meets or exceeds the equivalent qualifying California low emission vehicle standard under section 243(e)(2) of the Clean Air Act (42 U.S.C. 7583(e)(2)) for that make and model year; and

(B) for 2004 and later model vehicles, has received a certificate that such vehicle meets the Tier II emission level established in regulations prescribed by the Administrator of the Environmental Protection Agency under section 202(i) of the Clean Air Act (42 U.S.C. 7521(i)) for that make and model year vehicle; and

(3) which is made by a manufacturer.

(c) ALTERNATIVE FUEL DEFINED.—In this section, the term ''alternative fuel'' has the meaning such term has under section 301(2) of the Energy Policy Act of 1992 (42 U.S.C. 13211(2)).

SEC. 152. RAILROAD EFFICIENCY.

(a) LOCOMOTIVE TECHNOLOGY DEMONSTRATION.—The Secretary of Energy shall establish a public-private

research partnership with railroad carriers, locomotive manufacturers, and a world-class research and test center dedicated to the advancement of railroad technology, efficiency, and safety that is owned by the Federal Railroad Administration and operated in the private sector, for the development and demonstration of locomotive technologies that increase fuel economy and reduce emissions.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy $25,000,000 for fiscal year 2002, $30,000,000 for fiscal year 2003, and $35,000,000 for fiscal year 2004 for carrying out this section.

SEC. 153. BIODIESEL FUEL USE CREDITS.

Section 312(c) of the Energy Policy Act of 1992 (42 U.S.C. 13220(c)) is amended—

(1) by striking ''NOT'' in the subsection heading; and

(2) by striking ''not''.

SEC. 154. MOBILE TO STATIONARY SOURCE TRADING.

Within 90 days after the enactment of this section, the Administrator of the Environmental Protection Agency is directed to commence a review of the Agency's policies regarding the use of mobile to stationary source trading of emission credits under the Clean Air Act to determine whether such trading can provide both nonattain-

ment and attainment areas with additional flexibility in achieving and maintaining healthy air quality and increasing use of alternative fuel and advanced technology vehicles, thereby reducing United States dependence on foreign oil.

Subtitle F—Other Provisions

SEC. 161. REVIEW OF REGULATIONS TO ELIMINATE BARRIERS TO EMERGING ENERGY TECHNOLOGY.

(a) IN GENERAL.—Each Federal agency shall carry out a review of its regulations and standards to determine those that act as a barrier to market entry for emerging energy-efficient technologies, including, but not limited to, fuel cells, combined heat and power, and distributed generation (including small-scale renewable energy).

(b) REPORT TO CONGRESS.—No later than 18 months after the date of enactment of this section, each agency shall provide a report to Congress and the President detailing all regulatory barriers to emerging energy-efficient technologies, along with actions the agency intends to take, or has taken, to remove such barriers.

(c) PERIODIC REVIEW.—Each agency shall subsequently review its regulations and standards in the manner specified in this section no less frequently than every 5 years, and report their findings to Congress and the President. Such reviews shall include a detailed analysis

of all agency actions taken to remove existing barriers to emerging energy technologies.

SEC. 162. ADVANCED IDLE ELIMINATION SYSTEMS.

(a) DEFINITIONS.—

(1) ADVANCED IDLE ELIMINATION SYSTEM.—The term ''advanced idle elimination system'' means a device or system of devices that is installed at a truck stop or other location (for example, a loading, unloading, or transfer facility) where vehicles (such as trucks, trains, buses, boats, automobiles, and recreational vehicles) are parked and that is designed to provide to the vehicle the services (such as heat, air conditioning, and electricity) that would otherwise require the operation of the auxiliary or drive train engine or both while the vehicle is stationary and parked.

(2) EXTENDED IDLING.—The term ''extended idling'' means the idling of a motor vehicle for a period greater than 60 minutes.

(b) RECOGNITION OF BENEFITS OF ADVANCED IDLE ELIMINATION SYSTEMS.—Within 90 days after the date of enactment of this subsection, the Administrator of the Environmental Protection Agency is directed to commence a review of the Agency's mobile source air emissions models used under the Clean Air Act to determine whether

such models accurately reflect the emissions resulting from extended idling of heavy-duty trucks and other vehicles and engines, and shall update those models as the Administrator deems appropriate. Additionally, within 90-days after the date of enactment of this subsection, the Administrator shall commence a review as to the appropriate emissions reductions credit that should be allotted under the Clean Air Act for the use of advanced idle elimination systems, and whether such credits should be subject to an emissions trading system, and shall revise Agency regulations and guidance as the Administrator deems appropriate.

SEC. 163. STUDY OF BENEFITS AND FEASIBILITY OF OIL BYPASS FILTRATION TECHNOLOGY.

(a) STUDY.—The Secretary of Energy and the Administrator of the Environmental Protection Agency shall jointly conduct a study of oil bypass filtration technology in motor vehicle engines. The study shall analyze and quantify the potential benefits of such technology in terms of reduced demand for oil and the potential environmental benefits of the technology in terms of reduced waste and air pollution. The Secretary and the Administrator shall also examine the feasibility of using such technology in the Federal motor vehicle fleet.

(b) REPORT.—Not later than 6 months after the enactment of this Act, the Secretary of Energy and the Administrator of the Environmental Protection Agency shall jointly submit a report containing the results of the study conducted under subsection (a) to the Committee on Energy and Commerce of the United States House of Representatives and to the Committee on Energy and Natural Resources of the United States Senate.

SEC. 164. GAS FLARE STUDY.

(a) STUDY.—The Secretary of Energy shall conduct a study of the economic feasibility of installing small cogeneration facilities utilizing excess gas flares at petrochemical facilities to provide reduced electricity costs to customers living within 3 miles of the petrochemical facilities. The Secretary shall solicit public comment to assist in preparing the report required under subsection (b).

(b) REPORT.—Not later than 18 months after the date of the enactment of this Act, the Secretary of Energy shall transmit a report to the Congress on the results of the study conducted under subsection (a).

SEC. 165. TELECOMMUTING STUDY.

(a) STUDY REQUIRED.—The Secretary, in consultation with Commission, and the NTIA, shall conduct a study of the energy conservation implications of the widespread adoption of telecommuting in the United States.

(b) REQUIRED SUBJECTS OF STUDY.—The study required by subsection (a) shall analyze the following subjects in relation to the energy saving potential of telecommuting:

(1) Reductions of energy use and energy costs in commuting and regular office heating, cooling, and other operations.

(2) Other energy reductions accomplished by telecommuting.

(3) Existing regulatory barriers that hamper telecommuting, including barriers to broadband telecommunications services deployment.

(4) Collateral benefits to the environment, family life, and other values.

(c) REPORT REQUIRED.—The Secretary shall submit to the President and the Congress a report on the study required by this section not later than 6 months after the date of enactment of this Act. Such report shall include a description of the results of the analysis of each of the subject described in subsection (b).

(d) DEFINITIONS.—As used in this section:

(1) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

(2) COMMISSION.—The term ''Commission'' means the Federal Communications Commission.

(3) NTIA.—The term ''NTIA'' means the National Telecommunications and Information Administration of the Department of Commerce.

(4) TELECOMMUTING.—The term ''telecommuting'' means the performance of work functions using communications technologies, thereby eliminating or substantially reducing the need to commute to and from traditional worksites.

TITLE II—AUTOMOBILE FUEL ECONOMY

SEC. 201. AVERAGE FUEL ECONOMY STANDARDS FOR NONPASSENGER AUTOMOBILES.

Section 32902(a) of title 49, United States Code, is amended—

(1) by inserting ''(1)'' after ''NONPASSENGER AUTOMOBILES.—''; and

(2) by adding at the end the following:

''(2) The Secretary shall prescribe under paragraph (1) average fuel economy standards for automobiles (except passenger automobiles) manufactured in model years 2004 through 2010 that are calculated to ensure that the aggregate amount of gasoline projected to be used in those model years by automobiles to which the standards apply is at least 5 billion gallons less than the aggregate amount of gasoline that would be used in those model years by

such automobiles if they achieved only the fuel economy required under the average fuel economy standard that applies under this subsection to automobiles (except passenger automobiles) manufactured in model year 2002.''.

SEC. 202. CONSIDERATION OF PRESCRIBING DIFFERENT AVERAGE FUEL ECONOMY STANDARDS FOR NONPASSENGER AUTOMOBILES.

(a) IN GENERAL.—The Secretary of Transportation shall, in prescribing average fuel economy standards under section 32902(a) of title 49, United States Code, for automobiles (except passenger automobiles) manufactured in model year 2004, consider the potential benefits of—

(1) establishing a weight-based system for automobiles, that is based on the inertia weight, curb weight, gross vehicle weight rating, or another appropriate measure of such automobiles; and

(2) prescribing different fuel economy standards for automobiles that are subject to the weight-based system.

(b) SPECIFIC CONSIDERATIONS.—In implementing this section the Secretary—

(1) shall consider any recommendations made in the National Academy of Sciences study completed pursuant to the Department of Transportation and Related Agencies Appropriations Act,

2000 (Public Law 106–346; 114 Stat. 2763 et seq.); and

(2) shall evaluate the merits of any weight-based system in terms of motor vehicle safety, energy conservation, and competitiveness of and employment in the United States automotive sector, and if a weight-based system is established by the Secretary a manufacturer may trade credits between or among the automobiles (except passenger automobiles) manufactured by the manufacturer.

SEC. 203. DUAL FUELED AUTOMOBILES.

(a) PURPOSES.—The purposes of this section are—

(1) to extend the manufacturing incentives for dual fueled automobiles, as set forth in subsections (b) and (d) of section 32905 of title 49, United States Code, through the 2008 model year; and

(2) to similarly extend the limitation on the maximum average fuel economy increase for such automobiles, as set forth in subsection (a)(1) of section 32906 of title 49, United States Code.

(b) AMENDMENTS.—

(1) MANUFACTURING INCENTIVES.—Section 32905 of title 49, United States Code, is amended as follows:

(A) Subsections (b) and (d) are each amended by striking ''model years 1993–2004'' and inserting ''model years 1993–2008''.

(B) Subsection (f) is amended by striking ''Not later than December 31, 2001, the Secretary'' and inserting ''Not later than December 31, 2005, the Secretary''.

(C) Subsection (f)(1) is amended by striking ''model year 2004'' and inserting ''model year 2008''.

(D) Subsection (g) is amended by striking ''Not later than September 30, 2000'' and inserting ''Not later than September 30, 2004''.

(2) MAXIMUM FUEL ECONOMY INCREASE.—Subsection (a)(1) of section 32906 of title 49, United States Code, is amended as follows:

(A) Subparagraph (A) is amended by striking ''the model years 1993–2004'' and inserting ''model years 1993–2008''.

(B) Subparagraph (B) is amended by striking ''the model years 2005–2008'' and inserting ''model years 2009–2012''.

SEC. 204. FUEL ECONOMY OF THE FEDERAL FLEET OF AUTOMOBILES.

Section 32917 of title 49, United States Code, is amended to read as follows:

"§ 32917. Standards for executive agency automobiles

''(a) BASELINE AVERAGE FUEL ECONOMY.—The head of each executive agency shall determine, for all automobiles in the agency's fleet of automobiles that were leased or bought as a new vehicle in fiscal year 1999, the average fuel economy for such automobiles. For the purposes of this section, the average fuel economy so determined shall be the baseline average fuel economy for the agency's fleet of automobiles.

''(b) INCREASE OF AVERAGE FUEL ECONOMY.—The head of an executive agency shall manage the procurement of automobiles for that agency in such a manner that—

''(1) not later than September 30, 2003, the average fuel economy of the new automobiles in the agency's fleet of automobiles is not less than 1 mile per gallon higher than the baseline average fuel economy determined under subsection (a) for that fleet; and

''(2) not later than September 30, 2005, the average fuel economy of the new automobiles in the agency's fleet of automobiles is not less than 3 miles per gallon higher than the baseline average fuel

economy determined under subsection (a) for that fleet.

"(c) CALCULATION OF AVERAGE FUEL ECONOMY.—Average fuel economy shall be calculated for the purposes of this section in accordance with guidance which the Secretary of Transportation shall prescribe for the implementation of this section.

"(d) DEFINITIONS.—In this section:

"(1) The term 'automobile' does not include any vehicle designed for combat-related missions, law enforcement work, or emergency rescue work.

"(2) The term 'executive agency' has the meaning given that term in section 105 of title 5.

"(3) The term 'new automobile', with respect to the fleet of automobiles of an executive agency, means an automobile that is leased for at least 60 consecutive days or bought, by or for the agency, after September 30, 1999.".

SEC. 205. HYBRID VEHICLES AND ALTERNATIVE VEHICLES.

(a) IN GENERAL.—Section 303(b)(1) of the Energy Policy Act of 1992 is amended by adding the following at the end: "Of the total number of vehicles acquired by a Federal fleet in fiscal years 2004 and 2005, at least 5 percent of the vehicles in addition to those covered by the preceding sentence shall be alternative fueled vehicles

or hybrid vehicles and in fiscal year 2006 and thereafter at least 10 percent of the vehicles in addition to those covered by the preceding sentence shall be alternative fueled vehicles or hybrid vehicles.''.

(b) DEFINITION.—Section 301 of such Act is amended by striking ''and'' at the end of paragraph (13), by striking the period at the end of paragraph (14) and inserting ''; and'' and by adding at the end the following:

''(15) The term 'hybrid vehicle' means a motor vehicle which draws propulsion energy from onboard sources of stored energy which are both—

''(A) an internal combustion or heat engine using combustible fuel; and

''(B) a rechargeable energy storage system.''.

SEC. 206. FEDERAL FLEET PETROLEUM-BASED NONALTERNATIVE FUELS.

(a) IN GENERAL.—Title III of the Energy Policy Act of 1992 (42 U.S.C. 13212 et seq.) is amended as follows:

(1) By adding at the end thereof the following:

''SEC. 313. CONSERVATION OF PETROLEUM-BASED FUELS BY THE FEDERAL GOVERNMENT FOR LIGHT-DUTY MOTOR VEHICLES.

''(a) PURPOSES.—The purposes of this section are to complement and supplement the requirements of section 303 of this Act that Federal fleets, as that term is defined

in section 303(b)(3), acquire in the aggregate a minimum percentage of alternative fuel vehicles, to encourage the manufacture and sale or lease of such vehicles nationwide, and to achieve, in the aggregate, a reduction in the amount of the petroleum-based fuels (other than the alternative fuels defined in this title) used by new light-duty motor vehicles acquired by the Federal Government in model years 2004 through 2010 and thereafter.

"(b) IMPLEMENTATION.—In furtherance of such purposes, such Federal fleets in the aggregate shall reduce the purchase of petroleum-based nonalternative fuels for such fleets beginning October 1, 2003, through September 30, 2009, from the amount purchased for such fleets over a comparable period since enactment of this Act, as determined by the Secretary, through the annual purchase, in accordance with section 304, and the use of alternative fuels for the light-duty motor vehicles of such Federal fleets, so as to achieve levels which reflect total reliance by such fleets on the consumptive use of alternative fuels consistent with the provisions of section 303(b) of this Act. The Secretary shall, within 120 days after the enactment of this section, promulgate, in consultation with the Administrator of the General Services Administration and the Director of the Office of Management and Budget and such other heads of entities referenced in section 303 with-

in the executive branch as such Director may designate, standards for the full and prompt implementation of this section by such entities. The Secretary shall monitor compliance with this section and such standards by all such fleets and shall report annually to the Congress, based on reports by the heads of such fleets, on the extent to which the requirements of this section and such standards are being achieved. The report shall include information on annual reductions achieved of petroleum-based fuels and the problems, if any, encountered in acquiring alternative fuels and in requiring their use.''.

(2) By amending section 304(b) of such Act to read as follows:

''(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary or, as appropriate, the head of each Federal fleet subject to the provisions of this section and section 313 of this Act, such sums as may be necessary to achieve the purposes of section 313(a) and the provisions of this section. Such sums shall remain available until expended.''.

(b) CLERICAL AMENDMENT.—The table of contents in section 1(b) of such Act is amended by adding at the end of the items relating to title III the following:

''Sec. 313. Conservation of petroleum-based fuels by the Federal Government for light-duty motor vehicles.''.

SEC. 207. STUDY OF FEASIBILITY AND EFFECTS OF REDUCING USE OF FUEL FOR AUTOMOBILES.

(a) IN GENERAL.—Not later than 30 days after the date of the enactment of this Act, the Secretary of Transportation shall enter into an arrangement with the National Academy of Sciences under which the Academy shall study the feasibility and effects of reducing by model year 2010, by a significant percentage, the use of fuel for automobiles.

(b) SUBJECTS OF STUDY.—The study under this section shall include—

(1) examination of, and recommendation of alternatives to, the policy under current Federal law of establishing average fuel economy standards for automobiles and requiring each automobile manufacturer to comply with average fuel economy standards that apply to the automobiles it manufactures;

(2) examination of how automobile manufacturers could contribute toward achieving the reduction referred to in subsection (a);

(3) examination of the potential of fuel cell technology in motor vehicles in order to determine the extent to which such technology may contribute to achieving the reduction referred to in subsection (a); and

(4) examination of the effects of the reduction referred to in subsection (a) on—

(A) gasoline supplies;

(B) the automobile industry, including sales of automobiles manufactured in the United States;

(C) motor vehicle safety; and

(D) air quality.

(c) REPORT.—The Secretary shall require the National Academy of Sciences to submit to the Secretary and the Congress a report on the findings, conclusion, and recommendations of the study under this section by not later than 1 year after the date of the enactment of this Act.

TITLE III—NUCLEAR ENERGY

SEC. 301. BUDGET STATUS OF NUCLEAR WASTE FUND.

(a) IN GENERAL.—Notwithstanding any other provision of law, the receipts and disbursements of the Nuclear Waste Fund established under section 302 of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10222) shall not be counted as new budget authority, outlays, receipts, or deficit or surplus for purposes of—

(1) the budget of the United States Government as submitted by the President;

(2) the congressional budget; or

(3) the Balanced Budget and Emergency Deficit Control Act of 1985.

(b) EFFECT ON PAYGO SCORECARD.—Upon the enactment of this Act, the Director of the Office of Management and Budget shall not make any estimates of changes in direct spending outlays and receipts under section 252(d) of the Balanced Budget and Emergency Deficit Control Act of 1985 resulting from the enactment of subsection (a) of this section.

SEC. 302. LICENSE PERIOD.

Section 103 c. of the Atomic Energy Act of 1954 (42 U.S.C. 2133(c)) is amended—

(1) by striking ''c. Each such'' and inserting the following:

''c. LICENSE PERIOD.—

''(1) IN GENERAL.—Each such''; and

(2) by adding at the end the following:

''(2) COMBINED LICENSES.—In the case of a combined construction and operating license issued under section 185 b., the initial duration of the license may not exceed 40 years from the date on which the Commission finds, before operation of the facility, that the acceptance criteria required by section 185 b. are met.''.

SEC. 303. COST RECOVERY FROM GOVERNMENT AGENCIES.

Section 161 w. of the Atomic Energy Act of 1954 (42 U.S.C. 2201(w)) is amended—

(1) by striking ''for or is issued'' and all that follows through ''1702'' and inserting ''to the Commission for, or is issued by the Commission, a license or certificate'';

(2) by striking ''483a'' and inserting ''9701''; and

(3) by striking '', of applicants for, or holders of, such licenses or certificates''.

SEC. 304. DEPLETED URANIUM HEXAFLUORIDE.

Section 1(b) of Public Law 105–204 is amended by striking ''fiscal year 2002'' and inserting ''fiscal year 2005''.

SEC. 305. NUCLEAR REGULATORY COMMISSION MEETINGS.

If a quorum of the Nuclear Regulatory Commission gathers to discuss official Commission business the discussions shall be recorded, and the Commission shall notify the public of such discussions within 15 days after they occur. The Commission shall promptly make a transcript of the recording available to the public on request, except to the extent that public disclosure is exempted or prohibited by law. This section shall not apply to a meeting, within the meaning of that term under section 552b(a)(2) of title 5, United States Code.

SEC. 306. COOPERATIVE RESEARCH AND DEVELOPMENT AND SPECIAL DEMONSTRATION PROJECTS FOR THE URANIUM MINING INDUSTRY.

(a) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary $10,000,000 for each of fiscal years 2002, 2003, and 2004 for—

(1) cooperative, cost-shared, agreements between the Department of Energy and domestic uranium producers to identify, test, and develop improved in situ leaching mining technologies, including low-cost environmental restoration technologies that may be applied to sites after completion of in situ leaching operations; and

(2) funding for competitively selected demonstration projects with domestic uranium producers relating to—

(A) enhanced production with minimal environmental impacts;

(B) restoration of well fields; and

(C) decommissioning and decontamination activities.

(b) DOMESTIC URANIUM PRODUCER.—For purposes of this section, the term ''domestic uranium producer'' has the meaning given that term in section 1018(4) of the Energy Policy Act of 1992 (42 U.S.C. 2296b–7(4)), except

that the term shall not include any producer that has not produced uranium from domestic reserves on or after July 30, 1998.

SEC. 307. MAINTENANCE OF A VIABLE DOMESTIC URANIUM CONVERSION INDUSTRY.

There are authorized to be appropriated to the Secretary $800,000 for contracting with the Nation's sole remaining uranium converter for the purpose of performing research and development to improve the environmental and economic performance of United States uranium conversion operations.

SEC. 308. PADUCAH DECONTAMINATION AND DECOMMISSIONING PLAN.

The Secretary of Energy shall prepare and submit a plan to Congress within 180 days after the date of the enactment of this Act that establishes scope, cost, schedule, sequence of activities, and contracting strategy for—

(1) the decontamination and decommissioning of the Department of Energy's surplus buildings and facilities at the Paducah Gaseous Diffusion Plant that have no future anticipated reuse; and

(2) the remediation of Department of Energy Material Storage Areas at the Paducah Gaseous Diffusion Plant.

Such plan shall inventory all surplus facilities and buildings, and identify and rank health and safety risks associated with such facilities and buildings. Such plan shall inventory all Department of Energy Material Storage Areas, and identify and rank health and safety risks associated with such Department of Energy Material Storage Areas. The Department of Energy shall incorporate these risk factors in designing the sequence and schedule for the plan. Such plan shall identify funding requirements that are in addition to the expected outlays included in the Department of Energy's Environmental Management Plan for the Paducah Gaseous Diffusion Plan.

TITLE IV—HYDROELECTRIC ENERGY

SEC. 401. ALTERNATIVE CONDITIONS AND FISHWAYS.

(a) ALTERNATIVE MANDATORY CONDITIONS.—Section 4 of the Federal Power Act (16 U.S.C. 797) is amended by adding at the end the following:

''(h)(1) Whenever any person applies for a license for any project works within any reservation of the United States, and the Secretary of the department under whose supervision such reservation falls deems a condition to such license to be necessary under the first proviso of subsection (e), the license applicant or any other party to the licensing proceeding may propose an alternative condition.

"(2) Notwithstanding the first proviso of subsection (e), the Secretary of the department under whose supervision the reservation falls shall accept the proposed alternative condition referred to in paragraph (1), and the Commission shall include in the license such alternative condition, if the Secretary of the appropriate department determines, based on substantial evidence provided by the party proposing such alternative condition, that the alternative condition—

"(A) provides no less protection for the reservation than provided by the condition deemed necessary by the Secretary; and

"(B) will either—

"(i) cost less to implement, or

"(ii) result in improved operation of the project works for electricity production

as compared to the condition deemed necessary by the Secretary.

"(3) Within one year after the enactment of this subsection, each Secretary concerned shall, by rule, establish a process to expeditiously resolve conflicts arising under this subsection.".

(b) ALTERNATIVE FISHWAYS.—Section 18 of the Federal Power Act (16 U.S.C. 811) is amended by—

(1) inserting ''(a)'' before the first sentence; and

(2) adding at the end the following:

''(b)(1) Whenever the Commission shall require a licensee to construct, maintain, or operate a fishway prescribed by the Secretary of the Interior or the Secretary of Commerce under this section, the licensee or any other party to the proceeding may propose an alternative to such prescription to construct, maintain, or operate a fishway.

''(2) Notwithstanding subsection (a), the Secretary of the Interior or the Secretary of Commerce, as appropriate, shall accept and prescribe, and the Commission shall require, the proposed alternative referred to in paragraph (1), if the Secretary of the appropriate department determines, based on substantial evidence provided by the party proposing such alternative, that the alternative—

''(A) will be no less effective than the fishway initially prescribed by the Secretary, and

''(B) will either—

''(i) cost less to implement, or

''(ii) result in improved operation of the project works for electricity production

as compared to the fishway initially prescribed by the Secretary.

"(3) Within one year after the enactment of this subsection, the Secretary of the Interior and the Secretary of Commerce shall each, by rule, establish a process to expeditiously resolve conflicts arising under this subsection."

SEC. 402. FERC DATA ON HYDROELECTRIC LICENSING.

(a) DATA COLLECTION PROCEDURES.—The Federal Energy Regulatory Commission shall revise its procedures regarding the collection of data in connection with the Commission's consideration of hydroelectric licenses under the Federal Power Act. Such revised data collection procedures shall be designed to provide the Commission with complete and accurate information concerning the time and costs to parties involved in the licensing process. Such data shall be available for each significant stage in the licensing process and shall be designed to identify projects with similar characteristics so that analyses can be made of the time and costs involved in licensing proceedings based upon the different characteristics of those proceedings.

(b) REPORTS.—Within 6 months after the date of enactment of this Act, the Commission shall notify the Committee on Energy and Commerce of the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate of the

progress made by the Commission under subsection (a), and within one year after such date of enactment, the Commission shall submit a report to such Committees specifying the measures taken by the Commission pursuant to subsection (a).

TITLE V—FUELS

SEC. 601. TANK DRAINING DURING TRANSITION TO SUMMERTIME RFG.

Not later than 60 days after the enactment of the Act, the Administrator of the Environmental Protection Agency shall commence a rulemaking to determine whether modifications to the regulations set forth in 40 C.F.R. Section 80.78 and any associated regulations regarding the transition to high ozone season reformulated gasoline are necessary to ensure that the transition to high ozone season reformulated gasoline is conducted in a manner that minimizes disruptions to the general availability and affordability of gasoline, and maximizes flexibility with regard to the draining and inventory management of gasoline storage tanks located at refineries, terminals, wholesale and retail outlets, consistent with the goals of the Clean Air Act. The Administrator shall propose and take final action in such rulemaking to ensure that any modifications are effective and implemented at least 60 days

prior to the beginning of the high ozone season for the year 2002.

SEC. 602. GASOLINE BLENDSTOCK REQUIREMENTS.

Not later than 60 days after the enactment of this Act, the Administrator of the Environmental Protection Agency shall commence a rulemaking to determine whether modifications to product transfer documentation, accounting, compliance calculation, and other requirements contained in the regulations of the Administrator set forth in section 80.102 of title 40 of the Code of Federal Regulations relating to gasoline blendstocks are necessary to facilitate the movement of gasoline and gasoline feedstocks among different regions throughout the country and to improve the ability of petroleum refiners and importers to respond to regional gasoline shortages and prevent unreasonable short-term price increases. The Administrator shall take into consideration the extent to which such requirements have been, or will be, rendered unnecessary or inefficient by reason of subsequent environmental safeguards that were not in effect at the time the regulations in section 80.102 of title 40 of the Code of Federal Regulations were promulgated. The Administrator shall propose and take final action in such rulemaking to ensure that any modifications are effective and implemented at

least 60 days prior to the beginning of the high ozone season for the year 2002.

SEC. 603. BOUTIQUE FUELS.

(a) JOINT STUDY.—The Administrator of the Environmental Protection Agency and the Secretary of Energy shall jointly conduct a study of all Federal, State, and local requirements regarding motor vehicle fuels, including requirements relating to reformulated gasoline, volatility (Reid Vapor Pressure), oxygenated fuel, diesel fuel and other requirements that vary from State to State, region to region, or locality to locality. The study shall analyze—

(1) the effect of the variety of such requirements on the price of motor vehicle fuels to the consumer;

(2) the availability and affordability of motor vehicle fuels in different States and localities;

(3) the effect of Federal, State, and local regulations, including multiple fuel requirements, on domestic refineries and the fuel distribution system;

(4) the effect of such requirements on local, regional, and national air quality requirements and goals;

(5) the effect of such requirements on vehicle emissions;

(6) the feasibility of developing national or regional fuel specifications for the contiguous United States that would—

(A) enhance flexibility in the fuel distribution infrastructure and improve fuel fungibility;

(B) reduce price volatility and costs to consumers and producers;

(C) meet local, regional, and national air quality requirements and goals; and

(D) provide increased gasoline market liquidity; and

(7) the extent to which the Environmental Protection Agency's Tier II requirements for conventional gasoline may achieve in future years the same or similar air quality results as State reformulated gasoline programs and State programs regarding gasoline volatility (RVP).

(b) REPORT.—By December 31, 2001, the Administrator of the Environmental Protection Agency and the Secretary of Energy shall submit a report to the Congress containing the results of the study conducted under subsection (a). Such report shall contain recommendations for legislative and administrative actions that may be taken to simplify the national distribution system for motor vehicle fuel, make such system more cost-effective, and reduce

the costs and increase the availability of motor vehicle fuel to the end user while meeting the requirements of the Clean Air Act. Such recommendations shall take into account the need to provide lead time for refinery and fuel distribution system modifications necessary to assure adequate fuel supply for all States.

SEC. 604. FUNDING FOR MTBE CONTAMINATION.

Notwithstanding any other provision of law, there is authorized to be appropriated to the Administrator of the Environmental Protection Agency from the Leaking Underground Storage Trust Fund not more than $200,000,000 to be used for taking such action, limited to assessment, corrective action, inspection of underground storage tank systems, and groundwater monitoring in connection with MTBE contamination, as the Administrator deems necessary to protect human health and the environment from releases of methyl tertiary butyl ether (MTBE) from underground storage tanks.

TITLE VI—RENEWABLE ENERGY

SEC. 701. ASSESSMENT OF RENEWABLE ENERGY RESOURCES.

(a) RESOURCE ASSESSMENT.—Not later than one year after the date of enactment of this Act, and each year thereafter, the Secretary of Energy shall publish an

assessment by the National Laboratories of all renewable energy resources available within the United States.

(b) CONTENTS OF REPORT.—The report published under subsection (a) shall contain each of the following:

(1) A detailed inventory describing the available amount and characteristics of solar, wind, biomass, geothermal, hydroelectric and other renewable energy sources.

(2) Such other information as the Secretary of Energy believes would be useful in developing such renewable energy resources, including descriptions of surrounding terrain, population and load centers, nearby energy infrastructure, location of energy and water resources, and available estimates of the costs needed to develop each resource.

SEC. 702. RENEWABLE ENERGY PRODUCTION INCENTIVE.

Section 1212 of the Energy Policy Act of 1992 (42 U.S.C. 13317) is amended as follows:

(1) In subsection (a) by striking ''and which satisfies'' and all that follows through ''Secretary shall establish.'' and inserting ''. The Secretary shall establish other procedures necessary for efficient administration of the program. The Secretary shall not establish any criteria or procedures that have the effect of assigning to proposals a higher or lower pri-

ority for eligibility or allocation of appropriated funds on the basis of the energy source proposed.''.

(2) In subsection (b)—

(A) by striking ''a State or any political'' and all that follows through ''nonprofit electrical cooperative'' and inserting ''an electricity-generating cooperative exempt from taxation under section 501(c)(12) or section 1381(a)(2)(C) of the Internal Revenue Code of 1986, a public utility described in section 115 of such Code, a State, Commonwealth, territory, or possession of the United States or the District of Columbia, or a political subdivision thereof, or an Indian tribal government or subdivision thereof,''; and

(B) By inserting ''landfill gas,'' after ''wind, biomass,''.

(3) In subsection (c) by striking ''during the 10-fiscal year period beginning with the first full fiscal year occurring after the enactment of this section'' and inserting ''before October 1, 2013''.

(4) In subsection (d) by inserting ''or in which the Secretary finds that all necessary Federal and State authorizations have been obtained to begin

construction of the facility'' after ''eligible for such payments''.

(5) In subsection (e)(1) by inserting ''landfill gas,'' after ''wind, biomass,''.

(6) In subsection (f) by striking ''the expiration of'' and all that follows through ''of this section'' and inserting ''September 30, 2023''.

(7) In subsection (g)—

(A) by striking ''1993, 1994, and 1995'' and inserting ''2003 through 2023''; and

(B) by inserting ''Funds may be appropriated pursuant to this subsection to remain available until expended.'' after ''purposes of this section.''.

TITLE VII—PIPELINES

SEC. 801. PROHIBITION ON CERTAIN PIPELINE ROUTE.

No license, permit, lease, right-of-way, authorization or other approval required under Federal law for the construction of any pipeline to transport natural gas from lands within the Prudhoe Bay oil and gas lease area may be granted for any pipeline that follows a route that traverses—

(1) the submerged lands (as defined by the Submerged Lands Act) beneath, or the adjacent shoreline of, the Beaufort Sea; and

(2) enters Canada at any point north of 68 degrees North latitude.

SEC. 802. HISTORIC PIPELINES.

Section 7 of the Natural Gas Act (15 U.S.C. 717f) is amended by adding at the end the following new subsection:

''(i) Notwithstanding the National Historic Preservation Act, a transportation facility shall not be eligible for inclusion on the National Register of Historic Places until the Commission has permitted the abandonment of the transportation facility pursuant to subsection (b) of this section.''.

TITLE VII—MISCELLANEOUS PROVISIONS

SEC. 901. WASTE REDUCTION AND USE OF ALTERNATIVES.

(a) GRANT AUTHORITY.—The Secretary of Energy is authorized to make a single grant to a qualified institution to examine and develop the feasibility of burning post-consumer carpet in cement kilns as an alternative energy source. The purposes of the grant shall include determining—

(1) how post-consumer carpet can be burned without disrupting kiln operations;

(2) the extent to which overall kiln emissions may be reduced; and

(3) how this process provides benefits to both cement kiln operations and carpet suppliers.

(b) QUALIFIED INSTITUTION.—For the purposes of subsection (a), a qualified institution is a research-intensive institution of higher learning with demonstrated expertise in the fields of fiber recycling and logistical modeling of carpet waste collection and preparation.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy for carrying out this section $275,000 for fiscal year 2002, to remain available until expended.

SEC. 902. ANNUAL REPORT ON UNITED STATES ENERGY INDEPENDENCE.

(a) REPORT.—The Secretary of Energy, in consultation with the heads of other relevant Federal agencies, shall include in each report under section 801(c) of the Department of Energy Organization Act a section which evaluates the progress the United States has made toward obtaining the goal of not more than 50 percent dependence on foreign oil sources by 2010.

(b) ALTERNATIVES.—The information required under this section to be included in the reports under section 801(c) of the Department of Energy Organization Act shall include a specification of what legislative or administrative actions must be implemented to meet this goal and

set forth a range of options and alternatives with a cost/benefit analysis for each option or alternative together with an estimate of the contribution each option or alternative could make to reduce foreign oil imports. The Secretary shall solicit information from the public and request information from the Energy Information Agency and other agencies to develop the information required under this section. The information shall indicate, in detail, options and alternatives to—

(1) increase the use of renewable domestic energy sources, including conventional and nonconventional sources;

(2) conserve energy resources, including improving efficiencies and decreasing consumption; and

(3) increase domestic production and use of oil, natural gas, nuclear, and coal, including any actions necessary to provide access to, and transportation of, these energy resources.

SEC. 903. STUDY OF AIRCRAFT EMISSIONS.

The Secretary of Transportation and the Administrator of the Environmental Protection Agency shall jointly commence a study within 60 days after the enactment of this Act to investigate the impact of aircraft emissions on air quality in areas that are considered to be in nonattainment for the national ambient air quality standard

for ozone. As part of this study, the Secretary and the Administrator shall focus on the impact of emissions by aircraft idling at airports and on the contribution of such emissions as a percentage of total emissions in the non-attainment area. Within 180 days of the commencement of the study, the Secretary and the Administrator shall submit a report to the Committees on Energy and Commerce and Transportation and Infrastructure of the United States House of Representatives and to the Committees on Environment and Public Works and Commerce, Science, and Transportation of the United States Senate containing the results of the study and recommendations with respect to a plan to maintain comprehensive data on aircraft emissions and methods by which such emissions may be reduced, without increasing individual aircraft noise, in order to assist in the attainment of the national ambient air quality standards.

DIVISION B

SEC. 2001. SHORT TITLE.

This division may be cited as the ''Comprehensive Energy Research and Technology Act of 2001''.

SEC. 2002. FINDINGS.

The Congress finds that—

(1) the Nation's prosperity and way of life are sustained by energy use;

(2) the growing imbalance between domestic energy production and consumption means that the Nation is becoming increasingly reliant on imported energy, which has the potential to undermine the Nation's economy, standard of living, and national security;

(3) energy conservation and energy efficiency help maximize the use of available energy resources, reduce energy shortages, lower the Nation's reliance on energy imports, mitigate the impacts of high energy prices, and help protect the environment and public health;

(4) development of a balanced portfolio of domestic energy supplies will ensure that future generations of Americans will have access to the energy they need;

(5) energy efficiency technologies, renewable and alternative energy technologies, and advanced energy systems technologies will help diversify the Nation's energy portfolio with few adverse environmental impacts and are vital to delivering clean energy to fuel the Nation's economic growth;

(6) development of reliable, affordable, and environmentally sound energy efficiency technologies, renewable and alternative energy technologies, and advanced energy systems technologies will require maintenance of a vibrant fundamental scientific knowledge base and continued scientific and technological innovations that can be accelerated by Federal funding, whereas commercial deployment of such systems and technologies are the responsibility of the private sector;

(7) Federal funding should focus on those programs, projects, and activities that are long-term, high-risk, noncommercial, and well-managed, and that provide the potential for scientific and technological advances; and

(8) public-private partnerships should be encouraged to leverage scarce taxpayer dollars.

SEC. 2003. PURPOSES.

The purposes of this division are to—

(1) protect and strengthen the Nation's economy, standard of living, and national security by reducing dependence on imported energy;

(2) meet future needs for energy services at the lowest total cost to the Nation, including environmental costs, giving balanced and comprehensive consideration to technologies that improve the efficiency of energy end uses and that enhance energy supply;

(3) reduce the air, water, and other environmental impacts (including emissions of greenhouse gases) of energy production, distribution, transportation, and use through the development of environmentally sustainable energy systems;

(4) consider the comparative environmental impacts of the energy saved or produced by specific programs, projects, or activities;

(5) maintain the technological competitiveness of the United States and stimulate economic growth through the development of advanced energy systems and technologies;

(6) foster international cooperation by developing international markets for domestically produced sustainable energy technologies, and by transferring environmentally sound, advanced energy sys-

tems and technologies to developing countries to promote sustainable development;

(7) provide sufficient funding of programs, projects, and activities that are performance-based and modeled as public-private partnerships, as appropriate; and

(8) enhance the contribution of a given program, project, or activity to fundamental scientific knowledge.

SEC. 2004. GOALS.

(a) IN GENERAL.—Subject to subsection (b), in order to achieve the purposes of this division under section 2003, the Secretary should conduct a balanced energy research, development, demonstration, and commercial application portfolio of programs guided by the following goals to meet the purposes of this division under section 2003.

(1) ENERGY CONSERVATION AND ENERGY EFFICIENCY.—

(A) For the Building Technology, State and Community Sector, the program should develop technologies, housing components, designs, and production methods that will, by 2010—

(i) reduce the monthly energy cost of new housing by 20 percent, compared to the cost as of the date of the enactment of this Act;

(ii) cut the environmental impact and energy use of new housing by 50 percent, compared to the impact and use as of the date of the enactment of this Act; and

(iii) improve durability and reduce maintenance costs by 50 percent compared to the durability and costs as of the date of the enactment of this Act.

(B) For the Industry Sector, the program should, in cooperation with the affected industries, improve the energy intensity of the major energy-consuming industries by at least 25 percent by 2010, compared to the energy intensity as of the date of the enactment of this Act.

(C) For Power Technologies, the program should, in cooperation with the affected industries—

(i) develop a microturbine (40 to 300 kilowatt) that is more than 40 percent more efficient by 2006, and more than 50 percent more efficient by 2010, compared

to the efficiency as of the date of the enactment of this Act; and

(ii) develop advanced materials for combustion systems that reduce emissions of nitrogen oxides by 30 to 50 percent while increasing efficiency 5 to 10 percent by 2007, compared to such emissions as of the date of the enactment of this Act.

(D) For the Transportation Sector, the program should, in cooperation with affected industries—

(i) develop a production prototype passenger automobile that has fuel economy equivalent to 80 miles per gallon of gasoline by 2004;

(ii) develop class 7 and 8 heavy duty trucks and buses with ultra low emissions and the ability to use an alternative fuel that has an average fuel economy equivalent to—

(I) 10 miles per gallon of gasoline by 2007; and

(II) 13 miles per gallon of gasoline by 2010;

(iii) develop a production prototype of a passenger automobile with zero equivalent emissions that has an average fuel economy of 100 miles per gallon of gasoline by 2010; and

(iv) improve, by 2010, the average fuel economy of trucks—

(I) in classes 1 and 2 by 300 percent; and

(II) in classes 3 through 6 by 200 percent,

compared to the fuel economy as of the date of the enactment of this Act.

(2) RENEWABLE ENERGY.—

(A) For Hydrogen Research, to carry out the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990, as amended by subtitle A of title II of this division.

(B) For bioenergy:

(i) The program should reduce the cost of bioenergy relative to other energy sources to enable the United States to triple bioenergy use by 2010.

(ii) For biopower systems, the program should reduce the cost of such systems to enable commercialization of integrated power-generating technologies that employ gas turbines and fuel cells integrated with bioenergy gasifiers within five years after the date of the enactment of this Act.

(iii) For biofuels, the program should accelerate research, development, and demonstration on advanced enzymatic hydrolysis technology for making ethanol from cellulosic feedstock, with the goal that between 2010 and 2015 ethanol produced from energy crops would be fully competitive in terms of price with gasoline as a neat fuel, in either internal combustion engines or fuel cell vehicles.

(C) For Geothermal Technology Development, the program should focus on advanced concepts for the long term. The first priority should be high-grade enhanced geothermal systems; the second priority should be lower grade, hot dry rock, and geopressured systems; and the third priority should be support of field

demonstrations of enhanced geothermal systems technology, including sites in lower grade areas to demonstrate the benefits of reservoir concepts to different conditions.

(D) For Hydropower, the program should provide a new generation of turbine technologies that will increase generating capacity and will be less damaging to fish and aquatic ecosystems.

(E) For Concentrating Solar Power, the program should strengthen ongoing research, development, and demonstration combining high-efficiency and high-temperature receivers with advanced thermal storage and power cycles, with the goal of making solar-only power (including baseload solar power) widely competitive with fossil fuel power by 2015. The program should limit or halt its research and development on power-tower and power-trough technologies because further refinements to these concepts will not further their deployment, and should assess the market prospects for solar dish/engine technologies to determine whether continued research and development is warranted.

(F) For Photovoltaic Energy Systems, the program should pursue research, development, and demonstration that will, by 2005, increase the efficiency of thin film modules from the current 7 percent to 11 percent in multi-million watt production; reduce the direct manufacturing cost of photovoltaic modules by 30 percent from the current $2.50 per watt to $1.75 per watt by 2005; and establish greater than a 20-year lifetime of photovoltaic systems by improving the reliability and lifetime of balance-of-system components and reducing recurring cost by 40 percent. The program's top priority should be the development of sound manufacturing technologies for thin-film modules, and the program should make a concerted effort to integrate fundamental research and basic engineering research.

(G) For Solar Building Technology Research, the program should complete research and development on new polymers and manufacturing processes to reduce the cost of solar water heating by 50 percent by 2004, compared to the cost as of the date of enactment of this Act.

(H) For Wind Energy Systems, the program should reduce the cost of wind energy to three cents per kilowatt-hour at Class 6 (15 miles-per-hour annual average) wind sites by 2004, and 4 cents per kilowatt-hour in Class 4 (13 miles-per-hour annual average) wind sites by 2015, and further if required so that wind power can be widely competitive with fossil-fuel-based electricity in a restructured electric industry. Program research on advanced wind turbine technology should focus on turbulent flow studies, durable materials to extend turbine life, blade efficiency, and higher efficiency operation in low quality wind regimes.

(I) For Electric Energy Systems and Storage, including High Temperature Superconducting Research and Development, Energy Storage Systems, and Transmission Reliability, the program should develop high capacity superconducting transmission lines and generators, highly reliable energy storage systems, and distributed generating systems to accommodate multiple types of energy sources under common interconnect standards.

(J) For the International Renewable Energy and Renewable Energy Production Incentive programs, and Renewable Program Support, the program should encourage the commercial application of renewable energy technologies by developed and developing countries, State and local governmental entities and nonprofit electric cooperatives, and by the competitive domestic market.

(3) NUCLEAR ENERGY.—

(A) For university nuclear science and engineering, the program should carry out the provisions of subtitle A of title III of this division.

(B) For fuel cycle research, development, and demonstration, the program should carry out the provisions of subtitle B of title III of this division.

(C) For the Nuclear Energy Research Initiative, the program should accomplish the objectives of section 2341(b) of this Act.

(D) For the Nuclear Energy Plant Optimization Program, the program should accomplish the objectives of section 2342(b) of this Act.

(E) For Nuclear Energy Technologies, the program should carry out the provisions of section 2343 of this Act.

(F) For Advanced Radioisotope Power Systems, the program should ensure that the United States has adequate capability to power future satellite and space missions.

(4) FOSSIL ENERGY.—

(A) For core fossil energy research and development, the program should achieve the goals outlined by the Department's Vision 21 Program. This research should address fuel-flexible gasification and turbines, fuel cells, advanced-combustion systems, advanced fuels and chemicals, advanced modeling and systems analysis, materials and heat exchangers, environmental control technologies, gas-stream purification, gas-separation technology, and sequestration research and development focused on cost-effective novel concepts for capturing, reusing or storing, or otherwise mitigating carbon and other greenhouse gas emissions.

(B) For offshore oil and natural gas resources, the program should investigate and develop technologies to—

(i) extract methane hydrates in coastal waters of the United States, in accordance with the provisions of the Methane Hydrate Research and Development Act of 2000; and

(ii) develop natural gas and oil reserves in the ultra-deepwater of the Central and Western Gulf of Mexico. Research and development on ultra-deepwater resource recovery shall focus on improving the safety and efficiency of such recovery and of sub-sea production technology used for such recovery, while lowering costs.

(C) For transportation fuels, the program should support a comprehensive transportation fuels strategy to increase the price elasticity of oil supply and demand by focusing research on reducing the cost of producing transportation fuels from natural gas and indirect liquefaction of coal.

(5) SCIENCE.—The Secretary, through the Office of Science, should—

(A) develop and maintain a robust portfolio of fundamental scientific and energy research, including High Energy and Nuclear

Physics, Biological and Environmental Research, Basic Energy Sciences (including Materials Sciences, Chemical Sciences, Engineering and Geosciences, and Energy Biosciences), Advanced Scientific Computing, Energy Research and Analysis, Multiprogram Energy Laboratories-Facilities Support, Fusion Energy Sciences, and Facilities and Infrastructure;

(B) maintain, upgrade, and expand, as appropriate, and in accordance with the provisions of this division, the scientific user facilities maintained by the Office of Science, and ensure that they are an integral part of the Department's mission for exploring the frontiers of fundamental energy sciences; and

(C) ensure that its fundamental energy sciences programs, where appropriate, help inform the applied research and development programs of the Department.

(b) REVIEW AND ASSESSMENT.—The Secretary shall perform an assessment that establishes measurable cost and performance-based goals, or that modifies the goals under subsection (a), as appropriate, for 2005, 2010, 2015, and 2020 for each of the programs authorized by this division that would enable each such program to meet

the purposes of this division under section 2003. Such assessment shall be based on the latest scientific and technical knowledge, and shall also take into consideration, as appropriate, the comparative environmental impacts (including emissions of greenhouse gases) of the energy saved or produced by specific programs.

(c) CONSULTATION.—In establishing the measurable cost and performance-based goals under subsection (b), the Secretary shall consult with the private sector, institutions of higher learning, national laboratories, environmental organizations, professional and technical societies, and any other persons as the Secretary considers appropriate.

(d) SCHEDULE.—The Secretary shall—

(1) issue and publish in the Federal Register a set of draft measurable cost and performance-based goals for the programs authorized by this division for public comment—

(A) in the case of a program established before the date of the enactment of this Act, not later than 120 days after the date of the enactment of this Act; and

(B) in the case of a program not established before the date of the enactment of this

Act, not later than 120 days after the date of establishment of the program;

(2) not later than 60 days after the date of publication under paragraph (1), after taking into consideration any public comments received, transmit to the Congress and publish in the Federal Register the final measurable cost and performance-based goals; and

(3) update all such cost and performance-based goals on a biennial basis.

SEC. 2005. DEFINITIONS.

For purposes of this division, except as otherwise provided—

(1) the term ''Administrator'' means the Administrator of the Environmental Protection Agency;

(2) the term ''appropriate congressional committees'' means—

(A) the Committee on Science and the Committee on Appropriations of the House of Representatives; and

(B) the Committee on Energy and Natural Resources and the Committee on Appropriations of the Senate;

(3) the term ''Department'' means the Department of Energy; and

(4) the term ''Secretary'' means the Secretary of Energy.

SEC. 2006. AUTHORIZATIONS.

Authorizations of appropriations under this division are for environmental research and development, scientific and energy research, development, and demonstration, and commercial application of energy technology programs, projects, and activities.

SEC. 2007. BALANCE OF FUNDING PRIORITIES.

(a) SENSE OF CONGRESS.—It is the sense of the Congress that the funding of the various programs authorized by titles I through IV of this division should remain in the same proportion to each other as provided in this division, regardless of the total amount of funding made available for those programs.

(b) REPORT TO CONGRESS.—If for fiscal year 2002, 2003, or 2004 the amounts appropriated in general appropriations Acts for the programs authorized in titles I through IV of this division are not in the same proportion to one another as are the authorizations for such programs in this division, the Secretary and the Administrator shall, within 60 days after the date of the enactment of the last general appropriations Act appropriating amounts for such programs, transmit to the appropriate congressional committees a report describing the pro-

grams, projects, and activities that would have been funded if the proportions provided for in this division had been maintained in the appropriations. The amount appropriated for the program receiving the highest percentage of its authorized funding for a fiscal year shall be used as the baseline for calculating the proportional deficiencies of appropriations for other programs in that fiscal year.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle A—Alternative Fuel Vehicles

SEC. 2101. SHORT TITLE.

This subtitle may be cited as the ''Alternative Fuel Vehicle Acceleration Act of 2001''.

SEC. 2102. DEFINITIONS.

For the purposes of this subtitle, the following definitions apply:

(1) ALTERNATIVE FUEL VEHICLE.—

(A) IN GENERAL.—Except as provided in subparagraph (B), the term ''alternative fuel vehicle'' means a motor vehicle that is powered—

(i) in whole or in part by electricity, including electricity supplied by a fuel cell;

(ii) by liquefied natural gas;

(iii) by compressed natural gas;

(iv) by liquefied petroleum gas;

(v) by hydrogen;

(vi) by methanol or ethanol at no less than 85 percent by volume; or

(vii) by propane.

(B) EXCLUSIONS.—The term ''alternative fuel vehicle'' does not include—

(i) any vehicle designed to operate solely on gasoline or diesel derived from fossil fuels, regardless of whether it can also be operated on an alternative fuel; or

(ii) any vehicle that the Secretary determines, by rule, does not yield substantial environmental benefits over a vehicle operating solely on gasoline or diesel derived from fossil fuels.

(2) PILOT PROGRAM.—The term ''pilot program'' means the competitive grant program established under section 2103.

(3) ULTRA-LOW SULFUR DIESEL VEHICLE.—The term ''ultra-low sulfur diesel vehicle'' means a vehicle powered by a heavy-duty diesel engine that—

(A) is fueled by diesel fuel which contains sulfur at not more than 15 parts per million; and

(B) emits not more than the lesser of—

(i) for vehicles manufactured in—

(I) model years 2001 through 2003, 3.0 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and

(II) model years 2004 through 2006, 2.5 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; or

(ii) the emissions of nonmethane hydrocarbons, oxides of nitrogen, and particulate matter of the best performing technology of ultra-low sulfur diesel vehicles of the same type that are commercially available.

SEC. 2103. PILOT PROGRAM.

(a) ESTABLISHMENT.—The Secretary shall establish a competitive grant pilot program to provide not more than 15 grants to State governments, local governments, or metropolitan transportation authorities to carry out a project or projects for the purposes described in subsection (b).

(b) GRANT PURPOSES.—Grants under this section may be used for the following purposes:

(1) The acquisition of alternative fuel vehicles, including—

(A) passenger vehicles;

(B) buses used for public transportation or transportation to and from schools;

(C) delivery vehicles for goods or services;

(D) ground support vehicles at public airports, including vehicles to carry baggage or push airplanes away from terminal gates; and

(E) motorized two-wheel bicycles, scooters, or other vehicles for use by law enforcement personnel or other State or local government or metropolitan transportation authority employees.

(2) The acquisition of ultra-low sulfur diesel vehicles.

(3) Infrastructure necessary to directly support an alternative fuel vehicle project funded by the grant, including fueling and other support equipment.

(4) Operation and maintenance of vehicles, infrastructure, and equipment acquired as part of a project funded by the grant.

(c) APPLICATIONS.—

(1) REQUIREMENTS.—The Secretary shall issue requirements for applying for grants under the pilot program. At a minimum, the Secretary shall require that applications be submitted by the head of a State or local government or a metropolitan transportation authority, or any combination thereof, and shall include—

(A) at least one project to enable passengers or goods to be transferred directly from one alternative fuel vehicle or ultra-low sulfur diesel vehicle to another in a linked transportation system;

(B) a description of the projects proposed in the application, including how they meet the requirements of this subtitle;

(C) an estimate of the ridership or degree of use of the projects proposed in the application;

(D) an estimate of the air pollution emissions reduced and fossil fuel displaced as a result of the projects proposed in the application, and a plan to collect and disseminate environmental data, related to the projects to be funded under the grant, over the life of the projects;

(E) a description of how the projects proposed in the application will be sustainable without Federal assistance after the completion of the term of the grant;

(F) a complete description of the costs of each project proposed in the application, including acquisition, construction, operation, and maintenance costs over the expected life of the project;

(G) a description of which costs of the projects proposed in the application will be supported by Federal assistance under this subtitle; and

(H) documentation to the satisfaction of the Secretary that diesel fuel containing sulfur at not more than 15 parts per million is avail-

able for carrying out the projects, and a commitment by the applicant to use such fuel in carrying out the projects.

(2) PARTNERS.—An applicant under paragraph (1) may carry out projects under the pilot program in partnership with public and private entities.

(d) SELECTION CRITERIA.—In evaluating applications under the pilot program, the Secretary shall consider each applicant's previous experience with similar projects and shall give priority consideration to applications that—

(1) are most likely to maximize protection of the environment;

(2) demonstrate the greatest commitment on the part of the applicant to ensure funding for the proposed projects and the greatest likelihood that each project proposed in the application will be maintained or expanded after Federal assistance under this subtitle is completed; and

(3) exceed the minimum requirements of subsection (c)(1)(A).

(e) PILOT PROJECT REQUIREMENTS.—

(1) MAXIMUM AMOUNT.—The Secretary shall not provide more than $20,000,000 in Federal assistance under the pilot program to any applicant.

(2) COST SHARING.—The Secretary shall not provide more than 50 percent of the cost, incurred during the period of the grant, of any project under the pilot program.

(3) MAXIMUM PERIOD OF GRANTS.—The Secretary shall not fund any applicant under the pilot program for more than 5 years.

(4) DEPLOYMENT AND DISTRIBUTION.—The Secretary shall seek to the maximum extent practicable to achieve nationwide deployment of alternative fuel vehicles through the pilot program, and shall ensure a broad geographic distribution of project sites.

(5) TRANSFER OF INFORMATION AND KNOWLEDGE.—The Secretary shall establish mechanisms to ensure that the information and knowledge gained by participants in the pilot program are transferred among the pilot program participants and to other interested parties, including other applicants that submitted applications.

(f) SCHEDULE.—

(1) PUBLICATION.—Not later than 3 months after the date of enactment of this Act, the Secretary shall publish in the Federal Register, Commerce Business Daily, and elsewhere as appropriate,

a request for applications to undertake projects under the pilot program. Applications shall be due within 6 months of the publication of the notice.

(2) SELECTION.—Not later than 6 months after the date by which applications for grants are due, the Secretary shall select by competitive, peer review all applications for projects to be awarded a grant under the pilot program.

(g) LIMIT ON FUNDING.—The Secretary shall provide not less than 20 percent and not more than 25 percent of the grant funding made available under this section for the acquisition of ultra-low sulfur diesel vehicles.

SEC. 2104. REPORTS TO CONGRESS.

(a) INITIAL REPORT.—Not later than 2 months after the date grants are awarded under this subtitle, the Secretary shall transmit to the appropriate congressional committees a report containing—

(1) an identification of the grant recipients and a description of the projects to be funded;

(2) an identification of other applicants that submitted applications for the pilot program; and

(3) a description of the mechanisms used by the Secretary to ensure that the information and knowledge gained by participants in the pilot program are transferred among the pilot program participants

and to other interested parties, including other applicants that submitted applications.

(b) EVALUATION.—Not later than 3 years after the date of enactment of this Act, and annually thereafter until the pilot program ends, the Secretary shall transmit to the appropriate congressional committees a report containing an evaluation of the effectiveness of the pilot program, including an assessment of the benefits to the environment derived from the projects included in the pilot program as well as an estimate of the potential benefits to the environment to be derived from widespread application of alternative fuel vehicles and ultra-low sulfur diesel vehicles.

SEC. 2105. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary $200,000,000 to carry out this subtitle, to remain available until expended.

Subtitle B—Distributed Power Hybrid Energy Systems

SEC. 2121. FINDINGS.

The Congress makes the following findings:

(1) Our ability to take advantage of our renewable, indigenous resources in a cost-effective manner can be greatly advanced through systems that com-

pensate for the intermittent nature of these resources through distributed power hybrid systems.

(2) Distributed power hybrid systems can—

(A) shelter consumers from temporary energy price volatility created by supply and demand mismatches;

(B) increase the reliability of energy supply; and

(C) address significant local differences in power and economic development needs and resource availability that exist throughout the United States.

(3) Realizing these benefits will require a concerted and integrated effort to remove market barriers to adopting distributed power hybrid systems by—

(A) developing the technological foundation that enables designing, testing, certifying, and operating distributed power hybrid systems; and

(B) providing the policy framework that reduces such barriers.

(4) While many of the individual distributed power hybrid systems components are either available or under development in existing private and public sector programs, the capabilities to integrate

these components into workable distributed power hybrid systems that maximize benefits to consumers in a safe manner often are not coherently being addressed.

SEC. 2122. DEFINITIONS.

For purposes of this subtitle—

(1) the term ''distributed power hybrid system'' means a system using 2 or more distributed power sources, operated together with associated supporting equipment, including storage equipment, and software necessary to provide electric power onsite and to an electric distribution system; and

(2) the term ''distributed power source'' means an independent electric energy source of usually 10 megawatts or less located close to a residential, commercial, or industrial load center, including—

(A) reciprocating engines;

(B) turbines;

(C) microturbines;

(D) fuel cells;

(E) solar electric systems;

(F) wind energy systems;

(G) biopower systems;

(H) geothermal power systems; or

(I) combined heat and power systems.

SEC. 2123. STRATEGY.

(a) REQUIREMENT.—Not later than 1 year after the date of the enactment of this Act, the Secretary shall develop and transmit to the Congress a distributed power hybrid systems strategy showing—

(1) needs best met with distributed power hybrid systems configurations, especially systems including one or more solar or renewable power sources; and

(2) technology gaps and barriers (including barriers to efficient connection with the power grid) that hamper the use of distributed power hybrid systems.

(b) ELEMENTS.—The strategy shall provide for development of—

(1) system integration tools (including databases, computer models, software, sensors, and controls) needed to plan, design, build, and operate distributed power hybrid systems for maximum benefits;

(2) tests of distributed power hybrid systems, power parks, and microgrids, including field tests and cost-shared demonstrations with industry;

(3) design tools to characterize the benefits of distributed power hybrid systems for consumers, to reduce testing needs, to speed commercialization,

and to generate data characterizing grid operations, including interconnection requirements;

(4) precise resource assessment tools to map local resources for distributed power hybrid systems; and

(5) a comprehensive research, development, demonstration, and commercial application program to ensure the reliability, efficiency, and environmental integrity of distributed energy resources, focused on filling gaps in distributed power hybrid systems technologies identified under subsection (a)(2), which may include—

(A) integration of a wide variety of advanced technologies into distributed power hybrid systems;

(B) energy storage devices;

(C) environmental control technologies;

(D) interconnection standards, protocols, and equipment; and

(E) ancillary equipment for dispatch and control.

(c) IMPLEMENTATION AND INTEGRATION.—The Secretary shall implement the strategy transmitted under subsection (a) and the research program under subsection (b)(5). Activities pursuant to the strategy shall be inte-

grated with other activities of the Department's Office of Power Technologies.

SEC. 2124. HIGH POWER DENSITY INDUSTRY PROGRAM.

(a) IN GENERAL.—The Secretary shall develop and implement a comprehensive research, development, demonstration, and commercial application program to improve energy efficiency, reliability, and environmental responsibility in high power density industries, such as data centers, server farms, telecommunications facilities, and heavy industry.

(b) AREAS.—In carrying out this section, the Secretary shall consider technologies that provide—

(1) significant improvement in efficiency of high power density facilities, and in data and telecommunications centers, using advanced thermal control technologies;

(2) significant improvements in air-conditioning efficiency in facilities such as data centers and telecommunications facilities;

(3) significant advances in peak load reduction; and

(4) advanced real time metering and load management and control devices.

(c) IMPLEMENTATION AND INTEGRATION.—Activities pursuant to this program shall be integrated with other

activities of the Department's Office of Power Technologies.

SEC. 2125. MICRO-COGENERATION ENERGY TECHNOLOGY.

The Secretary shall make competitive, merit-based grants to consortia of private sector entities for the development of micro-cogeneration energy technology. The consortia shall explore the creation of small-scale combined heat and power through the use of residential heating appliances. There are authorized to be appropriated to the Secretary $20,000,000 to carry out this section, to remain available until expended.

SEC. 2126. PROGRAM PLAN.

Within 4 months after the date of enactment of this Act, the Secretary, in consultation with other appropriate Federal agencies, shall prepare and transmit to the Congress a 5-year program plan to guide activities under this subtitle. In preparing the program plan, the Secretary shall consult with appropriate representatives of the distributed energy resources, power transmission, and high power density industries to prioritize appropriate program areas. The Secretary shall also seek the advice of utilities, energy services providers, manufacturers, institutions of higher learning, other appropriate State and local agencies, environmental organizations, professional and tech-

nical societies, and any other persons the Secretary considers appropriate.

SEC. 2127. REPORT.

Two years after date of enactment of this Act and at two year intervals thereafter, the Secretary, jointly with other appropriate Federal agencies, shall transmit a report to Congress describing the progress made to achieve the purposes of this subtitle.

SEC. 2128. VOLUNTARY CONSENSUS STANDARDS.

Not later than 2 years after the date of enactment of this Act, the Secretary, in consultation with the National Institute of Standards and Technology, shall work with the Institute of Electrical and Electronic Engineers and other standards development organizations toward the development of voluntary consensus standards for distributed energy systems for use in manufacturing and using equipment and systems for connection with electric distribution systems, for obtaining electricity from, or providing electricity to, such systems.

Subtitle C—Secondary Electric Vehicle Battery Use

SEC. 2131. DEFINITIONS.

For purposes of this subtitle, the term—

(1) ''battery'' means an energy storage device that previously has been used to provide motive

power in a vehicle powered in whole or in part by electricity; and

(2) ''associated equipment'' means equipment located at the location where the batteries will be used that is necessary to enable the use of the energy stored in the batteries.

SEC. 2132. ESTABLISHMENT OF SECONDARY ELECTRIC VEHICLE BATTERY USE PROGRAM.

(a) PROGRAM.—The Secretary shall establish and conduct a research, development, and demonstration program for the secondary use of batteries where the original use of such batteries was in transportation applications. Such program shall be—

(1) designed to demonstrate the use of batteries in secondary application, including utility and commercial power storage and power quality;

(2) structured to evaluate the performance, including longevity of useful service life and costs, of such batteries in field operations, and evaluate the necessary supporting infrastructure, including disposal and reuse of batteries; and

(3) coordinated with ongoing secondary battery use programs underway at the national laboratories and in industry.

(b) SOLICITATION.—(1) Not later than 6 months after the date of the enactment of this Act, the Secretary shall solicit proposals to demonstrate the secondary use of batteries and associated equipment and supporting infrastructure in geographic locations throughout the United States. The Secretary may make additional solicitations for proposals if the Secretary determines that such solicitations are necessary to carry out this section.

(2)(A) Proposals submitted in response to a solicitation under this section shall include—

(i) a description of the project, including the batteries to be used in the project, the proposed locations and applications for the batteries, the number of batteries to be demonstrated, and the type, characteristics, and estimated life-cycle costs of the batteries compared to other energy storage devices currently used;

(ii) the contribution, if any, of State or local governments and other persons to the demonstration project;

(iii) the type of associated equipment to be demonstrated and the type of supporting infrastructure to be demonstrated; and

(iv) any other information the Secretary considers appropriate.

(B) If the proposal includes a lease arrangement, the proposal shall indicate the terms of such lease arrangement for the batteries and associated equipment.

(c) SELECTION OF PROPOSALS.—(1)(A) The Secretary shall, not later than 3 months after the closing date established by the Secretary for receipt of proposals under subsection (b), select at least 5 proposals to receive financial assistance under this section.

(B) No one project selected under this section shall receive more than 25 percent of the funds authorized under this section. No more than 3 projects selected under this section shall demonstrate the same battery type.

(2) In selecting a proposal under this section, the Secretary shall consider—

(A) the ability of the proposer to acquire the batteries and associated equipment and to successfully manage and conduct the demonstration project, including the reporting requirements set forth in paragraph (3)(B);

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

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

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

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

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

(G) the extent of involvement of State or local government and other persons in the demonstration project and whether such involvement will—

(i) permit a reduction of the Federal cost share per project; or

(ii) otherwise be used to allow the Federal contribution to be provided to demonstrate a greater number of batteries; and

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

(3) CONDITIONS.—The Secretary shall require that—

(A) as a part of a demonstration project, the users of the batteries provide to the proposer information regarding the operation, maintenance, performance, and use of the batteries, and the proposer provide such information to the battery manufac-

turer, for 3 years after the beginning of the demonstration project;

(B) the proposer provide to the Secretary such information regarding the operation, maintenance, performance, and use of the batteries as the Secretary may request during the period of the demonstration project; and

(C) the proposer provide at least 50 percent of the costs associated with the proposal.

SEC. 2133. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary, from amounts authorized under section 2161(a), for purposes of this subtitle—

(1) $1,000,000 for fiscal year 2002;

(2) $7,000,000 for fiscal year 2003; and

(3) $7,000,000 for fiscal year 2004.

Such appropriations may remain available until expended.

Subtitle D—Green School Buses

SEC. 2141. SHORT TITLE.

This subtitle may be cited as the ''Clean Green School Bus Act of 2001''.

SEC. 2142. ESTABLISHMENT OF PILOT PROGRAM.

(a) ESTABLISHMENT.—The Secretary shall establish a pilot program for awarding grants on a competitive basis to eligible entities for the demonstration and commercial

application of alternative fuel school buses and ultra-low sulfur diesel school buses.

(b) REQUIREMENTS.—Not later than 3 months after the date of the enactment of this Act, the Secretary shall establish and publish in the Federal register grant requirements on eligibility for assistance, and on implementation of the program established under subsection (a), including certification requirements to ensure compliance with this subtitle.

(c) SOLICITATION.—Not later than 6 months after the date of the enactment of this Act, the Secretary shall solicit proposals for grants under this section.

(d) ELIGIBLE RECIPIENTS.—A grant shall be awarded under this section only—

(1) to a local governmental entity responsible for providing school bus service for one or more public school systems; or

(2) jointly to an entity described in paragraph (1) and a contracting entity that provides school bus service to the public school system or systems.

(e) TYPES OF GRANTS.—

(1) IN GENERAL.—Grants under this section shall be for the demonstration and commercial application of technologies to facilitate the use of alternative fuel school buses and ultra-low sulfur diesel

school buses in lieu of buses manufactured before model year 1977 and diesel-powered buses manufactured before model year 1991.

(2) NO ECONOMIC BENEFIT.—Other than the receipt of the grant, a recipient of a grant under this section may not receive any economic benefit in connection with the receipt of the grant.

(3) PRIORITY OF GRANT APPLICATIONS.—The Secretary shall give priority to awarding grants to applicants who can demonstrate the use of alternative fuel buses and ultra-low sulfur diesel school buses in lieu of buses manufactured before model year 1977.

(f) CONDITIONS OF GRANT.—A grant provided under this section shall include the following conditions:

(1) All buses acquired with funds provided under the grant shall be operated as part of the school bus fleet for which the grant was made for a minimum of 5 years.

(2) Funds provided under the grant may only be used—

(A) to pay the cost, except as provided in paragraph (3), of new alternative fuel school buses or ultra-low sulfur diesel school buses, including State taxes and contract fees; and

(B) to provide—

(i) up to 10 percent of the price of the alternative fuel buses acquired, for necessary alternative fuel infrastructure if the infrastructure will only be available to the grant recipient; and

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

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

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

(g) BUSES.—Funding under a grant made under this section may be used to demonstrate the use only of new

alternative fuel school buses or ultra-low sulfur diesel school buses—

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

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

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

(A) for buses manufactured in model years 2001 and 2002, 2.5 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and

(B) for buses manufactured in model years 2003 through 2006, 1.8 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and

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

(A) for buses manufactured in model years 2001 through 2003, 3.0 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and

(B) for buses manufactured in model years 2004 through 2006, 2.5 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter,

except that under no circumstances shall buses be acquired under this section that emit nonmethane hydrocarbons, oxides of nitrogen, or particulate matter at a rate greater than the best performing technology of ultra-low sulfur diesel school buses commercially available at the time the grant is made.

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

(i) LIMIT ON FUNDING.—The Secretary shall provide not less than 20 percent and not more than 25 percent of the grant funding made available under this section for any fiscal year for the acquisition of ultra-low sulfur diesel school buses.

(j) DEFINITIONS.—For purposes of this section—

(1) the term ''alternative fuel school bus'' means a bus powered substantially by electricity (including electricity supplied by a fuel cell), or by liquefied natural gas, compressed natural gas, liquefied petroleum gas, hydrogen, propane, or methanol or ethanol at no less than 85 percent by volume; and

(2) the term ''ultra-low sulfur diesel school bus'' means a school bus powered by diesel fuel which contains sulfur at not more than 15 parts per million.

SEC. 2143. FUEL CELL BUS DEVELOPMENT AND DEMONSTRATION PROGRAM.

(a) ESTABLISHMENT OF PROGRAM.—The Secretary shall establish a program for entering into cooperative agreements with private sector fuel cell bus developers for the development of fuel cell-powered school buses, and subsequently with not less than 2 units of local government using natural gas-powered school buses and such private sector fuel cell bus developers to demonstrate the use of fuel cell-powered school buses.

(b) COST SHARING.—The non-Federal contribution for activities funded under this section shall be not less than—

(1) 20 percent for fuel infrastructure development activities; and

(2) 50 percent for demonstration activities and for development activities not described in paragraph (1).

(c) FUNDING.—No more than $25,000,000 of the amounts authorized under section 2144 may be used for carrying out this section for the period encompassing fiscal years 2002 through 2006.

(d) REPORTS TO CONGRESS.—Not later than 3 years after the date of the enactment of this Act, and not later than October 1, 2006, the Secretary shall transmit to the appropriate congressional committees a report that—

(1) evaluates the process of converting natural gas infrastructure to accommodate fuel cell-powered school buses; and

(2) assesses the results of the development and demonstration program under this section.

SEC. 2144. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary for carrying out this subtitle, to remain available until expended—

(1) $40,000,000 for fiscal year 2002;

(2) $50,000,000 for fiscal year 2003;

(3) $60,000,000 for fiscal year 2004;

(4) $70,000,000 for fiscal year 2005; and

(5) $80,000,000 for fiscal year 2006.

Subtitle E—Next Generation Lighting Initiative

SEC. 2151. SHORT TITLE.

This subtitle may be cited as ''Next Generation Lighting Initiative Act''.

SEC. 2152. DEFINITION.

In this subtitle, the term ''Lighting Initiative'' means the ''Next Generation Lighting Initiative'' established under section 2153(a).

SEC. 2153. NEXT GENERATION LIGHTING INITIATIVE.

(a) ESTABLISHMENT.—The Secretary is authorized to establish a lighting initiative to be known as the ''Next Generation Lighting Initiative'' to research, develop, and conduct demonstration activities on advanced lighting technologies, including white light emitting diodes.

(b) RESEARCH OBJECTIVES.—The research objectives of the Lighting Initiative shall be to develop, by 2011, advanced lighting technologies that, compared to incandescent and fluorescent lighting technologies as of the date of the enactment of this Act, are—

(1) longer lasting;

(2) more energy-efficient; and

(3) cost-competitive.

SEC. 2154. STUDY.

(a) IN GENERAL.—Not later than 6 months after the date of enactment of this Act, the Secretary, in consultation with other Federal agencies, as appropriate, shall complete a study on strategies for the development and commercial application of advanced lighting technologies. The Secretary shall request a review by the National Academies of Sciences and Engineering of the study under this subsection, and shall transmit the results of the study to the appropriate congressional committees.

(b) REQUIREMENTS.—The study shall—

(1) develop a comprehensive strategy to implement the Lighting Initiative; and

(2) identify the research and development, manufacturing, deployment, and marketing barriers that must be overcome to achieve a goal of a 25 percent market penetration by advanced lighting technologies into the incandescent and fluorescent lighting market by the year 2012.

(c) IMPLEMENTATION.—As soon as practicable after the review of the study under subsection (a) is transmitted to the Secretary by the National Academies of Sciences and Engineering, the Secretary shall adapt the implementation of the Lighting Initiative taking into consideration the recommendations of the National Academies of Sciences and Engineering.

SEC. 2155. GRANT PROGRAM.

(a) IN GENERAL.—Subject to section 2603 of this Act, the Secretary may make merit-based competitive grants to firms and research organizations that conduct research, development, and demonstration projects related to advanced lighting technologies.

(b) ANNUAL REVIEW.—

(1) IN GENERAL.—An annual independent review of the grant-related activities of firms and research organizations receiving a grant under this section shall be conducted by a committee appointed by the Secretary under the Federal Advisory Committee Act (5 U.S.C. App.), or, at the request of the Secretary, a committee appointed by the National Academies of Sciences and Engineering.

(2) REQUIREMENTS.—Using clearly defined standards established by the Secretary, the review shall assess technology advances and progress toward commercialization of the grant-related activities of firms or research organizations during each fiscal year of the grant program.

(c) TECHNICAL AND FINANCIAL ASSISTANCE.—The national laboratories and other Federal agencies, as appropriate, shall cooperate with and provide technical and financial assistance to firms and research organizations

conducting research, development, and demonstration projects carried out under this subtitle.

Subtitle F—Department of Energy Authorization of Appropriations

SEC. 2161. AUTHORIZATION OF APPROPRIATIONS.

(a) OPERATION AND MAINTENANCE.—In addition to amounts authorized to be appropriated under section 2105, section 2125, and section 2144, there are authorized to be appropriated to the Secretary for subtitle B, subtitle C, subtitle E, and for Energy Conservation operation and maintenance (including Building Technology, State and Community Sector (Nongrants), Industry Sector, Transportation Sector, Power Technologies, and Policy and Management) $625,000,000 for fiscal year 2002, $700,000,000 for fiscal year 2003, and $800,000,000 for fiscal year 2004, to remain available until expended.

(b) LIMITS ON USE OF FUNDS.—None of the funds authorized to be appropriated in subsection (a) may be used for—

(1) Building Technology, State and Community Sector—

(A) Residential Building Energy Codes;

(B) Commercial Building Energy Codes;

(C) Lighting and Appliance Standards;

(D) Weatherization Assistance Program; or

(E) State Energy Program; or

(2) Federal Energy Management Program.

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

SEC. 2171. SHORT TITLE.

This subtitle may be cited as the ''Environmental Protection Agency Office of Air and Radiation Authorization Act of 2001''.

SEC. 2172. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Administrator for Office of Air and Radiation Climate Change Protection Programs $121,942,000 for fiscal year 2002, $126,800,000 for fiscal year 2003, and $131,800,000 for fiscal year 2004 to remain available until expended, of which—

(1) $52,731,000 for fiscal year 2002, $54,800,000 for fiscal year 2003, and $57,000,000 for fiscal year 2004 shall be for Buildings;

(2) $32,441,000 for fiscal year 2002, $33,700,000 for fiscal year 2003, and $35,000,000 for fiscal year 2004 shall be for Transportation;

(3) $27,295,000 for fiscal year 2002, $28,400,000 for fiscal year 2003, and $29,500,000 for fiscal year 2004 shall be for Industry;

(4) $1,700,000 for fiscal year 2002, $1,800,000 for fiscal year 2003, and $1,900,000 for fiscal year 2004 shall be for Carbon Removal;

(5) $2,500,000 for fiscal year 2002, $2,600,000 for fiscal year 2003, and $2,700,000 for fiscal year 2004 shall be for State and Local Climate; and

(6) $5,275,000 for fiscal year 2002, $5,500,000 for fiscal year 2003, and $5,700,000 for fiscal year 2004 shall be for International Capacity Building.

SEC. 2173. LIMITS ON USE OF FUNDS.

(a) PRODUCTION OR PROVISION OF ARTICLES OR SERVICES.—None of the funds authorized to be appropriated by this subtitle may be used to produce or provide articles or services for the purpose of selling the articles or services to a person outside the Federal Government, unless the Administrator determines that comparable articles or services are not available from a commercial source in the United States.

(b) REQUESTS FOR PROPOSALS.—None of the funds authorized to be appropriated by this subtitle may be used by the Environmental Protection Agency to prepare or ini-

tiate Requests for Proposals for a program if the program has not been authorized by Congress.

SEC. 2174. COST SHARING.

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

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

(c) CALCULATION OF AMOUNT.—In calculating the amount of the non-Federal commitment under subsection

(a) or (b), the Administrator may include personnel, services, equipment, and other resources.

SEC. 2175. LIMITATION ON DEMONSTRATION AND COMMERCIAL APPLICATIONS OF ENERGY TECHNOLOGY.

The Administrator shall provide funding for scientific or energy demonstration or commercial application of energy technology programs, projects, or activities of the Office of Air and Radiation only for technologies or processes that can be reasonably expected to yield new, measurable benefits to the cost, efficiency, or performance of the technology or process.

SEC. 2176. REPROGRAMMING.

(a) AUTHORITY.—The Administrator may use amounts appropriated under this subtitle for a program, project, or activity other than the program, project, or activity for which such amounts were appropriated only if—

(1) the Administrator has transmitted to the appropriate congressional committees a report described in subsection (b) and a period of 30 days has elapsed after such committees receive the report;

(2) amounts used for the program, project, or activity do not exceed—

(A) 105 percent of the amount authorized for the program, project, or activity; or

(B) $250,000 more than the amount authorized for the program, project, or activity, whichever is less; and

(3) the program, project, or activity has been presented to, or requested of, the Congress by the Administrator.

(b) REPORT.—(1) The report referred to in subsection (a) is a report containing a full and complete statement of the action proposed to be taken and the facts and circumstances relied upon in support of the proposed action.

(2) In the computation of the 30-day period under subsection (a), there shall be excluded any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain.

(c) LIMITATIONS.—(1) In no event may the total amount of funds obligated pursuant to this subtitle exceed the total amount authorized to be appropriated by this subtitle.

(2) Funds appropriated pursuant to this subtitle may not be used for an item for which Congress has declined to authorize funds.

SEC. 2177. BUDGET REQUEST FORMAT.

The Administrator shall provide to the appropriate congressional committees, to be transmitted at the same

time as the Environmental Protection Agency's annual budget request submission, a detailed justification for budget authorization for the programs, projects, and activities for which funds are authorized by this subtitle. Each such document shall include, for the fiscal year for which funding is being requested and for the 2 previous fiscal years—

(1) a description of, and funding requested or allocated for, each such program, project, or activity;

(2) an identification of all recipients of funds to conduct such programs, projects, and activities; and

(3) an estimate of the amounts to be expended by each recipient of funds identified under paragraph (2).

SEC. 2178. OTHER PROVISIONS.

(a) ANNUAL OPERATING PLAN AND REPORTS.—The Administrator shall provide simultaneously to the Committee on Science of the House of Representatives—

(1) any annual operating plan or other operational funding document, including any additions or amendments thereto; and

(2) any report relating to the environmental research or development, scientific or energy research, development, or demonstration, or commercial appli-

cation of energy technology programs, projects, or activities of the Environmental Protection Agency, provided to any committee of Congress.

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

Subtitle H—National Building Performance Initiative

SEC. 2181. NATIONAL BUILDING PERFORMANCE INITIATIVE.

(a) INTERAGENCY GROUP.—Not later than 3 months after the date of the enactment of this Act, the Director of the Office of Science and Technology Policy shall establish an Interagency Group responsible for the development and implementation of a National Building Performance Initiative to address energy conservation and research and development and related issues. The National Institute of Standards and Technology shall provide necessary administrative support for the Interagency Group.

(b) PLAN.—Not later than 9 months after the date of the enactment of this Act, the Interagency Group shall

transmit to the Congress a multiyear implementation plan describing the Federal role in reducing the costs, including energy costs, of using, owning, and operating commercial, institutional, residential, and industrial buildings by 30 percent by 2020. The plan shall include—

(1) research, development, and demonstration of systems and materials for new construction and retrofit, on the building envelope and components; and

(2) the collection and dissemination in a usable form of research results and other pertinent information to the design and construction industry, government officials, and the general public.

(c) NATIONAL BUILDING PERFORMANCE ADVISORY COMMITTEE.—A National Building Performance Advisory Committee shall be established to advise on creation of the plan, review progress made under the plan, advise on any improvements that should be made to the plan, and report to the Congress on actions that have been taken to advance the Nation's capability in furtherance of the plan. The members shall include representatives of a broad cross-section of interests such as the research, technology transfer, architectural, engineering, and financial communities; materials and systems suppliers; State, county, and local governments; the residential, multi-

family, and commercial sectors of the construction industry; and the insurance industry.

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

TITLE II—RENEWABLE ENERGY

Subtitle A—Hydrogen

SEC. 2201. SHORT TITLE.

This subtitle may be cited as the ''Robert S. Walker and George E. Brown, Jr. Hydrogen Energy Act of 2001''.

SEC. 2202. PURPOSES.

Section 102(b) of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

''(b) PURPOSES.—The purposes of this Act are—

''(1) to direct the Secretary to conduct research, development, and demonstration activities leading to the production, storage, transportation, and use of hydrogen for industrial, commercial, residential, transportation, and utility applications;

"(2) to direct the Secretary to develop a program of technology assessment, information dissemination, and education in which Federal, State, and local agencies, members of the energy, transportation, and other industries, and other entities may participate; and

"(3) to develop methods of hydrogen production that minimize adverse environmental impacts, with emphasis on efficient and cost-effective production from renewable energy resources.".

SEC. 2203. DEFINITIONS.

Section 102(c) of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended—

(1) by redesignating paragraphs (1) through (3) as paragraphs (2) through (4), respectively; and

(2) by inserting before paragraph (2), as so redesignated by paragraph (1) of this section, the following new paragraph:

"(1) 'advisory committee' means the advisory committee established under section 108;".

SEC. 2204. REPORTS TO CONGRESS.

Section 103 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

"SEC. 103. REPORTS TO CONGRESS.

''(a) REQUIREMENT.—Not later than 1 year after the date of the enactment of the Robert S. Walker and George E. Brown, Jr. Hydrogen Energy Act of 2001, and biennially thereafter, the Secretary shall transmit to Congress a detailed report on the status and progress of the programs and activities authorized under this Act.

''(b) CONTENTS.—A report under subsection (a) shall include, in addition to any views and recommendations of the Secretary—

''(1) an assessment of the extent to which the program is meeting the purposes specified in section 102(b);

''(2) a determination of the effectiveness of the technology assessment, information dissemination, and education program established under section 106;

''(3) an analysis of Federal, State, local, and private sector hydrogen-related research, development, and demonstration activities to identify productive areas for increased intergovernmental and private-public sector collaboration; and

''(4) recommendations of the advisory committee for any improvements needed in the programs and activities authorized by this Act.''.

SEC. 2205. HYDROGEN RESEARCH AND DEVELOPMENT.

Section 104 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

"SEC. 104. HYDROGEN RESEARCH AND DEVELOPMENT.

"(a) ESTABLISHMENT OF PROGRAM.—The Secretary shall conduct a hydrogen research and development program relating to production, storage, transportation, and use of hydrogen, with the goal of enabling the private sector to demonstrate the technical feasibility of using hydrogen for industrial, commercial, residential, transportation, and utility applications.

"(b) ELEMENTS.—In conducting the program authorized by this section, the Secretary shall—

"(1) give particular attention to developing an understanding and resolution of critical technical issues preventing the introduction of hydrogen as an energy carrier into the marketplace;

"(2) initiate or accelerate existing research and development in critical technical issues that will contribute to the development of more economical hydrogen production, storage, transportation, and use, including critical technical issues with respect to production (giving priority to those production techniques that use renewable energy resources as their primary source of energy for hydrogen production),

liquefaction, transmission, distribution, storage, and use (including use of hydrogen in surface transportation); and

"(3) survey private sector and public sector hydrogen research and development activities worldwide, and take steps to ensure that research and development activities under this section do not—

"(A) duplicate any available research and development results; or

"(B) displace or compete with the privately funded hydrogen research and development activities of United States industry.

"(c) EVALUATION OF TECHNOLOGIES.—The Secretary shall evaluate, for the purpose of determining whether to undertake or fund research and development activities under this section, any reasonable new or improved technology that could lead or contribute to the development of economical hydrogen production, storage, transportation, and use.

"(d) RESEARCH AND DEVELOPMENT SUPPORT.—The Secretary is authorized to arrange for tests and demonstrations and to disseminate to researchers and developers information, data, and other materials necessary to support the research and development activities authorized

under this section and other efforts authorized under this Act, consistent with section 106 of this Act.

"(e) COMPETITIVE PEER REVIEW.—The Secretary shall carry out or fund research and development activities under this section only on a competitive basis using peer review.

"(f) COST SHARING.—For research and development programs carried out under this section, the Secretary shall require a commitment from non-Federal sources of at least 20 percent of the cost of the project. The Secretary may reduce or eliminate the non-Federal requirement under this subsection if the Secretary determines that the research and development is of a basic or fundamental nature.".

SEC. 2206. DEMONSTRATIONS.

Section 105 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended—

(1) in subsection (a), by striking ", preferably in self-contained locations,";

(2) in subsection (b), by striking "at self-contained sites" and inserting ", which shall include a fuel cell bus demonstration program to address hydrogen production, storage, and use in transit bus applications"; and

(3) in subsection (c), by inserting ''NON-FEDERAL FUNDING REQUIREMENT.—'' after ''(c)''.

SEC. 2207. TECHNOLOGY TRANSFER.

Section 106 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

''SEC. 106. TECHNOLOGY ASSESSMENT, INFORMATION DISSEMINATION, AND EDUCATION PROGRAM.

''(a) PROGRAM.—The Secretary shall, in consultation with the advisory committee, conduct a program designed to accelerate wider application of hydrogen production, storage, transportation, and use technologies, including application in foreign countries to increase the global market for the technologies and foster global economic development without harmful environmental effects.

''(b) INFORMATION.—The Secretary, in carrying out the program authorized by subsection (a), shall—

''(1) undertake an update of the inventory and assessment, required under section 106(b)(1) of this Act as in effect before the date of the enactment of the Robert S. Walker and George E. Brown, Jr. Hydrogen Energy Act of 2001, of hydrogen technologies and their commercial capability to economically produce, store, transport, or use hydrogen in

industrial, commercial, residential, transportation, and utility sector; and

"(2) develop, with other Federal agencies as appropriate and industry, an information exchange program to improve technology transfer for hydrogen production, storage, transportation, and use, which may consist of workshops, publications, conferences, and a database for the use by the public and private sectors.".

SEC. 2208. COORDINATION AND CONSULTATION.

Section 107 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended—

(1) by amending paragraph (1) of subsection (a) to read as follows:

"(1) shall establish a central point for the coordination of all hydrogen research, development, and demonstration activities of the Department; and"; and

(2) by amending subsection (c) to read as follows:

"(c) CONSULTATION.—The Secretary shall consult with other Federal agencies as appropriate, and the advisory committee, in carrying out the Secretary's authorities pursuant to this Act.".

SEC. 2209. ADVISORY COMMITTEE.

Section 108 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

"SEC. 108. ADVISORY COMMITTEE.

"(a) ESTABLISHMENT.—The Secretary shall enter into appropriate arrangements with the National Academies of Sciences and Engineering to establish an advisory committee consisting of experts drawn from domestic industry, academia, Governmental laboratories, and financial, environmental, and other organizations, as appropriate, to review and advise on the progress made through the programs and activities authorized under this Act.

"(b) COOPERATION.—The heads of Federal agencies shall cooperate with the advisory committee in carrying out this section and shall furnish to the advisory committee such information as the advisory committee reasonably deems necessary to carry out this section.

"(c) REVIEW.—The advisory committee shall review and make any necessary recommendations to the Secretary on—

"(1) the implementation and conduct of programs and activities authorized under this Act; and

"(2) the economic, technological, and environmental consequences of the deployment of hydrogen production, storage, transportation, and use systems.

"(d) RESPONSIBILITIES OF THE SECRETARY.—The Secretary shall consider, but need not adopt, any recommendations of the advisory committee under subsection (c). The Secretary shall provide an explanation of the reasons that any such recommendations will not be implemented and include such explanation in the report to Congress under section 103(a) of this Act.".

SEC. 2210. AUTHORIZATION OF APPROPRIATIONS.

Section 109 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

"SEC. 109. AUTHORIZATION OF APPROPRIATIONS.

"(a) RESEARCH AND DEVELOPMENT; ADVISORY COMMITTEE.—There are authorized to be appropriated to the Secretary to carry out sections 104 and 108—

"(1) $40,000,000 for fiscal year 2002;

"(2) $45,000,000 for fiscal year 2003;

"(3) $50,000,000 for fiscal year 2004;

"(4) $55,000,000 for fiscal year 2005; and

"(5) $60,000,000 for fiscal year 2006.

"(b) DEMONSTRATION.—There are authorized to be appropriated to the Secretary to carry out section 105—

"(1) $20,000,000 for fiscal year 2002;

"(2) $25,000,000 for fiscal year 2003;

"(3) $30,000,000 for fiscal year 2004;

"(4) $35,000,000 for fiscal year 2005; and

"(5) $40,000,000 for fiscal year 2006.".

SEC. 2211. REPEAL.

(a) REPEAL.—Title II of the Hydrogen Future Act of 1996 is repealed.

(b) CONFORMING AMENDMENT.—Section 2 of the Hydrogen Future Act of 1996 is amended by striking "titles II and III" and inserting "title III".

Subtitle B—Bioenergy

SEC. 2221. SHORT TITLE.

This subtitle may be cited as the "Bioenergy Act of 2001".

SEC. 2222. FINDINGS.

Congress finds that bioenergy has potential to help—

(1) meet the Nation's energy needs;

(2) reduce reliance on imported fuels;

(3) promote rural economic development;

(4) provide for productive utilization of agricultural residues and waste materials, and forestry residues and byproducts; and

(5) protect the environment.

SEC. 2223. DEFINITIONS.

For purposes of this subtitle—

(1) the term "bioenergy" means energy derived from any organic matter that is available on a re-

newable or recurring basis, including agricultural crops and trees, wood and wood wastes and residues, plants (including aquatic plants), grasses, residues, fibers, and animal and other organic wastes;

(2) the term ''biofuels'' includes liquid or gaseous fuels, industrial chemicals, or both;

(3) the term ''biopower'' includes the generation of electricity or process steam or both; and

(4) the term ''integrated bioenergy research and development'' includes biopower and biofuels applications.

SEC. 2224. AUTHORIZATION.

The Secretary is authorized to conduct environmental research and development, scientific and energy research, development, and demonstration, and commercial application of energy technology programs, projects, and activities related to bioenergy, including biopower energy systems, biofuels energy systems, and integrated bioenergy research and development.

SEC. 2225. AUTHORIZATION OF APPROPRIATIONS.

(a) BIOPOWER ENERGY SYSTEMS.—There are authorized to be appropriated to the Secretary for Biopower Energy Systems programs, projects, and activities—

(1) $45,700,000 for fiscal year 2002;

(2) $52,500,000 for fiscal year 2003;

(3) $60,300,000 for fiscal year 2004;

(4) $69,300,000 for fiscal year 2005; and

(5) $79,600,000 for fiscal year 2006.

(b) BIOFUELS ENERGY SYSTEMS.—There are authorized to be appropriated to the Secretary for biofuels energy systems programs, projects, and activities—

(1) $53,500,000 for fiscal year 2002;

(2) $61,400,000 for fiscal year 2003;

(3) $70,600,000 for fiscal year 2004;

(4) $81,100,000 for fiscal year 2005; and

(5) $93,200,000 for fiscal year 2006.

(c) INTEGRATED BIOENERGY RESEARCH AND DEVELOPMENT.—There are authorized to be appropriated to the Secretary for integrated bioenergy research and development programs, projects, and activities, $49,000,000 for each of the fiscal years 2002 through 2006. Activities funded under this subsection shall be coordinated with ongoing related programs of other Federal agencies, including the Plant Genome Program of the National Science Foundation.

(d) INTEGRATED APPLICATIONS.—Amounts authorized to be appropriated under this subtitle may be used to assist in the planning, design, and implementation of projects to convert rice straw and barley grain into biopower or biofuels.

Subtitle C—Transmission Infrastructure Systems

SEC. 2241. TRANSMISSION INFRASTRUCTURE SYSTEMS RESEARCH, DEVELOPMENT, DEMONSTRATION, AND COMMERCIAL APPLICATION.

(a) IN GENERAL.—The Secretary shall develop and implement a comprehensive research, development, demonstration, and commercial application program to ensure the reliability, efficiency, and environmental integrity of electrical transmission systems. Such program shall include advanced energy technologies and systems, high capacity superconducting transmission lines and generators, advanced grid reliability and efficiency technologies development, technologies contributing to significant load reductions, advanced metering, load management and control technologies, and technology transfer and education.

(b) TECHNOLOGY.—In carrying out this subtitle, the Secretary may include research, development, and demonstration on and commercial application of improved transmission technologies including the integration of the following technologies into improved transmission systems:

(1) High temperature superconductivity.

(2) Advanced transmission materials.

(3) Self-adjusting equipment, processes, or software for survivability, security, and failure containment.

(4) Enhancements of energy transfer over existing lines.

(5) Any other infrastructure technologies, as appropriate.

SEC. 2242. PROGRAM PLAN.

Within 4 months after the date of the enactment of this Act, the Secretary, in consultation with other appropriate Federal agencies, shall prepare and transmit to Congress a 5-year program plan to guide activities under this subtitle. In preparing the program plan, the Secretary shall consult with appropriate representatives of the transmission infrastructure systems industry to select and prioritize appropriate program areas. The Secretary shall also seek the advice of utilities, energy services providers, manufacturers, institutions of higher learning, other appropriate State and local agencies, environmental organizations, professional and technical societies, and any other persons as the Secretary considers appropriate.

SEC. 2243. REPORT.

Two years after the date of the enactment of this Act, and at two year intervals thereafter, the Secretary, in consultation with other appropriate Federal agencies, shall

transmit a report to Congress describing the progress made to achieve the purposes of this subtitle and identifying any additional resources needed to continue the development and commercial application of transmission infrastructure technologies.

Subtitle D—Department of Energy Authorization of Appropriations

SEC. 2261. AUTHORIZATION OF APPROPRIATIONS.

(a) OPERATION AND MAINTENANCE.—There are authorized to be appropriated to the Secretary for Renewable Energy operation and maintenance, including activities under subtitle C, Geothermal Technology Development, Hydropower, Concentrating Solar Power, Photovoltaic Energy Systems, Solar Building Technology Research, Wind Energy Systems, High Temperature Superconducting Research and Development, Energy Storage Systems, Transmission Reliability, International Renewable Energy Program, Renewable Energy Production Incentive Program, Renewable Program Support, National Renewable Energy Laboratory, and Program Direction, and including amounts authorized under the amendment made by section 2210 and amounts authorized under section 2225, $535,000,000 for fiscal year 2002, $639,000,000 for fiscal year 2003, and $683,000,000 for fiscal year 2004, to remain available until expended.

(b) WAVE POWERED ELECTRIC GENERATION.—Within the amounts authorized to be appropriated to the Secretary under subsection (a), the Secretary shall carry out a research program, in conjunction with other appropriate Federal agencies, on wave powered electric generation.

(c) ASSESSMENT OF RENEWABLE ENERGY RESOURCES.—

(1) IN GENERAL.—Using funds authorized in subsection (a), of this section, the Secretary shall transmit to the Congress, within one year after the date of the enactment of this Act, an assessment of all renewable energy resources available within the United States.

(2) RESOURCE ASSESSMENT.—Such report shall include a detailed inventory describing the available amount and characteristics of solar, wind, biomass, geothermal, hydroelectric, and other renewable energy sources, and an estimate of the costs needed to develop each resource. The report shall also include such other information as the Secretary believes would be useful in siting renewable energy generation, such as appropriate terrain, population and load centers, nearby energy infrastructure, and location of energy resources.

(3) AVAILABILITY.—The information and cost estimates in this report shall be updated annually and made available to the public, along with the data used to create the report.

(4) SUNSET.—This subsection shall expire at the end of fiscal year 2004.

(d) LIMITS ON USE OF FUNDS.—None of the funds authorized to be appropriated in subsection (a) may be used for—

(1) Departmental Energy Management Program; or

(2) Renewable Indian Energy Resources.

TITLE III—NUCLEAR ENERGY

Subtitle A—University Nuclear Science and Engineering

SEC. 2301. SHORT TITLE.

This subtitle may be cited as ''Department of Energy University Nuclear Science and Engineering Act''.

SEC. 2302. FINDINGS.

The Congress finds the following:

(1) United States university nuclear science and engineering programs are in a state of serious decline, with nuclear engineering enrollment at a 35-year low. Since 1980, the number of nuclear engineering university programs has declined nearly 40

percent, and over two-thirds of the faculty in these programs are 45 years of age or older. Also, since 1980, the number of university research and training reactors in the United States has declined by over 50 percent. Most of these reactors were built in the late 1950s and 1960s with 30-year to 40-year operating licenses, and many will require relicensing in the next several years.

(2) A decline in a competent nuclear workforce, and the lack of adequately trained nuclear scientists and engineers, will affect the ability of the United States to solve future nuclear waste storage issues, operate existing and design future fission reactors in the United States, respond to future nuclear events worldwide, help stem the proliferation of nuclear weapons, and design and operate naval nuclear reactors.

(3) The Department of Energy's Office of Nuclear Energy, Science and Technology, a principal Federal agency for civilian research in nuclear science and engineering, is well suited to help maintain tomorrow's human resource and training investment in the nuclear sciences and engineering.

SEC. 2303. DEPARTMENT OF ENERGY PROGRAM.

(a) ESTABLISHMENT.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall support a program to maintain the Nation's human resource investment and infrastructure in the nuclear sciences and engineering consistent with the Department's statutory authorities related to civilian nuclear research, development, and demonstration and commercial application of energy technology.

(b) DUTIES OF THE OFFICE OF NUCLEAR ENERGY, SCIENCE AND TECHNOLOGY.—In carrying out the program under this subtitle, the Director of the Office of Nuclear Energy, Science and Technology shall—

(1) develop a robust graduate and undergraduate fellowship program to attract new and talented students;

(2) assist universities in recruiting and retaining new faculty in the nuclear sciences and engineering through a Junior Faculty Research Initiation Grant Program;

(3) maintain a robust investment in the fundamental nuclear sciences and engineering through the Nuclear Engineering Education Research Program;

(4) encourage collaborative nuclear research among industry, national laboratories, and univer-

sities through the Nuclear Energy Research Initiative;

(5) assist universities in maintaining reactor infrastructure; and

(6) support communication and outreach related to nuclear science and engineering.

(c) MAINTAINING UNIVERSITY RESEARCH AND TRAINING REACTORS AND ASSOCIATED INFRASTRUCTURE.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall provide for the following university research and training reactor infrastructure maintenance and research activities:

(1) Refueling of university research reactors with low enriched fuels, upgrade of operational instrumentation, and sharing of reactors among universities.

(2) In collaboration with the United States nuclear industry, assistance, where necessary, in relicensing and upgrading university training reactors as part of a student training program.

(3) A university reactor research and training award program that provides for reactor improvements as part of a focused effort that emphasizes research, training, and education.

(d) UNIVERSITY-DOE LABORATORY INTERACTIONS.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall develop—

(1) a sabbatical fellowship program for university faculty to spend extended periods of time at Department of Energy laboratories in the areas of nuclear science and technology; and

(2) a visiting scientist program in which laboratory staff can spend time in academic nuclear science and engineering departments.

The Secretary may under subsection (b)(1) provide for fellowships for students to spend time at Department of Energy laboratories in the areas of nuclear science and technology under the mentorship of laboratory staff.

(e) OPERATIONS AND MAINTENANCE.—To the extent that the use of a university research reactor is funded under this subtitle, funds authorized under this subtitle may be used to supplement operation of the research reactor during the investigator's proposed effort. The host institution shall provide at least 50 percent of the cost of the reactor's operation.

(f) MERIT REVIEW REQUIRED.—All grants, contracts, cooperative agreements, or other financial assistance awards under this subtitle shall be made only after independent merit review.

(g) REPORT.—Not later than 6 months after the date of the enactment of this Act, the Secretary shall prepare and transmit to the appropriate congressional committees a 5-year plan on how the programs authorized in this subtitle will be implemented. The plan shall include a review of the projected personnel needs in the fields of nuclear science and engineering and of the scope of nuclear science and engineering education programs at the Department and other Federal agencies.

SEC. 2304. AUTHORIZATION OF APPROPRIATIONS.

(a) TOTAL AUTHORIZATION.—The following sums are authorized to be appropriated to the Secretary, to remain available until expended, for the purposes of carrying out this subtitle:

(1) $30,200,000 for fiscal year 2002.

(2) $41,000,000 for fiscal year 2003.

(3) $47,900,000 for fiscal year 2004.

(4) $55,600,000 for fiscal year 2005.

(5) $64,100,000 for fiscal year 2006.

(b) GRADUATE AND UNDERGRADUATE FELLOWSHIPS.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(b)(1):

(1) $3,000,000 for fiscal year 2002.

(2) $3,100,000 for fiscal year 2003.

(3) $3,200,000 for fiscal year 2004.

(4) $3,200,000 for fiscal year 2005.

(5) $3,200,000 for fiscal year 2006.

(c) JUNIOR FACULTY RESEARCH INITIATION GRANT PROGRAM.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(b)(2):

(1) $5,000,000 for fiscal year 2002.

(2) $7,000,000 for fiscal year 2003.

(3) $8,000,000 for fiscal year 2004.

(4) $9,000,000 for fiscal year 2005.

(5) $10,000,000 for fiscal year 2006.

(d) NUCLEAR ENGINEERING EDUCATION RESEARCH PROGRAM.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(b)(3):

(1) $8,000,000 for fiscal year 2002.

(2) $12,000,000 for fiscal year 2003.

(3) $13,000,000 for fiscal year 2004.

(4) $15,000,000 for fiscal year 2005.

(5) $20,000,000 for fiscal year 2006.

(e) COMMUNICATION AND OUTREACH RELATED TO NUCLEAR SCIENCE AND ENGINEERING.—Of the funds authorized by subsection (a), the following sums are au-

thorized to be appropriated to carry out section 2303(b)(5):

(1) $200,000 for fiscal year 2002.

(2) $200,000 for fiscal year 2003.

(3) $300,000 for fiscal year 2004.

(4) $300,000 for fiscal year 2005.

(5) $300,000 for fiscal year 2006.

(f) REFUELING OF UNIVERSITY RESEARCH REACTORS AND INSTRUMENTATION UPGRADES.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(c)(1):

(1) $6,000,000 for fiscal year 2002.

(2) $6,500,000 for fiscal year 2003.

(3) $7,000,000 for fiscal year 2004.

(4) $7,500,000 for fiscal year 2005.

(5) $8,000,000 for fiscal year 2006.

(g) RELICENSING ASSISTANCE.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(c)(2):

(1) $1,000,000 for fiscal year 2002.

(2) $1,100,000 for fiscal year 2003.

(3) $1,200,000 for fiscal year 2004.

(4) $1,300,000 for fiscal year 2005.

(5) $1,300,000 for fiscal year 2006.

(h) REACTOR RESEARCH AND TRAINING AWARD PROGRAM.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(c)(3):

(1) $6,000,000 for fiscal year 2002.

(2) $10,000,000 for fiscal year 2003.

(3) $14,000,000 for fiscal year 2004.

(4) $18,000,000 for fiscal year 2005.

(5) $20,000,000 for fiscal year 2006.

(i) UNIVERSITY-DOE LABORATORY INTERACTIONS.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(d):

(1) $1,000,000 for fiscal year 2002.

(2) $1,100,000 for fiscal year 2003.

(3) $1,200,000 for fiscal year 2004.

(4) $1,300,000 for fiscal year 2005.

(5) $1,300,000 for fiscal year 2006.

Subtitle B—Advanced Fuel Recycling Technology Research and Development Program

SEC. 2321. PROGRAM.

(a) IN GENERAL.—The Secretary, through the Director of the Office of Nuclear Energy, Science and Technology, shall conduct an advanced fuel recycling tech-

nology research and development program to further the availability of proliferation-resistant fuel recycling technologies as an alternative to aqueous reprocessing in support of evaluation of alternative national strategies for spent nuclear fuel and the Generation IV advanced reactor concepts, subject to annual review by the Secretary's Nuclear Energy Research Advisory Committee or other independent entity, as appropriate.

(b) REPORTS.—The Secretary shall report on the activities of the advanced fuel recycling technology research and development program, as part of the Department's annual budget submission.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

(1) $10,000,000 for fiscal year 2002; and

(2) such sums as are necessary for fiscal year 2003 and fiscal year 2004.

Subtitle C—Department of Energy Authorization of Appropriations

SEC. 2341. NUCLEAR ENERGY RESEARCH INITIATIVE.

(a) PROGRAM.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall conduct a Nuclear Energy Research Initiative for grants to be com-

petitively awarded and subject to peer review for research relating to nuclear energy.

(b) OBJECTIVES.—The program shall be directed toward accomplishing the objectives of—

(1) developing advanced concepts and scientific breakthroughs in nuclear fission and reactor technology to address and overcome the principal technical and scientific obstacles to the expanded use of nuclear energy in the United States;

(2) advancing the state of nuclear technology to maintain a competitive position in foreign markets and a future domestic market;

(3) promoting and maintaining a United States nuclear science and engineering infrastructure to meet future technical challenges;

(4) providing an effective means to collaborate on a cost-shared basis with international agencies and research organizations to address and influence nuclear technology development worldwide; and

(5) promoting United States leadership and partnerships in bilateral and multilateral nuclear energy research.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

(1) $60,000,000 for fiscal year 2002; and

(2) such sums as are necessary for fiscal year 2003 and fiscal year 2004.

SEC. 2342. NUCLEAR ENERGY PLANT OPTIMIZATION PROGRAM.

(a) PROGRAM.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall conduct a Nuclear Energy Plant Optimization research and development program jointly with industry and cost-shared by industry by at least 50 percent and subject to annual review by the Secretary's Nuclear Energy Research Advisory Committee or other independent entity, as appropriate.

(b) OBJECTIVES.—The program shall be directed toward accomplishing the objectives of—

(1) managing long-term effects of component aging; and

(2) improving the efficiency and productivity of existing nuclear power stations.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

(1) $15,000,000 for fiscal year 2002; and

(2) such sums as are necessary for fiscal years 2003 and 2004.

SEC. 2343. NUCLEAR ENERGY TECHNOLOGIES.

(a) IN GENERAL.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall conduct a study of Generation IV nuclear energy systems, including development of a technology roadmap and performance of research and development necessary to make an informed technical decision regarding the most promising candidates for commercial application.

(b) REACTOR CHARACTERISTICS.—To the extent practicable, in conducting the study under subsection (a), the Secretary shall study nuclear energy systems that offer the highest probability of achieving the goals for Generation IV nuclear energy systems, including—

(1) economics competitive with any other generators;

(2) enhanced safety features, including passive safety features;

(3) substantially reduced production of high-level waste, as compared with the quantity of waste produced by reactors in operation on the date of enactment of this Act;

(4) highly proliferation-resistant fuel and waste;

(5) sustainable energy generation including optimized fuel utilization; and

(6) substantially improved thermal efficiency, as compared with the thermal efficiency of reactors in operation on the date of enactment of this Act.

(c) CONSULTATION.—In conducting the study under subsection (a), the Secretary shall consult with appropriate representatives of industry, institutions of higher education, Federal agencies, and international, professional, and technical organizations.

(d) REPORT.—

(1) IN GENERAL.—Not later than December 31, 2002, the Secretary shall transmit to the appropriate congressional committees a report describing the activities of the Secretary under this section, and plans for research and development leading to a public/private cooperative demonstration of one or more Generation IV nuclear energy systems.

(2) CONTENTS.—The report shall contain—

(A) an assessment of all available technologies;

(B) a summary of actions needed for the most promising candidates to be considered as viable commercial options within the five to ten years after the date of the report, with consideration of regulatory, economic, and technical issues;

(C) a recommendation of not more than three promising Generation IV nuclear energy system concepts for further development;

(D) an evaluation of opportunities for public/private partnerships;

(E) a recommendation for structure of a public/private partnership to share in development and construction costs;

(F) a plan leading to the selection and conceptual design, by September 30, 2004, of at least one Generation IV nuclear energy system concept recommended under subparagraph (C) for demonstration through a public/private partnership;

(G) an evaluation of opportunities for siting demonstration facilities on Department of Energy land; and

(H) a recommendation for appropriate involvement of other Federal agencies.

(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section and to carry out the recommendations in the report transmitted under subsection (d)—

(1) $20,000,000 for fiscal year 2002; and

(2) such sums as are necessary for fiscal year 2003 and fiscal year 2004.

SEC. 2344. AUTHORIZATION OF APPROPRIATIONS.

(a) OPERATION AND MAINTENANCE.—There are authorized to be appropriated to the Secretary to carry out activities authorized under this title for nuclear energy operation and maintenance, including amounts authorized under sections 2304(a), 2321(c), 2341(c), 2342(c), and 2343(e), and including Advanced Radioisotope Power Systems, Test Reactor Landlord, and Program Direction, $191,200,000 for fiscal year 2002, $199,000,000 for fiscal year 2003, and $207,000,000 for fiscal year 2004, to remain available until expended.

(b) CONSTRUCTION.—There are authorized to be appropriated to the Secretary—

(1) $950,000 for fiscal year 2002, $2,200,000 for fiscal year 2003, $1,246,000 for fiscal year 2004, and $1,699,000 for fiscal year 2005 for completion of construction of Project 99-E-200, Test Reactor Area Electric Utility Upgrade, Idaho National Engineering and Environmental Laboratory; and

(2) $500,000 for fiscal year 2002, $500,000 for fiscal year 2003, $500,000 for fiscal year 2004, and $500,000 for fiscal year 2005, for completion of con-

struction of Project 95-E-201, Test Reactor Area Fire and Life Safety Improvements, Idaho National Engineering and Environmental Laboratory.

(c) LIMITS ON USE OF FUNDS.—None of the funds authorized to be appropriated in subsection (a) may be used for—

(1) Nuclear Energy Isotope Support and Production;

(2) Argonne National Laboratory-West Operations;

(3) Fast Flux Test Facility; or

(4) Nuclear Facilities Management.

TITLE IV—FOSSIL ENERGY

Subtitle A—Coal

SEC. 2401. COAL AND RELATED TECHNOLOGIES PROGRAMS.

(a) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary $172,000,000 for fiscal year 2002, $179,000,000 for fiscal year 2003, and $186,000,000 for fiscal year 2004, to remain available until expended, for other coal and related technologies research and development programs, which shall include—

(1) Innovations for Existing Plants;

(2) Integrated Gasification Combined Cycle;

(3) advanced combustion systems;

(4) Turbines;

(5) Sequestration Research and Development;

(6) innovative technologies for demonstration;

(7) Transportation Fuels and Chemicals;

(8) Solid Fuels and Feedstocks;

(9) Advanced Fuels Research; and

(10) Advanced Research.

(b) LIMIT ON USE OF FUNDS.—Notwithstanding subsection (a), no funds may be used to carry out the activities authorized by this section after September 30, 2002, unless the Secretary has transmitted to the Congress the report required by this subsection and 1 month has elapsed since that transmission. The report shall include a plan containing—

(1) a detailed description of how proposals will be solicited and evaluated, including a list of all activities expected to be undertaken;

(2) a detailed list of technical milestones for each coal and related technology that will be pursued;

(3) a description of how the programs authorized in this subsection will be carried out so as to complement and not duplicate activities authorized under division E.

Subtitle B—Oil and Gas

SEC. 2421. PETROLEUM-OIL TECHNOLOGY.

The Secretary shall conduct a program of research, development, demonstration, and commercial application on petroleum-oil technology. The program shall address—

(1) Exploration and Production Supporting Research;

(2) Oil Technology Reservoir Management/Extension; and

(3) Effective Environmental Protection.

SEC. 2422. GAS.

The Secretary shall conduct a program of research, development, demonstration, and commercial application on natural gas technologies. The program shall address—

(1) Exploration and Production;

(2) Infrastructure; and

(3) Effective Environmental Protection.

Subtitle C—Ultra-Deepwater and Unconventional Drilling

SEC. 2441. SHORT TITLE.

This subtitle may be cited as the ''Natural Gas and Other Petroleum Research, Development, and Demonstration Act of 2001''.

SEC. 2442. DEFINITIONS.

For purposes of this subtitle—

(1) the term ''deepwater'' means water depths greater than 200 meters but less than 1,500 meters;

(2) the term ''Fund'' means the Ultra-Deepwater and Unconventional Gas Research Fund established under section 2450;

(3) the term ''institution of higher education'' has the meaning given that term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001);

(4) the term ''Research Organization'' means the Research Organization created pursuant to section 2446(a);

(5) the term ''ultra-deepwater'' means water depths greater than 1,500 meters; and

(6) the term ''unconventional'' means located in heretofore inaccessible or uneconomic formations on land.

SEC. 2443. ULTRA-DEEPWATER PROGRAM.

The Secretary shall establish a program of research, development, and demonstration of ultra-deepwater natural gas and other petroleum exploration and production technologies, in areas currently available for Outer Continental Shelf leasing. The program shall be carried out by the Research Organization as provided in this subtitle.

SEC. 2444. NATIONAL ENERGY TECHNOLOGY LABORATORY.

The National Energy Technology Laboratory and the United States Geological Survey, when appropriate, shall carry out programs of long-term research into new natural gas and other petroleum exploration and production technologies and environmental mitigation technologies for production from unconventional and ultra-deepwater resources, including methane hydrates. Such Laboratory shall also conduct a program of research, development, and demonstration of new technologies for the reduction of greenhouse gas emissions from unconventional and ultra-deepwater natural gas or other petroleum exploration and production activities, including sub-sea floor carbon sequestration technologies.

SEC. 2445. ADVISORY COMMITTEE.

(a) ESTABLISHMENT.—The Secretary shall, within 3 months after the date of the enactment of this Act, establish an Advisory Committee consisting of 7 members, each having extensive operational knowledge of and experience in the natural gas and other petroleum exploration and production industry who are not Federal Government employees or contractors. A minimum of 4 members shall have extensive knowledge of ultra-deepwater natural gas or other petroleum exploration and production technologies, a minimum of 2 members shall have extensive knowledge of unconventional natural gas or other petro-

leum exploration and production technologies, and at least 1 member shall have extensive knowledge of greenhouse gas emission reduction technologies, including carbon sequestration.

(b) FUNCTION.—The Advisory Committee shall advise the Secretary on the selection of an organization to create the Research Organization and on the implementation of this subtitle.

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

(d) ADMINISTRATIVE COSTS.—The costs of activities carried out by the Secretary and the Advisory Committee under this subtitle shall be paid or reimbursed from the Fund.

(e) DURATION OF ADVISORY COMMITTEE.—Section 14 of the Federal Advisory Committee Act shall not apply to the Advisory Committee.

SEC. 2446. RESEARCH ORGANIZATION.

(a) SELECTION OF RESEARCH ORGANIZATION.—The Secretary, within 6 months after the date of the enactment of this Act, shall solicit proposals from eligible entities for the creation of the Research Organization, and within 3

months after such solicitation, shall select an entity to create the Research Organization.

(b) ELIGIBLE ENTITIES.—Entities eligible to create the Research Organization shall—

(1) have been in existence as of the date of the enactment of this Act;

(2) be entities exempt from tax under section 501(c)(3) of the Internal Revenue Code of 1986; and

(3) be experienced in planning and managing programs in natural gas or other petroleum exploration and production research, development, and demonstration.

(c) PROPOSALS.—A proposal from an entity seeking to create the Research Organization shall include a detailed description of the proposed membership and structure of the Research Organization.

(d) FUNCTIONS.—The Research Organization shall—

(1) award grants on a competitive basis to qualified—

(A) research institutions;

(B) institutions of higher education;

(C) companies; and

(D) consortia formed among institutions and companies described in subparagraphs (A)

through (C) for the purpose of conducting research, development, and demonstration of unconventional and ultra-deepwater natural gas or other petroleum exploration and production technologies; and

(2) review activities under those grants to ensure that they comply with the requirements of this subtitle and serve the purposes for which the grant was made.

SEC. 2447. GRANTS.

(a) TYPES OF GRANTS.—

(1) UNCONVENTIONAL.—The Research Organization shall award grants for research, development, and demonstration of technologies to maximize the value of the Government's natural gas and other petroleum resources in unconventional reservoirs, and to develop technologies to increase the supply of natural gas and other petroleum resources by lowering the cost and improving the efficiency of exploration and production of unconventional reservoirs, while improving safety and minimizing environmental impacts.

(2) ULTRA-DEEPWATER.—The Research Organization shall award grants for research, development, and demonstration of natural gas or other pe-

troleum exploration and production technologies to—

(A) maximize the value of the Federal Government's natural gas and other petroleum resources in the ultra-deepwater areas;

(B) increase the supply of natural gas and other petroleum resources by lowering the cost and improving the efficiency of exploration and production of ultra-deepwater reservoirs; and

(C) improve safety and minimize the environmental impacts of ultra-deepwater developments.

(3) ULTRA-DEEPWATER ARCHITECTURE.—The Research Organization shall award a grant to one or more consortia described in section 2446(d)(1)(D) for the purpose of developing and demonstrating the next generation architecture for ultra-deepwater production of natural gas and other petroleum in furtherance of the purposes stated in paragraph (2)(A) through (C).

(b) CONDITIONS FOR GRANTS.—Grants provided under this section shall contain the following conditions:

(1) If the grant recipient consists of more than one entity, the recipient shall provide a signed contract agreed to by all participating members clearly

defining all rights to intellectual property for existing technology and for future inventions conceived and developed using funds provided under the grant, in a manner that is consistent with applicable laws.

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

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

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

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

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

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

(c) ALLOCATION OF FUNDS.—Funds available for grants under this subtitle shall be allocated as follows:

(1) 15 percent shall be for grants under subsection (a)(1).

(2) 15 percent shall be for grants under subsection (a)(2).

(3) 60 percent shall be for grants under subsection (a)(3).

(4) 10 percent shall be for carrying out section 2444.

SEC. 2448. PLAN AND FUNDING.

(a) TRANSMITTAL TO SECRETARY.—The Research Organization shall transmit to the Secretary an annual plan proposing projects and funding of activities under each paragraph of section 2447(a).

(b) REVIEW.—The Secretary shall have 1 month to review the annual plan, and shall approve the plan, if it is consistent with this subtitle. If the Secretary approves the plan, the Secretary shall provide funding as proposed in the plan.

(c) DISAPPROVAL.—If the Secretary does not approve the plan, the Secretary shall notify the Research Organization of the reasons for disapproval and shall withhold funding until a new plan is submitted which the Secretary approves. Within 1 month after notifying the Research Organization of a disapproval, the Secretary shall notify the appropriate congressional committees of the disapproval.

SEC. 2449. AUDIT.

The Secretary shall retain an independent, commercial auditor to determine the extent to which the funds authorized by this subtitle have been expended in a man-

ner consistent with the purposes of this subtitle. The auditor shall transmit a report annually to the Secretary, who shall transmit the report to the appropriate congressional committees, along with a plan to remedy any deficiencies cited in the report.

SEC. 2450. FUND.

(a) ESTABLISHMENT.—There is established in the Treasury of the United States a fund to be known as the ''Ultra-Deepwater and Unconventional Gas Research Fund'' which shall be available for obligation to the extent provided in advance in appropriations Acts for allocation under section 2447(c).

(b) FUNDING SOURCES.—

(1) LOANS FROM TREASURY.—There are authorized to be appropriated to the Secretary $900,000,000 for the period encompassing fiscal years 2002 through 2009. Such amounts shall be deposited by the Secretary in the Fund, and shall be considered loans from the Treasury. Income received by the United States in connection with any ultra-deepwater oil and gas leases shall be deposited in the Treasury and considered as repayment for the loans under this paragraph.

(2) ADDITIONAL APPROPRIATIONS.—There are authorized to be appropriated to the Secretary such

sums as may be necessary for the fiscal years 2002 through 2009, to be deposited in the Fund.

(3) OIL AND GAS LEASE INCOME.—To the extent provided in advance in appropriations Acts, not more than 7.5 percent of the income of the United States from Federal oil and gas leases may be deposited in the Fund for fiscal years 2002 through 2009.

SEC. 2451. SUNSET.

No funds are authorized to be appropriated for carrying out this subtitle after fiscal year 2009. The Research Organization shall be terminated when it has expended all funds made available pursuant to this subtitle.

Subtitle D—Fuel Cells

SEC. 2461. FUEL CELLS.

(a) IN GENERAL.—The Secretary shall conduct a program of research, development, demonstration, and commercial application on fuel cells. The program shall address—

(1) Advanced Research;

(2) Systems Development;

(3) Vision 21-Hybrids; and

(4) Innovative Concepts.

(b) MANUFACTURING PRODUCTION AND PROCESSES.—In addition to the program under subsection (a),

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

(c) AUTHORIZATION OF APPROPRIATIONS.—Within the amounts authorized to be appropriated under section 2481(a), there are authorized to be appropriated to the Secretary for the purpose of carrying out subsection (b), $28,000,000 for each of fiscal years 2002 through 2004.

Subtitle E—Department of Energy Authorization of Appropriations

SEC. 2481. AUTHORIZATION OF APPROPRIATIONS.

(a) OPERATION AND MAINTENANCE.—There are authorized to be appropriated to the Secretary for operation and maintenance for subtitle B and subtitle D, and for Fossil Energy Research and Development Headquarters Program Direction, Field Program Direction, Plant and Capital Equipment, Cooperative Research and Development, Import/Export Authorization, and Advanced Metallurgical Processes $282,000,000 for fiscal year 2002,

$293,000,000 for fiscal year 2003, and $305,000,000 for fiscal year 2004, to remain available until expended.

(b) LIMITS ON USE OF FUNDS.—None of the funds authorized to be appropriated in subsection (a) may be used for—

(1) Gas Hydrates.

(2) Fossil Energy Environmental Restoration; or

(3) research, development, demonstration, and commercial application on coal and related technologies, including activities under subtitle A.

TITLE V—SCIENCE

Subtitle A—Fusion Energy Sciences

SEC. 2501. SHORT TITLE.

This subtitle may be cited as the ''Fusion Energy Sciences Act of 2001''.

SEC. 2502. FINDINGS.

The Congress finds that—

(1) economic prosperity is closely linked to an affordable and ample energy supply;

(2) environmental quality is closely linked to energy production and use;

(3) population, worldwide economic development, energy consumption, and stress on the envi-

ronment are all expected to increase substantially in the coming decades;

(4) the few energy options with the potential to meet economic and environmental needs for the long-term future should be pursued as part of a balanced national energy plan;

(5) fusion energy is an attractive long-term energy source because of the virtually inexhaustible supply of fuel, and the promise of minimal adverse environmental impact and inherent safety;

(6) the National Research Council, the President's Committee of Advisers on Science and Technology, and the Secretary of Energy Advisory Board have each recently reviewed the Fusion Energy Sciences Program and each strongly supports the fundamental science and creative innovation of the program, and has confirmed that progress toward the goal of producing practical fusion energy has been excellent, although much scientific and engineering work remains to be done;

(7) each of these reviews stressed the need for a magnetic fusion burning plasma experiment to address key scientific issues and as a necessary step in the development of fusion energy;

(8) the National Research Council has also called for a broadening of the Fusion Energy Sciences Program research base as a means to more fully integrate the fusion science community into the broader scientific community; and

(9) the Fusion Energy Sciences Program budget is inadequate to support the necessary science and innovation for the present generation of experiments, and cannot accommodate the cost of a burning plasma experiment constructed by the United States, or even the cost of key participation by the United States in an international effort.

SEC. 2503. PLAN FOR FUSION EXPERIMENT.

(a) PLAN FOR UNITED STATES FUSION EXPERIMENT.—The Secretary, on the basis of full consultation with the Fusion Energy Sciences Advisory Committee and the Secretary of Energy Advisory Board, as appropriate, shall develop a plan for United States construction of a magnetic fusion burning plasma experiment for the purpose of accelerating scientific understanding of fusion plasmas. The Secretary shall request a review of the plan by the National Academy of Sciences, and shall transmit the plan and the review to the Congress by July 1, 2004.

(b) REQUIREMENTS OF PLAN.—The plan described in subsection (a) shall—

(1) address key burning plasma physics issues; and

(2) include specific information on the scientific capabilities of the proposed experiment, the relevance of these capabilities to the goal of practical fusion energy, and the overall design of the experiment including its estimated cost and potential construction sites.

(c) UNITED STATES PARTICIPATION IN AN INTERNATIONAL EXPERIMENT.—In addition to the plan described in subsection (a), the Secretary, on the basis of full consultation with the Fusion Energy Sciences Advisory Committee and the Secretary of Energy Advisory Board, as appropriate, may also develop a plan for United States participation in an international burning plasma experiment for the same purpose, whose construction is found by the Secretary to be highly likely and where United States participation is cost effective relative to the cost and scientific benefits of a domestic experiment described in subsection (a). If the Secretary elects to develop a plan under this subsection, he shall include the information described in subsection (b), and an estimate of the cost of United States participation in such an international experiment. The Secretary shall request a review by the National Academies of Sciences and Engineering

of a plan developed under this subsection, and shall transmit the plan and the review to the Congress not later than July 1, 2004.

(d) AUTHORIZATION OF RESEARCH AND DEVELOPMENT.—The Secretary, through the Fusion Energy Sciences Program, may conduct any research and development necessary to fully develop the plans described in this section.

SEC. 2504. PLAN FOR FUSION ENERGY SCIENCES PROGRAM.

Not later than 6 months after the date of the enactment of this Act, the Secretary, in full consultation with FESAC, shall develop and transmit to the Congress a plan for the purpose of ensuring a strong scientific base for the Fusion Energy Sciences Program and to enable the experiments described in section 2503. Such plan shall include as its objectives—

(1) to ensure that existing fusion research facilities and equipment are more fully utilized with appropriate measurements and control tools;

(2) to ensure a strengthened fusion science theory and computational base;

(3) to ensure that the selection of and funding for new magnetic and inertial fusion research facili-

ties is based on scientific innovation and cost effectiveness;

(4) to improve the communication of scientific results and methods between the fusion science community and the wider scientific community;

(5) to ensure that adequate support is provided to optimize the design of the magnetic fusion burning plasma experiments referred to in section 2503;

(6) to ensure that inertial confinement fusion facilities are utilized to the extent practicable for the purpose of inertial fusion energy research and development;

(7) to develop a roadmap for a fusion-based energy source that shows the important scientific questions, the evolution of confinement configurations, the relation between these two features, and their relation to the fusion energy goal;

(8) to establish several new centers of excellence, selected through a competitive peer-review process and devoted to exploring the frontiers of fusion science;

(9) to ensure that the National Science Foundation, and other agencies, as appropriate, play a role in extending the reach of fusion science and in sponsoring general plasma science; and

(10) to ensure that there be continuing broad assessments of the outlook for fusion energy and periodic external reviews of fusion energy sciences.

SEC. 2505. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary for the development and review, but not for implementation, of the plans described in this subtitle and for activities of the Fusion Energy Sciences Program $320,000,000 for fiscal year 2002 and $335,000,000 for fiscal year 2003, of which up to $15,000,000 for each of fiscal year 2002 and fiscal year 2003 may be used to establish several new centers of excellence, selected through a competitive peer-review process and devoted to exploring the frontiers of fusion science.

Subtitle B—Spallation Neutron Source

SEC. 2521. DEFINITION.

For the purposes of this subtitle, the term ''Spallation Neutron Source'' means Department Project 99–E–334, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

SEC. 2522. AUTHORIZATION OF APPROPRIATIONS.

(a) AUTHORIZATION OF CONSTRUCTION FUNDING.—There are authorized to be appropriated to the Secretary for construction of the Spallation Neutron Source—

(1) $276,300,000 for fiscal year 2002;

(2) $210,571,000 for fiscal year 2003;

(3) $124,600,000 for fiscal year 2004;

(4) $79,800,000 for fiscal year 2005; and

(5) $41,100,000 for fiscal year 2006 for completion of construction.

(b) AUTHORIZATION OF OTHER PROJECT FUNDING.—There are authorized to be appropriated to the Secretary for other project costs (including research and development necessary to complete the project, preoperations costs, and capital equipment not related to construction) of the Spallation Neutron Source $15,353,000 for fiscal year 2002 and $103,279,000 for the period encompassing fiscal years 2003 through 2006, to remain available until expended through September 30, 2006.

SEC. 2523. REPORT.

The Secretary shall report on the Spallation Neutron Source as part of the Department's annual budget submission, including a description of the achievement of milestones, a comparison of actual costs to estimated costs, and any changes in estimated project costs or schedule.

SEC. 2524. LIMITATIONS.

The total amount obligated by the Department, including prior year appropriations, for the Spallation Neutron Source may not exceed—

(1) $1,192,700,000 for costs of construction;

(2) $219,000,000 for other project costs; and

(3) $1,411,700,000 for total project cost.

Subtitle C—Facilities, Infrastructure, and User Facilities

SEC. 2541. DEFINITION.

For purposes of this subtitle—

(1) the term ''nonmilitary energy laboratory'' means—

(A) Ames Laboratory;

(B) Argonne National Laboratory;

(C) Brookhaven National Laboratory;

(D) Fermi National Accelerator Laboratory;

(E) Lawrence Berkeley National Laboratory;

(F) Oak Ridge National Laboratory;

(G) Pacific Northwest National Laboratory;

(H) Princeton Plasma Physics Laboratory;

(I) Stanford Linear Accelerator Center;

(J) Thomas Jefferson National Accelerator Facility; or

(K) any other facility of the Department that the Secretary, in consultation with the Di-

rector, Office of Science and the appropriate congressional committees, determines to be consistent with the mission of the Office of Science; and

(2) the term ''user facility'' means—

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

(B) any other Office of Science funded facility designated by the Secretary as a user facility.

SEC. 2542. FACILITY AND INFRASTRUCTURE SUPPORT FOR NONMILITARY ENERGY LABORATORIES.

(a) FACILITY POLICY.—The Secretary shall develop and implement a least-cost nonmilitary energy laboratory facility and infrastructure strategy for—

(1) maintaining existing facilities and infrastructure, as needed;

(2) closing unneeded facilities;

(3) making facility modifications; and

(4) building new facilities.

(b) PLAN.—The Secretary shall prepare a comprehensive 10-year plan for conducting future facility maintenance, making repairs, modifications, and new additions, and constructing new facilities at each nonmilitary energy laboratory. Such plan shall provide for facilities work in accordance with the following priorities:

(1) Providing for the safety and health of employees, visitors, and the general public with regard to correcting existing structural, mechanical, electrical, and environmental deficiencies.

(2) Providing for the repair and rehabilitation of existing facilities to keep them in use and prevent deterioration, if feasible.

(3) Providing engineering design and construction services for those facilities that require modi-

fication or additions in order to meet the needs of new or expanded programs.

(c) REPORT.—

(1) TRANSMITTAL.—Within 1 year after the date of the enactment of this Act, the Secretary shall prepare and transmit to the appropriate congressional committees a report containing the plan prepared under subsection (b).

(2) CONTENTS.—For each nonmilitary energy laboratory, such report shall contain—

(A) the current priority list of proposed facilities and infrastructure projects, including cost and schedule requirements;

(B) a current ten-year plan that demonstrates the reconfiguration of its facilities and infrastructure to meet its missions and to address its long-term operational costs and return on investment;

(C) the total current budget for all facilities and infrastructure funding; and

(D) the current status of each facilities and infrastructure project compared to the original baseline cost, schedule, and scope.

(3) ADDITIONAL ELEMENTS.—The report shall also—

(A) include a plan for new facilities and facility modifications at each nonmilitary energy laboratory that will be required to meet the Department's changing missions of the twenty-first century, including schedules and estimates for implementation, and including a section outlining long-term funding requirements consistent with anticipated budgets and annual authorization of appropriations;

(B) address the coordination of modernization and consolidation of facilities among the nonmilitary energy laboratories in order to meet changing mission requirements; and

(C) provide for annual reports to the appropriate congressional committees on accomplishments, conformance to schedules, commitments, and expenditures.

SEC. 2543. USER FACILITIES.

(a) NOTICE REQUIREMENT.—When the Department makes a user facility available to universities and other potential users, or seeks input from universities and other potential users regarding significant characteristics or equipment in a user facility or a proposed user facility, the Department shall ensure broad public notice of such

availability or such need for input to universities and other potential users.

(b) COMPETITION REQUIREMENT.—When the Department considers the participation of a university or other potential user in the establishment or operation of a user facility, the Department shall employ full and open competition in selecting such a participant.

(c) PROHIBITION.—The Department may not redesignate a user facility, as defined by section 2541(b) as something other than a user facility for avoid the requirements of subsections (a) and (b).

Subtitle D—Advisory Panel on Office of Science

SEC. 2561. ESTABLISHMENT.

The Director of the Office of Science and Technology Policy, in consultation with the Secretary, shall establish an Advisory Panel on the Office of Science comprised of knowledgeable individuals to—

(1) address concerns about the current status and the future of scientific research supported by the Office;

(2) examine alternatives to the current organizational structure of the Office within the Department, taking into consideration existing structures

for the support of scientific research in other Federal agencies and the private sector; and

(3) suggest actions to strengthen the scientific research supported by the Office that might be taken jointly by the Department and Congress.

SEC. 2562. REPORT.

Within 6 months after the date of the enactment of this Act, the Advisory Panel shall transmit its findings and recommendations in a report to the Director of the Office of Science and Technology Policy and the Secretary. The Director and the Secretary shall jointly—

(1) consider each of the Panel's findings and recommendations, and comment on each as they consider appropriate; and

(2) transmit the Panel's report and the comments of the Director and the Secretary on the report to the appropriate congressional committees within 9 months after the date of the enactment of this Act.

Subtitle E—Department of Energy Authorization of Appropriations

SEC. 2581. AUTHORIZATION OF APPROPRIATIONS.

(a) OPERATION AND MAINTENANCE.—Including the amounts authorized to be appropriated for fiscal year 2002 under section 2505 for Fusion Energy Sciences and

under section 2522(b) for the Spallation Neutron Source, there are authorized to be appropriated to the Secretary for the Office of Science (also including subtitle C, High Energy Physics, Nuclear Physics, Biological and Environmental Research, Basic Energy Sciences (except for the Spallation Neutron Source), Advanced Scientific Computing Research, Energy Research Analysis, Multiprogram Energy Laboratories-Facilities Support, Facilities and Infrastructure, Safeguards and Security, and Program Direction) operation and maintenance $3,299,558,000 for fiscal year 2002, to remain available until expended.

(b) RESEARCH REGARDING PRECIOUS METAL CATALYSIS.—Within the amounts authorized to be appropriated to the Secretary under subsection (a), $5,000,000 for fiscal year 2002 may be used to carry out research in the use of precious metals (excluding platinum, palladium, and rhodium) in catalysis, either directly though national laboratories, or through the award of grants, cooperative agreements, or contracts with public or nonprofit entities.

(c) CONSTRUCTION.—In addition to the amounts authorized to be appropriated under section 2522(a) for construction of the Spallation Neutron Source, there are authorized to be appropriated to the Secretary for Science—

(1) $11,400,000 for fiscal year 2002 for completion of construction of Project 98-G-304, Neutrinos at the Main Injector, Fermi National Accelerator Laboratory;

(2) $11,405,000 for fiscal year 2002 for completion of construction of Project 01-E-300, Laboratory for Comparative and Functional Genomics, Oak Ridge National Laboratory;

(3) $4,000,000 for fiscal year 2002, $8,000,000 for fiscal year 2003, and $2,000,000 for fiscal year 2004 for completion of construction of Project 02-SC-002, Project Engineering Design (PED), Various Locations;

(4) $3,183,000 for fiscal year 2002 for completion of construction of Project 02-SC-002, Multiprogram Energy Laboratories Infrastructure Project Engineering Design (PED), Various Locations; and

(5) $18,633,000 for fiscal year 2002 and $13,029,000 for fiscal year 2003 for completion of construction of Project MEL-001, Multiprogram Energy Laboratories, Infrastructure, Various Locations.

(d) LIMITS ON USE OF FUNDS.—None of the funds authorized to be appropriated in subsection (c) may be used for construction at any national security laboratory

as defined in section 3281(1) of the National Defense Authorization Act for Fiscal Year 2000 (50 U.S.C. 2471(1)) or at any nuclear weapons production facility as defined in section 3281(2) of the National Defense Authorization Act for Fiscal Year 2000 (50 U.S.C. 2471(2)).

TITLE VI—MISCELLANEOUS

Subtitle A—General Provisions for the Department of Energy

SEC. 2601. RESEARCH, DEVELOPMENT, DEMONSTRATION, AND COMMERCIAL APPLICATION OF ENERGY TECHNOLOGY PROGRAMS, PROJECTS, AND ACTIVITIES.

(a) AUTHORIZED ACTIVITIES.—Except as otherwise provided in this division, research, development, demonstration, and commercial application programs, projects, and activities for which appropriations are authorized under this division may be carried out under the procedures of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.), the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.), or any other Act under which the Secretary is authorized to carry out such programs, projects, and activities, but only to the extent the Secretary is authorized to carry out such activities under each such Act.

(b) AUTHORIZED AGREEMENTS.—Except as otherwise provided in this division, in carrying out research, development, demonstration, and commercial application programs, projects, and activities for which appropriations are authorized under this division, the Secretary may use, to the extent authorized under applicable provisions of law, contracts, cooperative agreements, cooperative research and development agreements under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grants, joint ventures, and any other form of agreement available to the Secretary.

(c) DEFINITION.—For purposes of this section, the term ''joint venture'' has the meaning given that term under section 2 of the National Cooperative Research and Production Act of 1993 (15 U.S.C. 4301), except that such term may apply under this section to research, development, demonstration, and commercial application of energy technology joint ventures.

(d) PROTECTION OF INFORMATION.—Section 12(c)(7) of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3710a(c)(7)), relating to the protection of information, shall apply to research, development, demonstration, and commercial application of energy technology programs, projects, and activities for which appropriations are authorized under this division.

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

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

(g) GUIDELINES AND PROCEDURES.—The Secretary shall provide guidelines and procedures for the transition, where appropriate, of energy technologies from research through development and demonstration to commercial application of energy technology. Nothing in this section shall preclude the Secretary from—

(1) entering into a contract, cooperative agreement, cooperative research and development agreement under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grant, joint venture, or any other form of agreement available to the Secretary under this section that relates

to research, development, demonstration, and commercial application of energy technology; or

(2) extending a contract, cooperative agreement, cooperative research and development agreement under the Stevenson-Wydler Technology Innovation Act of 1980, grant, joint venture, or any other form of agreement available to the Secretary that relates to research, development, and demonstration to cover commercial application of energy technology.

(h) APPLICATION OF SECTION.—This section shall not apply to any contract, cooperative agreement, cooperative research and development agreement under the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grant, joint venture, or any other form of agreement available to the Secretary that is in effect as of the date of enactment of this Act.

SEC. 2602. LIMITS ON USE OF FUNDS.

(a) MANAGEMENT AND OPERATING CONTRACTS.—

(1) COMPETITIVE PROCEDURE REQUIREMENT.—None of the funds authorized to be appropriated to the Secretary by this division may be used to award a management and operating contract for a federally owned or operated nonmilitary energy laboratory of the Department unless such contract is

awarded using competitive procedures or the Secretary grants, on a case-by-case basis, a waiver to allow for such a deviation. The Secretary may not delegate the authority to grant such a waiver.

(2) CONGRESSIONAL NOTICE.—At least 2 months before a contract award, amendment, or modification for which the Secretary intends to grant such a waiver, the Secretary shall submit to the appropriate congressional committees a report notifying the committees of the waiver and setting forth the reasons for the waiver.

(b) PRODUCTION OR PROVISION OF ARTICLES OR SERVICES.—None of the funds authorized to be appropriated to the Secretary by this division may be used to produce or provide articles or services for the purpose of selling the articles or services to a person outside the Federal Government, unless the Secretary determines that comparable articles or services are not available from a commercial source in the United States.

(c) REQUESTS FOR PROPOSALS.—None of the funds authorized to be appropriated to the Secretary by this division may be used by the Department to prepare or initiate Requests for Proposals for a program if the program has not been authorized by Congress.

SEC. 2603. COST SHARING.

(a) RESEARCH AND DEVELOPMENT.—Except as otherwise provided in this division, for research and development programs carried out under this division, the Secretary shall require a commitment from non-Federal sources of at least 20 percent of the cost of the project. The Secretary may reduce or eliminate the non-Federal requirement under this subsection if the Secretary determines that the research and development is of a basic or fundamental nature.

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

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

SEC. 2604. LIMITATION ON DEMONSTRATION AND COMMERCIAL APPLICATION OF ENERGY TECHNOLOGY.

Except as otherwise provided in this division, the Secretary shall provide funding for scientific or energy demonstration and commercial application of energy technology programs, projects, or activities only for technologies or processes that can be reasonably expected to yield new, measurable benefits to the cost, efficiency, or performance of the technology or process.

SEC. 2605. REPROGRAMMING.

(a) AUTHORITY.—The Secretary may use amounts appropriated under this division for a program, project, or activity other than the program, project, or activity for which such amounts were appropriated only if—

(1) the Secretary has transmitted to the appropriate congressional committees a report described in subsection (b) and a period of 30 days has elapsed after such committees receive the report;

(2) amounts used for the program, project, or activity do not exceed—

(A) 105 percent of the amount authorized for the program, project, or activity; or

(B) $250,000 more than the amount authorized for the program, project, or activity,

whichever is less; and

(3) the program, project, or activity has been presented to, or requested of, the Congress by the Secretary.

(b) REPORT.—(1) The report referred to in subsection (a) is a report containing a full and complete statement of the action proposed to be taken and the facts and circumstances relied upon in support of the proposed action.

(2) In the computation of the 30-day period under subsection (a), there shall be excluded any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain.

(c) LIMITATIONS.—(1) In no event may the total amount of funds obligated by the Secretary pursuant to this division exceed the total amount authorized to be appropriated to the Secretary by this division.

(2) Funds appropriated to the Secretary pursuant to this division may not be used for an item for which Congress has declined to authorize funds.

Subtitle B—Other Miscellaneous Provisions

SEC. 2611. NOTICE OF REORGANIZATION.

The Secretary shall provide notice to the appropriate congressional committees not later than 15 days before any reorganization of any environmental research or devel-

opment, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity of the Department.

SEC. 2612. LIMITS ON GENERAL PLANT PROJECTS.

If, at any time during the construction of a civilian environmental research and development, scientific or energy research, development, or demonstration, or commercial application of energy technology project of the Department for which no specific funding level is provided by law, the estimated cost (including any revision thereof) of the project exceeds $5,000,000, the Secretary may not continue such construction unless the Secretary has furnished a complete report to the appropriate congressional committees explaining the project and the reasons for the estimate or revision.

SEC. 2613. LIMITS ON CONSTRUCTION PROJECTS.

(a) LIMITATION.—Except as provided in subsection (b), construction on a civilian environmental research and development, scientific or energy research, development, or demonstration, or commercial application of energy technology project of the Department for which funding has been specifically provided by law may not be started, and additional obligations may not be incurred in connection with the project above the authorized funding amount,

whenever the current estimated cost of the construction project exceeds by more than 10 percent the higher of—

(1) the amount authorized for the project, if the entire project has been funded by the Congress; or

(2) the amount of the total estimated cost for the project as shown in the most recent budget justification data submitted to Congress.

(b) NOTICE.—An action described in subsection (a) may be taken if—

(1) the Secretary has submitted to the appropriate congressional committees a report on the proposed actions and the circumstances making such actions necessary; and

(2) a period of 30 days has elapsed after the date on which the report is received by the committees.

(c) EXCLUSION.—In the computation of the 30-day period described in subsection (b)(2), there shall be excluded any day on which either House of Congress is not in session because of an adjournment of more than 3 days to a day certain.

(d) EXCEPTION.—Subsections (a) and (b) shall not apply to any construction project that has a current estimated cost of less than $5,000,000.

SEC. 2614. AUTHORITY FOR CONCEPTUAL AND CONSTRUCTION DESIGN.

(a) REQUIREMENT FOR CONCEPTUAL DESIGN.—(1) Subject to paragraph (2) and except as provided in paragraph (3), before submitting to Congress a request for funds for a construction project that is in support of a civilian environmental research and development, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity of the Department, the Secretary shall complete a conceptual design for that project.

(2) If the estimated cost of completing a conceptual design for a construction project exceeds $750,000, the Secretary shall submit to Congress a request for funds for the conceptual design before submitting a request for funds for the construction project.

(3) The requirement in paragraph (1) does not apply to a request for funds for a construction project, the total estimated cost of which is less than $5,000,000.

(b) AUTHORITY FOR CONSTRUCTION DESIGN.—(1) The Secretary may carry out construction design (including architectural and engineering services) in connection with any proposed construction project that is in support of a civilian environmental research and development, scientific or energy research, development, and demonstration, or commercial application of energy technology pro-

gram, project, or activity of the Department if the total estimated cost for such design does not exceed $250,000.

(2) If the total estimated cost for construction design in connection with any construction project described in paragraph (1) exceeds $250,000, funds for such design must be specifically authorized by law.

SEC. 2615. NATIONAL ENERGY POLICY DEVELOPMENT GROUP MANDATED REPORTS.

(a) THE SECRETARY'S REVIEW OF ENERGY EFFICIENCY RENEWABLE ENERGY, AND ALTERNATIVE ENERGY RESEARCH AND DEVELOPMENT.—Upon completion of the Secretary's review of current funding and historic performance of the Department's energy efficiency, renewable energy, and alternative energy research and development programs in response to the recommendations of the May 16, 2001, Report of the National Energy Policy Development Group, the Secretary shall transmit a report containing the results of such review to the appropriate congressional committees.

(b) REVIEW AND RECOMMENDATIONS ON USING THE NATION'S ENERGY RESOURCES MORE EFFICIENTLY.—Upon completion of the Office of Science and Technology Policy and the President's Council of Advisors on Science and Technology reviewing and making recommendations on using the Nation's energy resources more efficiently,

in response to the recommendation of the May 16, 2001, Report of the National Energy Policy Development Group, the Director of the Office of Science and Technology Policy shall transmit a report containing the results of such review and recommendations to the appropriate congressional committees.

SEC. 2616. PERIODIC REVIEWS AND ASSESSMENTS.

The Secretary shall enter into appropriate arrangements with the National Academies of Sciences and Engineering to ensure that there be periodic reviews and assessments of the programs authorized by this division, as well as the measurable cost and performance-based goals for such programs as established under section 2004, and the progress on meeting such goals. Such reviews and assessments shall be conducted at least every 5 years, or more often as the Secretary considers necessary, and the Secretary shall transmit to the appropriate congressional committees reports containing the results of such reviews and assessments.

DIVISION C

SEC. 3001. SHORT TITLE.

(a) SHORT TITLE.—This division may be cited as the ''Energy Tax Policy Act of 2001''.

(b) AMENDMENT OF 1986 CODE.—Except as otherwise expressly provided, whenever in this division an amendment or repeal is expressed in terms of an amendment to, or repeal of, a section or other provision, the reference shall be considered to be made to a section or other provision of the Internal Revenue Code of 1986.

TITLE I—CONSERVATION

SEC. 3101. CREDIT FOR RESIDENTIAL SOLAR ENERGY PROPERTY.

(a) IN GENERAL.—Subpart A of part IV of subchapter A of chapter 1 (relating to nonrefundable personal credits) is amended by inserting after section 25B the following new section:

''SEC. 25C. RESIDENTIAL SOLAR ENERGY PROPERTY.

''(a) ALLOWANCE OF CREDIT.—In the case of an individual, there shall be allowed as a credit against the tax imposed by this chapter for the taxable year an amount equal to the sum of—

''(1) 15 percent of the qualified photovoltaic property expenditures made by the taxpayer during such year, and

"(2) 15 percent of the qualified solar water heating property expenditures made by the taxpayer during the taxable year.

"(b) LIMITATIONS.—

"(1) MAXIMUM CREDIT.—The credit allowed under subsection (a) shall not exceed—

"(A) $2,000 for each system of property described in subsection (c)(1), and

"(B) $2,000 for each system of property described in subsection (c)(2).

"(2) SAFETY CERTIFICATIONS.—No credit shall be allowed under this section for an item of property unless—

"(A) in the case of solar water heating equipment, such equipment is certified for performance and safety by the non-profit Solar Rating Certification Corporation or a comparable entity endorsed by the government of the State in which such property is installed, and

"(B) in the case of a photovoltaic system, such system meets appropriate fire and electric code requirements.

"(3) LIMITATION BASED ON AMOUNT OF TAX.—The credit allowed under subsection (a) for the taxable year shall not exceed the excess of—

"(A) the sum of the regular tax liability (as defined in section 26(b)) plus the tax imposed by section 55, over

"(B) the sum of the credits allowable under this subpart (other than this section and sections 23, 25D, and 25E) and section 27 for the taxable year.

"(c) DEFINITIONS.—For purposes of this section—

"(1) QUALIFIED SOLAR WATER HEATING PROPERTY EXPENDITURE.—The term 'qualified solar water heating property expenditure' means an expenditure for property to heat water for use in a dwelling unit located in the United States and used as a residence if at least half of the energy used by such property for such purpose is derived from the sun.

"(2) QUALIFIED PHOTOVOLTAIC PROPERTY EXPENDITURE.—The term 'qualified photovoltaic property expenditure' means an expenditure for property that uses solar energy to generate electricity for use in a dwelling unit.

"(3) SOLAR PANELS.—No expenditure relating to a solar panel or other property installed as a roof (or portion thereof) shall fail to be treated as property described in paragraph (1) or (2) solely because it constitutes a structural component of the structure on which it is installed.

"(4) LABOR COSTS.—Expenditures for labor costs properly allocable to the onsite preparation, assembly, or original installation of the property described in paragraph (1) or (2) and for piping or wiring to interconnect such property to the dwelling unit shall be taken into account for purposes of this section.

"(5) SWIMMING POOLS, ETC., USED AS STORAGE MEDIUM.—Expenditures which are properly allocable to a swimming pool, hot tub, or any other energy storage medium which has a function other than the function of such storage shall not be taken into account for purposes of this section.

"(d) SPECIAL RULES.—

"(1) DOLLAR AMOUNTS IN CASE OF JOINT OCCUPANCY.—In the case of any dwelling unit which is jointly occupied and used during any calendar year as a residence by 2 or more individuals the following shall apply:

"(A) The amount of the credit allowable under subsection (a) by reason of expenditures (as the case may be) made during such calendar year by any of such individuals with respect to such dwelling unit shall be determined by treating all of such individuals as 1 taxpayer whose taxable year is such calendar year.

"(B) There shall be allowable with respect to such expenditures to each of such individuals, a credit under subsection (a) for the taxable year in which such calendar year ends in an amount which bears the same ratio to the amount determined under subparagraph (A) as the amount of such expenditures made by such individual during such calendar year bears to the aggregate of such expenditures made by all of such individuals during such calendar year.

"(2) TENANT-STOCKHOLDER IN COOPERATIVE HOUSING CORPORATION.—In the case of an individual who is a tenant-stockholder (as defined in section 216) in a cooperative housing corporation (as defined in such section), such individual shall be treated as having made his tenant-stockholder's proportionate share (as defined in section 216(b)(3)) of any expenditures of such corporation.

"(3) CONDOMINIUMS.—

"(A) IN GENERAL.—In the case of an individual who is a member of a condominium management association with respect to a condominium which he owns, such individual shall be treated as having made his proportionate share of any expenditures of such association.

"(B) CONDOMINIUM MANAGEMENT ASSOCIATION.—For purposes of this paragraph, the term 'condominium management association' means an organization which meets the requirements of paragraph (1) of section 528(c) (other than subparagraph (E) thereof) with respect to a condominium project substantially all of the units of which are used as residences.

"(4) ALLOCATION IN CERTAIN CASES.—If less than 80 percent of the use of an item is for nonbusiness purposes, only that portion of the expenditures for such item which is properly allocable to use for nonbusiness purposes shall be taken into account.

"(5) WHEN EXPENDITURE MADE; AMOUNT OF EXPENDITURE.—

"(A) IN GENERAL.—Except as provided in subparagraph (B), an expenditure with respect

to an item shall be treated as made when the original installation of the item is completed.

"(B) EXPENDITURES PART OF BUILDING CONSTRUCTION.—In the case of an expenditure in connection with the construction or reconstruction of a structure, such expenditure shall be treated as made when the original use of the constructed or reconstructed structure by the taxpayer begins.

"(C) AMOUNT.—The amount of any expenditure shall be the cost thereof.

"(6) PROPERTY FINANCED BY SUBSIDIZED ENERGY FINANCING.—For purposes of determining the amount of expenditures made by any individual with respect to any dwelling unit, there shall not be taken in to account expenditures which are made from subsidized energy financing (as defined in section 48(a)(4)(A)).

"(e) BASIS ADJUSTMENTS.—For purposes of this subtitle, if a credit is allowed under this section for any expenditure with respect to any property, the increase in the basis of such property which would (but for this subsection) result from such expenditure shall be reduced by the amount of the credit so allowed.

"(f) TERMINATION.—The credit allowed under this section shall not apply to taxable years beginning after December 31, 2006 (December 31, 2008, with respect to qualified photovoltaic property expenditures).".

(b) CONFORMING AMENDMENTS.—

(1) Subsection (a) of section 1016 is amended by striking "and" at the end of paragraph (27), by striking the period at the end of paragraph (28) and inserting ", and", and by adding at the end the following new paragraph:

"(29) to the extent provided in section 25C(e), in the case of amounts with respect to which a credit has been allowed under section 25C.".

(2) The table of sections for subpart A of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 25B the following new item:

"Sec. 25C. Residential solar energy property.".

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after December 31, 2001.

SEC. 3102. EXTENSION AND EXPANSION OF CREDIT FOR ELECTRICITY PRODUCED FROM RENEWABLE RESOURCES.

(a) EXTENSION OF CREDIT FOR WIND AND CLOSED-LOOP BIOMASS FACILITIES.—Subparagraphs (A) and (B)

of section 45(c)(3) are each amended by striking ''2002'' and inserting ''2007''.

(b) EXPANSION OF CREDIT FOR OPEN-LOOP BIOMASS AND LANDFILL GAS FACILITIES.—Paragraph (3) of section 45(c) is amended by adding at the end the following new subparagraphs:

''(D) OPEN-LOOP BIOMASS FACILITIES.—In the case of a facility using open-loop biomass to produce electricity, the term 'qualified facility' means any facility owned by the taxpayer which is originally placed in service before January 1, 2007.

''(E) LANDFILL GAS FACILITIES.—In the case of a facility producing electricity from gas derived from the biodegradation of municipal solid waste, the term 'qualified facility' means any facility owned by the taxpayer which is originally placed in service before January 1, 2007.''.

(c) DEFINITION AND SPECIAL RULES.—Subsection (c) of section 45 is amended by adding at the end the following new paragraphs:

''(5) OPEN-LOOP BIOMASS.—The term 'open-loop biomass' means any solid, nonhazardous, cel-

lulosic waste material which is segregated from other waste materials and which is derived from—

"(A) any of the following forest-related resources: mill residues, precommercial thinnings, slash, and brush, but not including old-growth timber,

"(B) solid wood waste materials, including waste pallets, crates, dunnage, manufacturing and construction wood wastes (other than pressure-treated, chemically-treated, or painted wood wastes), and landscape or right-of-way tree trimmings, but not including municipal solid waste (garbage), gas derived from the biodegradation of solid waste, or paper that is commonly recycled, or

"(C) agriculture sources, including orchard tree crops, vineyard, grain, legumes, sugar, and other crop by-products or residues.

Such term shall not include closed-loop biomass.

"(6) REDUCED CREDIT FOR CERTAIN PREEFFECTIVE DATE FACILITIES.—In the case of any facility described in subparagraph (D) or (E) of paragraph (3) which is placed in service before the date of the enactment of this subparagraph—

"(A) subsection (a)(1) shall be applied by substituting '1.0 cents' for '1.5 cents', and

"(B) the 5-year period beginning on the date of the enactment of this paragraph shall be substituted in lieu of the 10-year period in subsection (a)(2)(A)(ii).

"(7) LIMIT ON REDUCTIONS FOR GRANTS, ETC., FOR OPEN-LOOP BIOMASS FACILITIES.—If the amount of the credit determined under subsection (a) with respect to any open-loop biomass facility is required to be reduced under paragraph (3) of subsection (b), the fraction under such paragraph shall in no event be greater than 4/5.

"(8) COORDINATION WITH SECTION 29.—The term 'qualified facility' shall not include any facility the production from which is allowed as a credit under section 29 for the taxable year or any prior taxable year.".

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to electricity sold after the date of the enactment of this Act.

SEC. 3103. CREDIT FOR QUALIFIED STATIONARY FUEL CELL POWERPLANTS.

(a) BUSINESS PROPERTY.—

(1) IN GENERAL.—Subparagraph (A) of section 48(a)(3) (defining energy property) is amended by striking ''or'' at the end of clause (i), by adding ''or'' at the end of clause (ii), and by inserting after clause (ii) the following new clause:

''(iii) equipment which is part of a qualified stationary fuel cell powerplant,''.

(2) QUALIFIED STATIONARY FUEL CELL POWERPLANT.—Subsection (a) of section 48 is amended by redesignating paragraphs (4) and (5) as paragraphs (5) and (6), respectively, and by inserting after paragraph (3) the following new paragraph:

''(4) QUALIFIED STATIONARY FUEL CELL POWERPLANT.—For purposes of this subsection—

''(A) IN GENERAL.—The term 'qualified stationary fuel cell powerplant' means a stationary fuel cell power plant that has an electricity-only generation efficiency greater than 30 percent.

''(B) LIMITATION.—In the case of qualified stationary fuel cell powerplant placed in service during the taxable year, the credit under subsection (a) for such year may not exceed $1,000 for each kilowatt of capacity.

"(C) STATIONARY FUEL CELL POWER PLANT.—The term 'stationary fuel cell power plant' means an integrated system comprised of a fuel cell stack assembly and associated balance of plant components that converts a fuel into electricity using electrochemical means.

"(D) TERMINATION.—Such term shall not include any property placed in service after December 31, 2006."

(3) EFFECTIVE DATE.—The amendments made by this subsection shall apply to property placed in service after December 31, 2001, under rules similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date of the enactment of the Revenue Reconciliation Act of 1990).

(b) NONBUSINESS PROPERTY.—

(1) IN GENERAL.—Subpart A of part IV of subchapter A of chapter 1 (relating to nonrefundable personal credits) is amended by inserting after section 25C the following new section:

"SEC. 25D. NONBUSINESS QUALIFIED STATIONARY FUEL CELL POWERPLANT.

"(a) IN GENERAL.—In the case of an individual, there shall be allowed as a credit against the tax imposed

by this chapter for the taxable year an amount equal to 10 percent of the qualified stationary fuel cell powerplant expenditures which are paid or incurred during such year.

"(b) LIMITATIONS.—

"(1) IN GENERAL.—The credit allowed under subsection (a) for the taxable year and all prior taxable years shall not exceed $1,000 for each kilowatt of capacity.

"(2) LIMITATION BASED ON AMOUNT OF TAX.—The credit allowed under subsection (a) for the taxable year shall not exceed the excess of—

"(A) the sum of the regular tax liability (as defined in section 26(b)) plus the tax imposed by section 55, over

"(B) the sum of the credits allowable under this subpart (other than this section and sections 23 and 25E) and section 27 for the taxable year.

"(c) QUALIFIED STATIONARY FUEL CELL POWERPLANT EXPENDITURES.—For purposes of this section, the term 'qualified stationary fuel cell powerplant expenditures' means expenditures by the taxpayer for any qualified stationary fuel cell powerplant (as defined in section 48(a)(4))—

"(1) which meets the requirements of subparagraphs (B) and (D) of section 48(a)(3), and

"(2) which is installed on or in connection with a dwelling unit—

"(A) which is located in the United States, and

"(B) which is used by the taxpayer as a residence.

Such term includes expenditures for labor costs properly allocable to the onsite preparation, assembly, or original installation of the property.

"(d) SPECIAL RULES.—For purposes of this section, rules similar to the rules of section 25C(d) shall apply.

"(e) BASIS ADJUSTMENTS.—For purposes of this subtitle, if a credit is allowed under this section for any expenditure with respect to any property, the increase in the basis of such property which would (but for this subsection) result from such expenditure shall be reduced by the amount of the credit so allowed.

"(f) TERMINATION.—This section shall not apply to any expenditure made after December 31, 2006.".

(2) CONFORMING AMENDMENTS.—

(A) Subsection (a) of section 1016 is amended by striking "and" at the end of paragraph (28), by striking the period at the end of

paragraph (29) and inserting ", and", and by adding at the end the following new paragraph:

"(30) to the extent provided in section 25D(e), in the case of amounts with respect to which a credit has been allowed under section 25D.".

(B) The table of sections for subpart A of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 25C the following new item:

"Sec. 25D. Nonbusiness qualified stationary fuel cell powerplant.".

(3) EFFECTIVE DATE.—The amendments made by this subsection shall apply to expenditures paid or incurred after December 31, 2001.

SEC. 3104. ALTERNATIVE MOTOR VEHICLE CREDIT.

(a) IN GENERAL.—Subpart B of part IV of subchapter A of chapter 1 (relating to foreign tax credit, etc.) is amended by adding at the end the following:

"SEC. 30B. ALTERNATIVE MOTOR VEHICLE CREDIT.

"(a) ALLOWANCE OF CREDIT.—There shall be allowed as a credit against the tax imposed by this chapter for the taxable year an amount equal to the sum of—

"(1) the new qualified fuel cell motor vehicle credit determined under subsection (b),

"(2) the new qualified hybrid motor vehicle credit determined under subsection (c),

"(3) the new qualified alternative fuel motor vehicle credit determined under subsection (d), and

"(4) the advanced lean burn technology motor vehicle credit determined under subsection (e).

"(b) NEW QUALIFIED FUEL CELL MOTOR VEHICLE CREDIT.—

"(1) IN GENERAL.—For purposes of subsection (a), the new qualified fuel cell motor vehicle credit determined under this subsection with respect to a new qualified fuel cell motor vehicle placed in service by the taxpayer during the taxable year is—

"(A) $4,000, if such vehicle has a gross vehicle weight rating of not more than 8,500 pounds,

"(B) $10,000, if such vehicle has a gross vehicle weight rating of more than 8,500 pounds but not more than 14,000 pounds,

"(C) $20,000, if such vehicle has a gross vehicle weight rating of more than 14,000 pounds but not more than 26,000 pounds, and

"(D) $40,000, if such vehicle has a gross vehicle weight rating of more than 26,000 pounds.

"(2) INCREASE FOR FUEL EFFICIENCY.—

"(A) IN GENERAL.—The amount determined under paragraph (1)(A) with respect to a new qualified fuel cell motor vehicle which is a passenger automobile or light truck shall be increased by—

"(i) $1,000, if such vehicle achieves at least 150 percent but less than 175 percent of the 2000 model year city fuel economy,

"(ii) $1,500, if such vehicle achieves at least 175 percent but less than 200 percent of the 2000 model year city fuel economy,

"(iii) $2,000, if such vehicle achieves at least 200 percent but less than 225 percent of the 2000 model year city fuel economy,

"(iv) $2,500, if such vehicle achieves at least 225 percent but less than 250 percent of the 2000 model year city fuel economy,

"(v) $3,000, if such vehicle achieves at least 250 percent but less than 275 percent of the 2000 model year city fuel economy,

"(vi) $3,500, if such vehicle achieves at least 275 percent but less than 300 percent of the 2000 model year city fuel economy, and

"(vii) $4,000, if such vehicle achieves at least 300 percent of the 2000 model year city fuel economy.

"(B) 2000 MODEL YEAR CITY FUEL ECONOMY.—For purposes of subparagraph (A), the 2000 model year city fuel economy with respect to a vehicle shall be determined in accordance with the following tables:

"(i) In the case of a passenger automobile:

"If vehicle inertia weight class is:	The 2000 model year city fuel economy is:
1,500 or 1,750 lbs	43.7 mpg
2,000 lbs	38.3 mpg
2,250 lbs	34.1 mpg
2,500 lbs	30.7 mpg
2,750 lbs	27.9 mpg
3,000 lbs	25.6 mpg
3,500 lbs	22.0 mpg
4,000 lbs	19.3 mpg
4,500 lbs	17.2 mpg
5,000 lbs	15.5 mpg
5,500 lbs	14.1 mpg
6,000 lbs	12.9 mpg
6,500 lbs	11.9 mpg
7,000 or 8,500 lbs	11.1 mpg.

"(ii) In the case of a light truck:

"If vehicle inertia weight class is:	The 2000 model year city fuel economy is:
1,500 or 1,750 lbs	37.6 mpg
2,000 lbs	33.7 mpg
2,250 lbs	30.6 mpg
2,500 lbs	28.0 mpg

"If vehicle inertia weight class is:	The 2000 model year city fuel economy is:
2,750 lbs	25.9 mpg
3,000 lbs	24.1 mpg
3,500 lbs	21.3 mpg
4,000 lbs	19.0 mpg
4,500 lbs	17.3 mpg
5,000 lbs	15.8 mpg
5,500 lbs	14.6 mpg
6,000 lbs	13.6 mpg
6,500 lbs	12.8 mpg
7,000 or 8,500 lbs	12.0 mpg.

"(C) VEHICLE INERTIA WEIGHT CLASS.—For purposes of subparagraph (B), the term 'vehicle inertia weight class' has the same meaning as when defined in regulations prescribed by the Administrator of the Environmental Protection Agency for purposes of the administration of title II of the Clean Air Act (42 U.S.C. 7521 et seq.).

"(3) NEW QUALIFIED FUEL CELL MOTOR VEHICLE.—For purposes of this subsection, the term 'new qualified fuel cell motor vehicle' means a motor vehicle—

"(A) which is propelled by power derived from one or more cells which convert chemical energy directly into electricity by combining oxygen with hydrogen fuel which is stored on board the vehicle in any form and may or may not require reformation prior to use,

"(B) which, in the case of a passenger automobile or light truck—

"(i) for 2002 and later model vehicles, has received a certificate of conformity under the Clean Air Act and meets or exceeds the equivalent qualifying California low emission vehicle standard under section 243(e)(2) of the Clean Air Act for that make and model year, and

"(ii) for 2004 and later model vehicles, has received a certificate that such vehicle meets or exceeds the Tier II emission level established in regulations prescribed by the Administrator of the Environmental Protection Agency under section 202(i) of the Clean Air Act for that make and model year vehicle,

"(C) the original use of which commences with the taxpayer,

"(D) which is acquired for use or lease by the taxpayer and not for resale, and

"(E) which is made by a manufacturer.

"(c) NEW QUALIFIED HYBRID MOTOR VEHICLE CREDIT.—

"(1) IN GENERAL.—For purposes of subsection (a), the new qualified hybrid motor vehicle credit determined under this subsection with respect to a new

qualified hybrid motor vehicle placed in service by the taxpayer during the taxable year is the credit amount determined under paragraph (2).

"(2) CREDIT AMOUNT.—

"(A) IN GENERAL.—The credit amount determined under this paragraph shall be determined in accordance with the following tables:

"(i) In the case of a new qualified hybrid motor vehicle which is a passenger automobile or light truck and which provides the following percentage of the maximum available power:

"If percentage of the maximum available power is:	The credit amount is:
At least 2.5 percent but less than 10 percent	$250
At least 10 percent but less than 20 percent	$500
At least 20 percent but less than 30 percent	$750
At least 30 percent	$1,000.

"(ii) In the case of a new qualified hybrid motor vehicle which is a heavy duty hybrid motor vehicle and which provides the following percentage of the maximum available power:

"(I) If such vehicle has a gross vehicle weight rating of not more than 14,000 pounds:

"If percentage of the maximum available power is:	The credit amount is:
At least 20 percent but less than 30 percent	$1,500
At least 30 percent but less than 40 percent	$1,750
At least 40 percent but less than 50 percent	$2,000

"If percentage of the maximum available power is:	The credit amount is:
At least 50 percent but less than 60 percent	$2,250
At least 60 percent	$2,500.

"(II) If such vehicle has a gross vehicle weight rating of more than 14,000 but not more than 26,000 pounds:

"If percentage of the maximum available power is:	The credit amount is:
At least 20 percent but less than 30 percent	$4,000
At least 30 percent but less than 40 percent	$4,500
At least 40 percent but less than 50 percent	$5,000
At least 50 percent but less than 60 percent	$5,500
At least 60 percent	$6,000.

"(III) If such vehicle has a gross vehicle weight rating of more than 26,000 pounds:

"If percentage of the maximum available power is:	The credit amount is:
At least 20 percent but less than 30 percent	$6,000
At least 30 percent but less than 40 percent	$7,000
At least 40 percent but less than 50 percent	$8,000
At least 50 percent but less than 60 percent	$9,000
At least 60 percent	$10,000.

"(B) INCREASE FOR FUEL EFFICIENCY.—

"(i) AMOUNT.—The amount determined under subparagraph (A)(i) with respect to a passenger automobile or light truck shall be increased by—

"(I) $1,000, if such vehicle achieves at least 125 percent but less than 150 percent of the 2000 model year city fuel economy,

"(II) $1,500, if such vehicle achieves at least 150 percent but less than 175 percent of the 2000 model year city fuel economy,

"(III) $2,000, if such vehicle achieves at least 175 percent but less than 200 percent of the 2000 model year city fuel economy,

"(IV) $2,500, if such vehicle achieves at least 200 percent but less than 225 percent of the 2000 model year city fuel economy,

"(V) $3,000, if such vehicle achieves at least 225 percent but less than 250 percent of the 2000 model year city fuel economy, and

"(VI) $3,500, if such vehicle achieves at least 250 percent of the 2000 model year city fuel economy.

"(ii) 2000 MODEL YEAR CITY FUEL ECONOMY.—For purposes of clause (i), the 2000 model year city fuel economy with respect to a vehicle shall be determined using the tables provided in subsection (b)(2)(B) with respect to such vehicle.

"(iii) OPTION TO USE LIKE VEHICLE.—For purposes of clause (i), at the option of the vehicle manufacturer, the increase for fuel efficiency may be calculated by comparing the new qualified hybrid motor vehicle to a 'like vehicle'.

"(C) INCREASE FOR ACCELERATED EMISSIONS PERFORMANCE.—The amount determined under subparagraph (A)(ii) with respect to an applicable heavy duty hybrid motor vehicle shall be increased by the increase credit amount determined in accordance with the following tables:

"(i) In the case of a vehicle which has a gross vehicle weight rating of not more than 14,000 pounds:

"If the model year is:	The increase credit amount is:
2002	$3,500
2003	$3,000
2004	$2,500
2005	$2,000
2006	$1,500.

"(ii) In the case of a vehicle which has a gross vehicle weight rating of more than 14,000 pounds but not more than 26,000 pounds:

"If the model year is:	The increase credit amount is:
2002	$9,000
2003	$7,750
2004	$6,500

"If the model year is:	The increase credit amount is:
2005	$5,250
2006	$4,000.

"(iii) In the case of a vehicle which has a gross vehicle weight rating of more than 26,000 pounds:

"If the model year is:	The increase credit amount is:
2002	$14,000
2003	$12,000
2004	$10,000
2005	$8,000
2006	$6,000.

"(D) CONSERVATION CREDIT.—

"(i) AMOUNT.—The amount determined under subparagraph (A)(i) with respect to a passenger automobile or light truck shall be increased by—

"(I) $250, if such vehicle achieves a lifetime fuel savings of at least 1,500 gallons of gasoline, and

"(II) $500, if such vehicle achieves a lifetime fuel savings of at least 2,500 gallons of gasoline.

"(ii) LIFETIME FUEL SAVINGS FOR LIKE VEHICLE.—For purposes of clause (i), at the option of the vehicle manufacturer, the lifetime fuel savings fuel may be calculated by comparing the new qualified hybrid motor vehicle to a 'like vehicle'.

"(E) DEFINITIONS.—

"(i) APPLICABLE HEAVY DUTY HYBRID MOTOR VEHICLE.—For purposes of subparagraph (C), the term 'applicable heavy duty hybrid motor vehicle' means a heavy duty hybrid motor vehicle which is powered by an internal combustion or heat engine which is certified as meeting the emission standards set in the regulations prescribed by the Administrator of the Environmental Protection Agency for 2007 and later model year diesel heavy duty engines or 2008 and later model year ottocycle heavy duty engines, as applicable.

"(ii) HEAVY DUTY HYBRID MOTOR VEHICLE.—For purposes of this paragraph, the term 'heavy duty hybrid motor vehicle' means a new qualified hybrid motor vehicle which has a gross vehicle weight rating of more than 10,000 pounds and draws propulsion energy from both of the following onboard sources of stored energy:

"(I) An internal combustion or heat engine using consumable fuel which, for 2002 and later model vehicles, has received a certificate of con-

formity under the Clean Air Act and meets or exceeds a level of not greater than 3.0 grams per brake horsepower-hour of oxides of nitrogen and 0.01 per brake horsepower-hour of particulate matter.

"(II) A rechargeable energy storage system.

"(iii) MAXIMUM AVAILABLE POWER.—

"(I) PASSENGER AUTOMOBILE OR LIGHT TRUCK.—For purposes of subparagraph (A)(i), the term 'maximum available power' means the maximum power available from the battery or other electrical storage device, during a standard 10 second pulse power test, divided by the sum of the battery or other electrical storage device and the SAE net power of the heat engine.

"(II) HEAVY DUTY HYBRID MOTOR VEHICLE.—For purposes of subparagraph (A)(ii), the term 'maximum available power' means the maximum power available from the

battery or other electrical storage device, during a standard 10 second pulse power test, divided by the vehicle's total traction power. The term 'total traction power' means the sum of the electric motor peak power and the heat engine peak power of the vehicle, except that if the electric motor is the sole means by which the vehicle can be driven, the total traction power is the peak electric motor power.

''(iv) LIKE VEHICLE.—For purposes of subparagraph (B)(iii), the term 'like vehicle' for a new qualified hybrid motor vehicle derived from a conventional production vehicle produced in the same model year means a model that is equivalent in the following areas:

''(I) Body style (2-door or 4-door).

''(II) Transmission (automatic or manual).

''(III) Acceleration performance (± 0.05 seconds).

"(IV) Drivetrain (2-wheel drive or 4-wheel drive).

"(V) Certification by the Administrator of the Environmental Protection Agency.

"(v) LIFETIME FUEL SAVINGS.—For purposes of subsection (c)(2)(D), the term 'lifetime fuel savings' shall be calculated by dividing 120,000 by the difference between the 2000 model year city fuel economy for the vehicle inertia weight class and the city fuel economy for the new qualified hybrid motor vehicle.

"(3) NEW QUALIFIED HYBRID MOTOR VEHICLE.—For purposes of this subsection, the term 'new qualified hybrid motor vehicle' means a motor vehicle—

"(A) which draws propulsion energy from onboard sources of stored energy which are both—

"(i) an internal combustion or heat engine using combustible fuel, and

"(ii) a rechargeable energy storage system,

"(B) which, in the case of a passenger automobile or light truck, for 2002 and later model vehicles, has received a certificate of conformity under the Clean Air Act and meets or exceeds the equivalent qualifying California low emission vehicle standard under section 243(e)(2) of the Clean Air Act for that make and model year,

"(C) the original use of which commences with the taxpayer,

"(D) which is acquired for use or lease by the taxpayer and not for resale, and

"(E) which is made by a manufacturer.

"(d) NEW QUALIFIED ALTERNATIVE FUEL MOTOR VEHICLE CREDIT.—

"(1) ALLOWANCE OF CREDIT.—Except as provided in paragraph (5), the credit determined under this subsection is an amount equal to the applicable percentage of the incremental cost of any new qualified alternative fuel motor vehicle placed in service by the taxpayer during the taxable year.

"(2) APPLICABLE PERCENTAGE.—For purposes of paragraph (1), the applicable percentage with respect to any new qualified alternative fuel motor vehicle is—

"(A) 50 percent, plus

"(B) 30 percent, if such vehicle—

"(i) has received a certificate of conformity under the Clean Air Act and meets or exceeds the most stringent standard available for certification under the Clean Air Act for that make and model year vehicle (other than a zero emission standard), or

"(ii) has received an order from an applicable State certifying the vehicle for sale or lease in California and meets or exceeds the most stringent standard available for certification under the State laws of California (enacted in accordance with a waiver granted under section 209(b) of the Clean Air Act) for that make and model year vehicle (other than a zero emission standard).

"(3) INCREMENTAL COST.—For purposes of this subsection, the incremental cost of any new qualified alternative fuel motor vehicle is equal to the amount of the excess of the manufacturer's suggested retail price for such vehicle over such price for a gasoline or diesel fuel motor vehicle of the

same model, to the extent such amount does not exceed—

"(A) $5,000, if such vehicle has a gross vehicle weight rating of not more than 8,500 pounds,

"(B) $10,000, if such vehicle has a gross vehicle weight rating of more than 8,500 pounds but not more than 14,000 pounds,

"(C) $25,000, if such vehicle has a gross vehicle weight rating of more than 14,000 pounds but not more than 26,000 pounds, and

"(D) $40,000, if such vehicle has a gross vehicle weight rating of more than 26,000 pounds.

"(4) QUALIFIED ALTERNATIVE FUEL MOTOR VEHICLE DEFINED.—For purposes of this subsection—

"(A) IN GENERAL.—The term 'qualified alternative fuel motor vehicle' means any motor vehicle—

"(i) which is only capable of operating on an alternative fuel,

"(ii) the original use of which commences with the taxpayer,

"(iii) which is acquired by the taxpayer for use or lease, but not for resale, and

"(iv) which is made by a manufacturer.

"(B) ALTERNATIVE FUEL.—The term 'alternative fuel' means compressed natural gas, liquefied natural gas, liquefied petroleum gas, hydrogen, and any liquid at least 85 percent of the volume of which consists of methanol.

"(5) CREDIT FOR MIXED-FUEL VEHICLES.—

"(A) IN GENERAL.—In the case of a mixed-fuel vehicle placed in service by the taxpayer during the taxable year, the credit determined under this subsection is an amount equal to—

"(i) in the case of a 75/25 mixed-fuel vehicle, 70 percent of the credit which would have been allowed under this subsection if such vehicle was a qualified alternative fuel motor vehicle, and

"(ii) in the case of a 95/5 mixed-fuel vehicle, 95 percent of the credit which would have been allowed under this sub-

section if such vehicle was a qualified alternative fuel motor vehicle.

"(B) MIXED-FUEL VEHICLE.—For purposes of this subsection, the term 'mixed-fuel vehicle' means any motor vehicle described in subparagraph (C) or (D) of paragraph (3), which—

"(i) is certified by the manufacturer as being able to perform efficiently in normal operation on a combination of an alternative fuel and a petroleum-based fuel,

"(ii) either—

"(I) has received a certificate of conformity under the Clean Air Act, or

"(II) has received an order from an applicable State certifying the vehicle for sale or lease in California and meets or exceeds the low emission vehicle standard under section 88.105–94 of title 40, Code of Federal Regulations, for that make and model year vehicle,

"(iii) the original use of which commences with the taxpayer,

"(iv) which is acquired by the taxpayer for use or lease, but not for resale, and

"(v) which is made by a manufacturer.

"(C) 75/25 MIXED-FUEL VEHICLE.—For purposes of this subsection, the term '75/25 mixed-fuel vehicle' means a mixed-fuel vehicle which operates using at least 75 percent alternative fuel and not more than 25 percent petroleum-based fuel.

"(D) 95/5 MIXED-FUEL VEHICLE.—For purposes of this subsection, the term '95/5 mixed-fuel vehicle' means a mixed-fuel vehicle which operates using at least 95 percent alternative fuel and not more than 5 percent petroleum-based fuel.

"(e) ADVANCED LEAN BURN TECHNOLOGY MOTOR VEHICLE CREDIT.—

"(1) IN GENERAL.—For purposes of subsection (a), the advanced lean burn technology motor vehicle credit determined under this subsection with respect to a new qualified advanced lean burn technology motor vehicle placed in service by the taxpayer dur-

ing the taxable year is the credit amount determined under paragraph (2).

"(2) CREDIT AMOUNT.—

"(A) INCREASE FOR FUEL EFFICIENCY.—The credit amount determined under this paragraph shall be—

"(i) $1,000, if such vehicle achieves at least 125 percent but less than 150 percent of the 2000 model year city fuel economy,

"(ii) $1,500, if such vehicle achieves at least 150 percent but less than 175 percent of the 2000 model year city fuel economy,

"(iii) $2,000, if such vehicle achieves at least 175 percent but less than 200 percent of the 2000 model year city fuel economy,

"(iv) $2,500, if such vehicle achieves at least 200 percent but less than 225 percent of the 2000 model year city fuel economy,

"(v) $3,000, if such vehicle achieves at least 225 percent but less than 250 per-

cent of the 2000 model year city fuel economy, and

"(vi) $3,500, if such vehicle achieves at least 250 percent of the 2000 model year city fuel economy.

For purposes of clause (i), the 2000 model year city fuel economy with respect to a vehicle shall be determined using the tables provided in subsection (b)(2)(B) with respect to such vehicle.

"(B) CONSERVATION CREDIT.—The amount determined under subparagraph (A) with respect to an advanced lean burn technology motor vehicle shall be increased by—

"(i) $250, if such vehicle achieves a lifetime fuel savings of at least 1,500 gallons of gasoline, and

"(ii) $500, if such vehicle achieves a lifetime fuel savings of at least 2,500 gallons of gasoline.

"(C) OPTION TO USE LIKE VEHICLE.—At the option of the vehicle manufacturer, the increase for fuel efficiency and conservation credit may be calculated by comparing the new advanced lean-burn technology motor vehicle to a like vehicle.

"(3) DEFINITIONS.—For purposes of this subsection.—

"(A) ADVANCED LEAN BURN TECHNOLOGY MOTOR VEHICLE.—The term 'advanced lean burn technology motor vehicle' means a motor vehicle with an internal combustion engine that—

"(i) is designed to operate primarily using more air than is necessary for complete combustion of the fuel,

"(ii) incorporates direct injection,

"(iii) achieves at least 125 percent of the 2000 model year city fuel economy, and

"(iv) for 2004 and later model vehicles, has received a certificate that such vehicle meets or exceeds the Bin 5, Tier 2 emission levels (for passenger vehicles) or Bin 8, Tier 2 emission levels (for light trucks) established in regulations prescribed by the Administrator of the Environmental Protection Agency under section 202(i) of the Clean Air Act for that make and model year vehicle.

"(B) LIKE VEHICLE.—The term 'like vehicle' for an advanced lean burn technology motor vehicle derived from a conventional production vehicle produced in the same model year means a model that is equivalent in the following areas:

"(i) Body style (2-door or 4-door),

"(ii) Transmission (automatic or manual),

"(iii) Acceleration performance (± 0.05 seconds).

"(iv) Drivetrain (2-wheel drive or 4-wheel drive).

"(v) Certification by the Administrator of the Environmental Protection Agency.

"(C) LIFETIME FUEL SAVINGS.—The term 'lifetime fuel savings' shall be calculated by dividing 120,000 by the difference between the 2000 model year city fuel economy for the vehicle inertia weight class and the city fuel economy for the new qualified hybrid motor vehicle.

"(f) LIMITATION BASED ON AMOUNT OF TAX.—The credit allowed under subsection (a) for the taxable year shall not exceed the excess of—

"(1) the sum of the regular tax liability (as defined in section 26(b)) plus the tax imposed by section 55, over

"(2) the sum of the credits allowable under subpart A and sections 27, 29, and 30A for the taxable year.

"(g) OTHER DEFINITIONS AND SPECIAL RULES.—For purposes of this section—

"(1) CONSUMABLE FUEL.—The term 'consumable fuel' means any solid, liquid, or gaseous matter which releases energy when consumed by an auxiliary power unit.

"(2) MOTOR VEHICLE.—The term 'motor vehicle' has the meaning given such term by section 30(c)(2).

"(3) 2000 MODEL YEAR CITY FUEL ECONOMY.—The 2000 model year city fuel economy with respect to any vehicle shall be measured under rules similar to the rules under section 4064(c).

"(4) OTHER TERMS.—The terms 'automobile', 'passenger automobile', 'light truck', and 'manufacturer' have the meanings given such terms in regulations prescribed by the Administrator of the Environmental Protection Agency for purposes of the ad-

ministration of title II of the Clean Air Act (42 U.S.C. 7521 et seq.).

"(5) REDUCTION IN BASIS.—For purposes of this subtitle, the basis of any property for which a credit is allowable under subsection (a) shall be reduced by the amount of such credit so allowed.

"(6) NO DOUBLE BENEFIT.—The amount of any deduction or credit allowable under this chapter (other than the credit allowable under this section)—

"(A) for any incremental cost taken into account in computing the amount of the credit determined under subsection (d) shall be reduced by the amount of such credit attributable to such cost, and

"(B) with respect to a vehicle described under subsection (b) or (c), shall be reduced by the amount of credit allowed under subsection (a) for such vehicle for the taxable year.

"(7) PROPERTY USED BY TAX-EXEMPT ENTITIES.—In the case of a credit amount which is allowable with respect to a motor vehicle which is acquired by an entity exempt from tax under this chapter, the person which sells or leases such vehicle to the entity shall be treated as the taxpayer with

respect to the vehicle for purposes of this section and the credit shall be allowed to such person, but only if the person clearly discloses to the entity in any sale or lease document the specific amount of any credit otherwise allowable to the entity under this section and reduces the sale or lease price of such vehicle by an equivalent amount of such credit.

"(8) RECAPTURE.—The Secretary shall, by regulations, provide for recapturing the benefit of any credit allowable under subsection (a) with respect to any property which ceases to be property eligible for such credit (including recapture in the case of a lease period of less than the economic life of a vehicle).

"(9) PROPERTY USED OUTSIDE UNITED STATES, ETC., NOT QUALIFIED.—No credit shall be allowed under subsection (a) with respect to any property referred to in section 50(b) or with respect to the portion of the cost of any property taken into account under section 179.

"(10) ELECTION TO NOT TAKE CREDIT.—No credit shall be allowed under subsection (a) for any vehicle if the taxpayer elects to not have this section apply to such vehicle.

"(11) CARRYFORWARD ALLOWED.—

"(A) IN GENERAL.—If the credit amount allowable under subsection (a) for a taxable year exceeds the amount of the limitation under subsection (f) for such taxable year (referred to as the 'unused credit year' in this paragraph), such excess shall be allowed as a credit carryforward for each of the 20 taxable years following the unused credit year.

"(B) RULES.—Rules similar to the rules of section 39 shall apply with respect to the credit carryforward under subparagraph (A).

"(12) INTERACTION WITH AIR QUALITY AND MOTOR VEHICLE SAFETY STANDARDS.—Unless otherwise provided in this section, a motor vehicle shall not be considered eligible for a credit under this section unless such vehicle is in compliance with—

"(A) the applicable provisions of the Clean Air Act for the applicable make and model year of the vehicle (or applicable air quality provisions of State law in the case of a State which has adopted such provision under a waiver under section 209(b) of the Clean Air Act), and

"(B) the motor vehicle safety provisions of sections 30101 through 30169 of title 49, United States Code.

"(h) REGULATIONS.—

"(1) IN GENERAL.—The Secretary shall promulgate such regulations as necessary to carry out the provisions of this section.

"(2) ADMINISTRATOR OF ENVIRONMENTAL PROTECTION AGENCY.—The Administrator of the Environmental Protection Agency, in coordination with the Secretary of Transportation and the Secretary of the Treasury, shall prescribe such regulations as necessary to determine whether a motor vehicle meets the requirements to be eligible for a credit under this section.

"(i) TERMINATION.—This section shall not apply to any property placed in service after—

"(1) in the case of a new qualified fuel cell motor vehicle (as described in subsection (b)), December 31, 2011, and

"(2) in the case of any other property, December 31, 2007.".

(b) CONFORMING AMENDMENTS.—

(1) Section 1016(a) is amended by striking "and" at the end of paragraph (29), by striking the period at the end of paragraph (30) and inserting ", and", and by adding at the end the following:

"(31) to the extent provided in section 30B(g)(5).".

(2) Section 6501(m) is amended by inserting "30B(g)(10)," after "30(d)(4),".

(3) The table of sections for subpart B of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 30A the following:

"Sec. 30B. Alternative motor vehicle credit.".

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2001, in taxable years ending after such date.

SEC. 3105. EXTENSION OF DEDUCTION FOR CERTAIN REFUELING PROPERTY.

(a) IN GENERAL.—Section 179A(f) (relating to termination) is amended by striking "2004" and inserting "2007".

(b) MODIFICATION OF PHASEOUT.—Subparagraph (B) of section 179A(b)(1) is amended—

(1) in clause (i), by striking "2002" and inserting "2005",

(2) in clause (ii), by striking "2003" and inserting "2006", and

(3) in clause (iii), by striking "2004" and inserting "2007".

SEC. 3106. MODIFICATION OF CREDIT FOR QUALIFIED ELECTRIC VEHICLES.

(a) AMOUNT OF CREDIT.—

(1) IN GENERAL.—Section 30(a) (relating to allowance of credit) is amended by striking ''10 percent of''.

(2) LIMITATION OF CREDIT ACCORDING TO TYPE OF VEHICLE.—Section 30(b) (relating to limitations) is amended—

(A) by striking paragraphs (1) and (2) and inserting the following:

''(1) LIMITATION ACCORDING TO TYPE OF VEHICLE.—The amount of the credit allowed under subsection (a) for any vehicle shall not exceed the greatest of the following amounts applicable to such vehicle:

''(A) In the case of a vehicle which conforms to the Motor Vehicle Safety Standard 500 prescribed by the Secretary of Transportation, the lesser of—

''(i) 10 percent of the manufacturer's suggested retail price of the vehicle, or

''(ii) $4,000.

''(B) In the case of a vehicle not described in subparagraph (A) with a gross vehicle weight rating not exceeding 8,500 pounds—

"(i) $4,000, or

"(ii) $5,000, if such vehicle is—

"(I) capable of a driving range of at least 70 miles on a single charge of the vehicle's rechargeable batteries and measured pursuant to the urban dynamometer schedules under appendix I to part 86 of title 40, Code of Federal Regulations, or

"(II) capable of a payload capacity of at least 1,000 pounds.

"(C) In the case of a vehicle with a gross vehicle weight rating exceeding 8,500 pounds but not exceeding 14,000 pounds, $10,000.

"(D) In the case of a vehicle with a gross vehicle weight rating exceeding 14,000 pounds but not exceeding 26,000 pounds, $20,000.

"(E) In the case of a vehicle with a gross vehicle weight rating exceeding 26,000 pounds, $40,000.", and

(B) by redesignating paragraph (3) as paragraph (2).

(3) CONFORMING AMENDMENTS.—

(A) Section 53(d)(1)(B)(iii) is amended by striking ''section 30(b)(3)(B)'' and inserting ''section 30(b)(2)(B)''.

(B) Section 55(c)(2) is amended by striking ''30(b)(3)'' and inserting ''30(b)(2)''.

(b) QUALIFIED BATTERY ELECTRIC VEHICLE.—

(1) IN GENERAL.—Section 30(c)(1)(A) (defining qualified electric vehicle) is amended to read as follows:

''(A) which is—

''(i) operated solely by use of a battery or battery pack, or

''(ii) powered primarily through the use of an electric battery or battery pack using a flywheel or capacitor which stores energy produced by an electric motor through regenerative braking to assist in vehicle operation,''.

(2) LEASED VEHICLES.—Section 30(c)(1)(C) is amended by inserting ''or lease'' after ''use''.

(3) CONFORMING AMENDMENTS.—

(A) Subsections (a), and (c) of section 30 are each amended by inserting ''battery'' after ''qualified'' each place it appears.

(B) The heading of subsection (c) of section 30 is amended by inserting ''BATTERY'' after ''QUALIFIED''.

(C) The heading of section 30 is amended by inserting ''**BATTERY**'' after ''**QUALIFIED**''.

(D) The item relating to section 30 in the table of sections for subpart B of part IV of subchapter A of chapter 1 is amended by inserting ''battery'' after ''qualified''.

(E) Section 179A(c)(3) is amended by inserting ''battery'' before ''electric''.

(F) The heading of paragraph (3) of section 179A(c) is amended by inserting ''BATTERY'' before ''ELECTRIC''.

(c) ADDITIONAL SPECIAL RULES.—Section 30(d) (relating to special rules) is amended by adding at the end the following:

''(5) NO DOUBLE BENEFIT.—The amount of any deduction or credit allowable under this chapter for any cost taken into account in computing the amount of the credit determined under subsection (a) shall be reduced by the amount of such credit attributable to such cost.

''(6) PROPERTY USED BY TAX-EXEMPT ENTITIES.—In the case of a credit amount which is al-

lowable with respect to a vehicle which is acquired by an entity exempt from tax under this chapter, the person which sells or leases such vehicle to the entity shall be treated as the taxpayer with respect to the vehicle for purposes of this section and the credit shall be allowed to such person, but only if the person clearly discloses to the entity in any sale or lease contract the specific amount of any credit otherwise allowable to the entity under this section and reduces the sale or lease price of such vehicle by an equivalent amount of such credit.

"(7) CARRYFORWARD ALLOWED.—

"(A) IN GENERAL.—If the credit amount allowable under subsection (a) for a taxable year exceeds the amount of the limitation under subsection (b)(3) for such taxable year, such excess shall be allowed as a credit carryforward for each of the 20 taxable years following such taxable year.

"(B) RULES.—Rules similar to the rules of section 39 shall apply with respect to the credit carryforward under subparagraph (A)."

(d) EXTENSION.—Section 30(e) (relating to termination) is amended by striking "2004" and inserting "2007".

(e) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2001, in taxable years ending after such date.

SEC. 3107. TAX CREDIT FOR ENERGY EFFICIENT APPLIANCES.

(a) IN GENERAL.—Subpart D of part IV of subchapter A of chapter 1 (relating to business-related credits) is amended by adding at the end the following new section:

"SEC. 45G. ENERGY EFFICIENT APPLIANCE CREDIT.

"(a) GENERAL RULE.—For purposes of section 38, the energy efficient appliance credit determined under this section for the taxable year is an amount equal to the applicable amount determined under subsection (b) with respect to the eligible production of qualified energy efficient appliances produced by the taxpayer during the calendar year ending with or within the taxable year.

"(b) APPLICABLE AMOUNT; ELIGIBLE PRODUCTION.—For purposes of subsection (a)—

"(1) APPLICABLE AMOUNT.—The applicable amount is—

"(A) $50 in the case of an energy efficient clothes washer described in subsection (d)(2)(A)

or an energy efficient refrigerator described in subsection (d)(3)(B)(i), and

"(B) $100 in the case of any other energy efficient clothes washer or energy efficient refrigerator.

"(2) ELIGIBLE PRODUCTION.—

"(A) IN GENERAL.—The eligible production of each category of qualified energy efficient appliances is the excess of—

"(i) the number of appliances in such category which are produced by the taxpayer during such calendar year, over

"(ii) the average number of appliances in such category which were produced by the taxpayer during calendar years 1998, 1999, and 2000.

"(B) CATEGORIES.—For purposes of subparagraph (A), the categories are—

"(i) energy efficient clothes washers described in subsection (d)(2)(A),

"(ii) energy efficient clothes washers described in subsection (d)(2)(B),

"(iii) energy efficient refrigerators described in subsection (d)(3)(B)(i), and

"(iv) energy efficient refrigerators described in subsection (d)(3)(B)(ii).

"(C) SPECIAL RULE FOR 2001 PRODUCTION.—For purposes of determining eligible production for calendar year 2001—

"(i) only production after the date of the enactment of this section shall be taken into account under subparagraph (A)(i), and

"(ii) the amount taken into account under subparagraph (A)(ii) shall be an amount which bears the same ratio to the amount which would (but for this subparagraph) be taken into account under subparagraph (A)(ii) as—

"(I) the number of days in calendar year 2001 after the date of the enactment of this section, bears to

"(II) 365.

"(c) LIMITATION ON MAXIMUM CREDIT.—

"(1) IN GENERAL.—The maximum amount of credit allowed under subsection (a) with respect to a taxpayer for all taxable years shall be—

"(A) $30,000,000 with respect to the credit determined under subsection (b)(1)(A), and

"(B) $30,000,000 with respect to the credit determined under subsection (b)(1)(B).

"(2) LIMITATION BASED ON GROSS RECEIPTS.—The credit allowed under subsection (a) with respect to a taxpayer for the taxable year shall not exceed an amount equal to 2 percent of the average annual gross receipts of the taxpayer for the 3 taxable years preceding the taxable year in which the credit is determined.

"(3) GROSS RECEIPTS.—For purposes of this subsection, the rules of paragraphs (2) and (3) of section 448(c) shall apply.

"(d) QUALIFIED ENERGY EFFICIENT APPLIANCE.—For purposes of this section:

"(1) IN GENERAL.—The term 'qualified energy efficient appliance' means—

"(A) an energy efficient clothes washer, or

"(B) an energy efficient refrigerator.

"(2) ENERGY EFFICIENT CLOTHES WASHER.—The term 'energy efficient clothes washer' means a residential clothes washer, including a residential style coin operated washer, which is manufactured with—

"(A) a 1.26 MEF or greater, or

"(B) a 1.42 MEF (1.5 MEF for washers produced after 2004) or greater.

"(3) ENERGY EFFICIENT REFRIGERATOR.—The term 'energy efficient refrigerator' means an automatic defrost refrigerator-freezer which—

"(A) has an internal volume of at least 16.5 cubic feet, and

"(B) consumes—

"(i) 10 percent less kw/hr/yr than the energy conservation standards promulgated by the Department of Energy for refrigerators produced during 2001, and

"(ii) 15 percent less kw/hr/yr than such energy conservation standards for refrigerators produced after 2001.

"(4) MEF.—The term 'MEF' means Modified Energy Factor (as determined by the Secretary of Energy).

"(e) SPECIAL RULES.—

"(1) IN GENERAL.—Rules similar to the rules of subsections (c), (d), and (e) of section 52 shall apply for purposes of this section.

"(2) AGGREGATION RULES.—All persons treated as a single employer under subsection (a) or (b) of section 52 or subsection (m) or (o) of section 414

shall be treated as 1 person for purposes of subsection (a).

''(f) VERIFICATION.—The taxpayer shall submit such information or certification as the Secretary, in consultation with the Secretary of Energy, determines necessary to claim the credit amount under subsection (a).

''(g) TERMINATION.—This section shall not apply—

''(1) with respect to energy efficient refrigerators described in subsection (d)(3)(B)(i) produced after 2004, and

''(2) with respect to all other qualified energy efficient appliances produced after 2006.''.

(b) LIMITATION ON CARRYBACK.—Section 39(d) (relating to transition rules) is amended by adding at the end the following new paragraph:

''(11) NO CARRYBACK OF ENERGY EFFICIENT APPLIANCE CREDIT BEFORE EFFECTIVE DATE.—No portion of the unused business credit for any taxable year which is attributable to the energy efficient appliance credit determined under section 45G may be carried to a taxable year ending before the date of the enactment of section 45G.''.

(c) CONFORMING AMENDMENT.—Section 38(b) (relating to general business credit) is amended by striking ''plus'' at the end of paragraph (14), by striking the period

at the end of paragraph (15) and inserting ", plus", and by adding at the end the following new paragraph:

"(16) the energy efficient appliance credit determined under section 45G(a).".

(d) CLERICAL AMENDMENT.—The table of sections for subpart D of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 45F the following new item:

"Sec. 45G. Energy efficient appliance credit.".

(e) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after the date of the enactment of this Act.

SEC. 3108. CREDIT FOR ENERGY EFFICIENCY IMPROVEMENTS TO EXISTING HOMES.

(a) IN GENERAL.—Subpart A of part IV of subchapter A of chapter 1 (relating to nonrefundable personal credits) is amended by inserting after section 25D the following new section:

"SEC. 25E. ENERGY EFFICIENCY IMPROVEMENTS TO EXISTING HOMES.

"(a) ALLOWANCE OF CREDIT.—In the case of an individual, there shall be allowed as a credit against the tax imposed by this chapter for the taxable year an amount equal to 20 percent of the amount paid or incurred by the taxpayer for qualified energy efficiency improvements installed during such taxable year.

"(b) LIMITATIONS.—

"(1) MAXIMUM CREDIT.—The credit allowed by this section with respect to a dwelling shall not exceed $2,000.

"(2) PRIOR CREDIT AMOUNTS FOR TAXPAYER ON SAME DWELLING TAKEN INTO ACCOUNT.—If a credit was allowed to the taxpayer under subsection (a) with respect to a dwelling in 1 or more prior taxable years, the amount of the credit otherwise allowable for the taxable year with respect to that dwelling shall not exceed the amount of $2,000 reduced by the sum of the credits allowed under subsection (a) to the taxpayer with respect to the dwelling for all prior taxable years.

"(3) LIMITATION BASED ON AMOUNT OF TAX.—The credit allowed under subsection (a) for the taxable year shall not exceed the excess of—

"(A) the sum of the regular tax liability (as defined in section 26(b)) plus the tax imposed by section 55, over

"(B) the sum of the credits allowable under this subpart (other than this section and section 23) and section 27 for the taxable year.

"(c) CARRYFORWARD OF UNUSED CREDIT.—If the credit allowable under subsection (a) exceeds the limita-

tion imposed by subsection (b)(3) for such taxable year, such excess shall be carried to the succeeding taxable year and added to the credit allowable under subsection (a) for such succeeding taxable year.

"(d) QUALIFIED ENERGY EFFICIENCY IMPROVEMENTS.—For purposes of this section, the term 'qualified energy efficiency improvements' means any energy efficient building envelope component which meets the prescriptive criteria for such component established by the 1998 International Energy Conservation Code, if—

"(1) such component is installed in or on a dwelling—

"(A) located in the United States, and

"(B) owned and used by the taxpayer as the taxpayer's principal residence (within the meaning of section 121),

"(2) the original use of such component commences with the taxpayer, and

"(3) such component reasonably can be expected to remain in use for at least 5 years.

If the aggregate cost of such components with respect to any dwelling exceeds $1,000, such components shall be treated as qualified energy efficiency improvements only if such components are also certified in accordance with subsection (e) as meeting such criteria.

"(e) CERTIFICATION.—The certification described in subsection (d) shall be—

"(1) determined on the basis of the technical specifications or applicable ratings (including product labeling requirements) for the measurement of energy efficiency, based upon energy use or building envelope component performance, for the energy efficient building envelope component,

"(2) provided by a local building regulatory authority, a utility, a manufactured home production inspection primary inspection agency (IPIA), or an accredited home energy rating system provider who is accredited by or otherwise authorized to use approved energy performance measurement methods by the Home Energy Ratings Systems Council or the National Association of State Energy Officials, and

"(3) made in writing in a manner that specifies in readily verifiable fashion the energy efficient building envelope components installed and their respective energy efficiency levels.

"(f) DEFINITIONS AND SPECIAL RULES.—

"(1) TENANT-STOCKHOLDER IN COOPERATIVE HOUSING CORPORATION.—In the case of an individual who is a tenant-stockholder (as defined in section 216) in a cooperative housing corporation (as

defined in such section), such individual shall be treated as having paid his tenant-stockholder's proportionate share (as defined in section 216(b)(3)) of the cost of qualified energy efficiency improvements made by such corporation.

"(2) CONDOMINIUMS.—

"(A) IN GENERAL.—In the case of an individual who is a member of a condominium management association with respect to a condominium which he owns, such individual shall be treated as having paid his proportionate share of the cost of qualified energy efficiency improvements made by such association.

"(B) CONDOMINIUM MANAGEMENT ASSOCIATION.—For purposes of this paragraph, the term 'condominium management association' means an organization which meets the requirements of paragraph (1) of section 528(c) (other than subparagraph (E) thereof) with respect to a condominium project substantially all of the units of which are used as residences.

"(3) BUILDING ENVELOPE COMPONENT.—The term 'building envelope component' means insulation material or system which is specifically and primarily designed to reduce the heat loss or gain of a

dwelling when installed in or on such dwelling, exterior windows (including skylights) and doors, and metal roofs with appropriate pigmented coatings which are specifically and primarily designed to reduce the heat gain of a dwelling when installed in or on such dwelling.

"(4) MANUFACTURED HOMES INCLUDED.—For purposes of this section, the term 'dwelling' includes a manufactured home which conforms to Federal Manufactured Home Construction and Safety Standards (24 C.F.R. 3280).

"(g) BASIS ADJUSTMENT.—For purposes of this subtitle, if a credit is allowed under this section for any expenditure with respect to any property, the increase in the basis of such property which would (but for this subsection) result from such expenditure shall be reduced by the amount of the credit so allowed.

"(h) APPLICATION OF SECTION.—This section shall apply to qualified energy efficiency improvements installed after December 31, 2001 and before January 1, 2007.".

(b) CONFORMING AMENDMENTS.—

(1) Subsection (a) of section 1016 is amended by striking "and" at the end of paragraph (30), by striking the period at the end of paragraph (31) and

inserting ", and", and by adding at the end the following new paragraph:

"(32) to the extent provided in section 25E(g), in the case of amounts with respect to which a credit has been allowed under section 25E.".

(2) The table of sections for subpart A of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 25D the following new item:

"Sec. 25E. Energy efficiency improvements to existing homes.".

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after December 31, 2001.

SEC. 3109. BUSINESS CREDIT FOR CONSTRUCTION OF NEW ENERGY EFFICIENT HOME.

(a) IN GENERAL.—Subpart D of part IV of subchapter A of chapter 1 (relating to business related credits) is amended by inserting after section 45G the following new section:

"SEC. 45H. NEW ENERGY EFFICIENT HOME CREDIT.

"(a) IN GENERAL.—For purposes of section 38, in the case of an eligible contractor, the credit determined under this section for the taxable year is an amount equal to the aggregate adjusted bases of all energy efficient property installed in a qualified new energy efficient home during construction of such home.

"(b) LIMITATIONS.—

"(1) MAXIMUM CREDIT.—

"(A) IN GENERAL.—The credit allowed by this section with respect to a dwelling shall not exceed $2,000.

"(B) PRIOR CREDIT AMOUNTS ON SAME DWELLING TAKEN INTO ACCOUNT.—If a credit was allowed under subsection (a) with respect to a dwelling in 1 or more prior taxable years, the amount of the credit otherwise allowable for the taxable year with respect to that dwelling shall not exceed the amount of $2,000 reduced by the sum of the credits allowed under subsection (a) with respect to the dwelling for all prior taxable years.

"(2) COORDINATION WITH REHABILITATION AND ENERGY CREDITS.—For purposes of this section—

"(A) the basis of any property referred to in subsection (a) shall be reduced by that portion of the basis of any property which is attributable to qualified rehabilitation expenditures (as defined in section 47(c)(2)) or to the energy percentage of energy property (as determined under section 48(a)), and

"(B) expenditures taken into account under either section 47 or 48(a) shall not be taken into account under this section.

"(c) DEFINITIONS.—For purposes of this section—

"(1) ELIGIBLE CONTRACTOR.—The term 'eligible contractor' means the person who constructed the new energy efficient home, or in the case of a manufactured home which conforms to Federal Manufactured Home Construction and Safety Standards (24 C.F.R. 3280), the manufactured home producer of such home.

"(2) ENERGY EFFICIENT PROPERTY.—The term 'energy efficient property' means any energy efficient building envelope component, and any energy efficient heating or cooling appliance.

"(3) QUALIFIED NEW ENERGY EFFICIENT HOME.—The term 'qualified new energy efficient home' means a dwelling—

"(A) located in the United States,

"(B) the construction of which is substantially completed after December 31, 2001,

"(C) the original use of which is as a principal residence (within the meaning of section 121) which commences with the person who ac-

quires such dwelling from the eligible contractor, and

"(D) which is certified to have a level of annual heating and cooling energy consumption that is at least 30 percent below the annual level of heating and cooling energy consumption of a comparable dwelling constructed in accordance with the standards of the 1998 International Energy Conservation Code.

"(4) CONSTRUCTION.—The term 'construction' includes reconstruction and rehabilitation.

"(5) ACQUIRE.—The term 'acquire' includes purchase and, in the case of reconstruction and rehabilitation, such term includes a binding written contract for such reconstruction or rehabilitation.

"(6) BUILDING ENVELOPE COMPONENT.—The term 'building envelope component' means insulation material or system which is specifically and primarily designed to reduce the heat loss or gain of a dwelling when installed in or on such dwelling, exterior windows (including skylights) and doors, and metal roofs with appropriate pigmented coatings which are specifically and primarily designed to reduce the heat gain of a dwelling when installed in or on such dwelling.

"(7) MANUFACTURED HOME INCLUDED.—The term 'dwelling' includes a manufactured home conforming to Federal Manufactured Home Construction and Safety Standards (24 C.F.R. 3280).

"(d) CERTIFICATION.—

"(1) METHOD.—A certification described in subsection (c)(3)(D) shall be determined on the basis of one of the following methods:

"(A) The technical specifications or applicable ratings (including product labeling requirements) for the measurement of energy efficiency for the energy efficient building envelope component or energy efficient heating or cooling appliance, based upon energy use or building envelope component performance.

"(B) An energy performance measurement method that utilizes computer software approved by organizations designated by the Secretary.

"(2) PROVIDER.—Such certification shall be provided by—

"(A) in the case of a method described in paragraph (1)(A), a local building regulatory authority, a utility, a manufactured home production inspection primary inspection agency

(IPIA), or an accredited home energy rating systems provider who is accredited by, or otherwise authorized to use, approved energy performance measurement methods by the Home Energy Ratings Systems Council or the National Association of State Energy Officials, or

"(B) in the case of a method described in paragraph (1)(B), an individual recognized by an organization designated by the Secretary for such purposes.

"(3) FORM.—Such certification shall be made in writing in a manner that specifies in readily verifiable fashion the energy efficient building envelope components and energy efficient heating or cooling appliances installed and their respective energy efficiency levels, and in the case of a method described in subparagraph (B) of paragraph (1), accompanied by written analysis documenting the proper application of a permissible energy performance measurement method to the specific circumstances of such dwelling.

"(4) REGULATIONS.—

"(A) IN GENERAL.—In prescribing regulations under this subsection for energy performance measurement methods, the Secretary shall

prescribe procedures for calculating annual energy costs for heating and cooling and cost savings and for the reporting of the results. Such regulations shall—

"(i) be based on the National Home Energy Rating Technical Guidelines of the National Association of State Energy Officials, the Home Energy Rating Guidelines of the Home Energy Rating Systems Council, or the modified 1998 California Residential ACM manual,

"(ii) provide that any calculation procedures be developed such that the same energy efficiency measures allow a home to qualify for the credit under this section regardless of whether the house uses a gas or oil furnace or boiler or an electric heat pump, and

"(iii) require that any computer software allow for the printing of the Federal tax forms necessary for the credit under this section and explanations for the homebuyer of the energy efficient features that were used to comply with the requirements of this section.

"(B) PROVIDERS.—For purposes of paragraph (2)(B), the Secretary shall establish requirements for the designation of individuals based on the requirements for energy consultants and home energy raters specified by the National Association of State Energy Officials.

"(e) BASIS ADJUSTMENT.—For purposes of this subtitle, if a credit is allowed under this section for any expenditure with respect to any property, the increase in the basis of such property which would (but for this subsection) result from such expenditure shall be reduced by the amount of the credit so allowed.

"(f) APPLICATION OF SECTION.—Subsection (a) shall apply to dwellings purchased during the period beginning on January 1, 2002, and ending on December 31, 2006.".

(b) CREDIT MADE PART OF GENERAL BUSINESS CREDIT.—Subsection (b) of section 38 (relating to current year business credit) is amended by striking "plus" at the end of paragraph (15), by striking the period at the end of paragraph (16) and inserting ", plus", and by adding at the end thereof the following new paragraph:

"(17) the new energy efficient home credit determined under section 45H.".

(c) DENIAL OF DOUBLE BENEFIT.—Section 280C (relating to certain expenses for which credits are allow-

able) is amended by adding at the end thereof the following new subsection:

"(d) NEW ENERGY EFFICIENT HOME EXPENSES.—No deduction shall be allowed for that portion of expenses for a new energy efficient home otherwise allowable as a deduction for the taxable year which is equal to the amount of the credit determined for such taxable year under section 45H.".

(d) LIMITATION ON CARRYBACK.—Subsection (d) of section 39 is amended by adding at the end the following new paragraph:

"(12) NO CARRYBACK OF NEW ENERGY EFFICIENT HOME CREDIT BEFORE EFFECTIVE DATE.—No portion of the unused business credit for any taxable year which is attributable to the credit determined under section 45H may be carried back to any taxable year ending before January 1, 2002.".

(e) DEDUCTION FOR CERTAIN UNUSED BUSINESS CREDITS.—Subsection (c) of section 196 is amended by striking "and" at the end of paragraph (9), by striking the period at the end of paragraph (10) and inserting ", and", and by adding after paragraph (10) the following new paragraph:

"(11) the new energy efficient home credit determined under section 45H.".

(f) CLERICAL AMENDMENT.—The table of sections for subpart D of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 45G the following new item:

"Sec. 45H. New energy efficient home credit.".

(g) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after December 31, 2001.

SEC. 3110. ALLOWANCE OF DEDUCTION FOR ENERGY EFFICIENT COMMERCIAL BUILDING PROPERTY.

(a) IN GENERAL.—Part VI of subchapter B of chapter 1 (relating to itemized deductions for individuals and corporations) is amended by inserting after section 179A the following new section:

"SEC. 179B. DEDUCTION FOR ENERGY EFFICIENT COMMERCIAL BUILDING PROPERTY.

"(a) ALLOWANCE OF DEDUCTION.—

"(1) IN GENERAL.—There shall be allowed as a deduction an amount equal to energy efficient commercial building property expenditures made by a taxpayer for the taxable year.

"(2) MAXIMUM AMOUNT OF DEDUCTION.—The amount of energy efficient commercial building property expenditures taken into account under paragraph (1) shall not exceed an amount equal to the product of—

"(A) $2.25, and

"(B) the square footage of the building with respect to which the expenditures are made.

"(3) YEAR DEDUCTION ALLOWED.—The deduction under paragraph (1) shall be allowed for the taxable year in which the building is placed in service.

"(b) ENERGY EFFICIENT COMMERCIAL BUILDING PROPERTY EXPENDITURES.—For purposes of this section, the term 'energy efficient commercial building property expenditures' means an amount paid or incurred for energy efficient commercial building property installed on or in connection with new construction or reconstruction of property—

"(1) for which depreciation is allowable under section 167,

"(2) which is located in the United States, and

"(3) the construction or erection of which is completed by the taxpayer.

Such property includes all residential rental property, including low-rise multifamily structures and single family housing property which is not within the scope of Standard 90.1–1999 (described in subsection (c)). Such term includes expenditures for labor costs properly allocable to

the onsite preparation, assembly, or original installation of the property.

"(c) ENERGY EFFICIENT COMMERCIAL BUILDING PROPERTY.—For purposes of subsection (b)—

"(1) IN GENERAL.—The term 'energy efficient commercial building property' means any property which reduces total annual energy and power costs with respect to the lighting, heating, cooling, ventilation, and hot water supply systems of the building by 50 percent or more in comparison to a reference building which meets the requirements of Standard 90.1–1999 of the American Society of Heating, Refrigerating, and Air Conditioning Engineers and the Illuminating Engineering Society of North America using methods of calculation under paragraph (2) and certified by qualified professionals as provided under subsection (f).

"(2) METHODS OF CALCULATION.—The Secretary, in consultation with the Secretary of Energy, shall promulgate regulations which describe in detail methods for calculating and verifying energy and power consumption and cost, taking into consideration the provisions of the 1998 California Nonresidential ACM Manual. These procedures shall meet the following requirements:

"(A) In calculating tradeoffs and energy performance, the regulations shall prescribe the costs per unit of energy and power, such as kilowatt hour, kilowatt, gallon of fuel oil, and cubic foot or Btu of natural gas, which may be dependent on time of usage.

"(B) The calculational methodology shall require that compliance be demonstrated for a whole building. If some systems of the building, such as lighting, are designed later than other systems of the building, the method shall provide that either—

"(i) the expenses taken into account under subsection (a) shall not occur until the date designs for all energy-using systems of the building are completed,

"(ii) the energy performance of all systems and components not yet designed shall be assumed to comply minimally with the requirements of such Standard 90.1–1999, or

"(iii) the expenses taken into account under subsection (a) shall be a fraction of such expenses based on the performance of

less than all energy-using systems in accordance with subparagraph (C).

"(C) The expenditures in connection with the design of subsystems in the building, such as the envelope, the heating, ventilation, air conditioning and water heating system, and the lighting system shall be allocated to the appropriate building subsystem based on system-specific energy cost savings targets in regulations promulgated by the Secretary of Energy which are equivalent, using the calculation methodology, to the whole building requirement of 50 percent savings.

"(D) The calculational methods under this subparagraph need not comply fully with section 11 of such Standard 90.1–1999.

"(E) The calculational methods shall be fuel neutral, such that the same energy efficiency features shall qualify a building for the deduction under this subsection regardless of whether the heating source is a gas or oil furnace or an electric heat pump.

"(F) The calculational methods shall provide appropriate calculated energy savings for design methods and technologies not otherwise

credited in either such Standard 90.1–1999 or in the 1998 California Nonresidential ACM Manual, including the following:

"(i) Natural ventilation.

"(ii) Evaporative cooling.

"(iii) Automatic lighting controls such as occupancy sensors, photocells, and time-clocks.

"(iv) Daylighting.

"(v) Designs utilizing semi-conditioned spaces that maintain adequate comfort conditions without air conditioning or without heating.

"(vi) Improved fan system efficiency, including reductions in static pressure.

"(vii) Advanced unloading mechanisms for mechanical cooling, such as multiple or variable speed compressors.

"(viii) The calculational methods may take into account the extent of commissioning in the building, and allow the taxpayer to take into account measured performance that exceeds typical performance.

"(3) COMPUTER SOFTWARE.—

"(A) IN GENERAL.—Any calculation under this subsection shall be prepared by qualified computer software.

"(B) QUALIFIED COMPUTER SOFTWARE.—For purposes of this paragraph, the term 'qualified computer software' means software—

"(i) for which the software designer has certified that the software meets all procedures and detailed methods for calculating energy and power consumption and costs as required by the Secretary,

"(ii) which provides such forms as required to be filed by the Secretary in connection with energy efficiency of property and the deduction allowed under this section, and

"(iii) which provides a notice form which summarizes the energy efficiency features of the building and its projected annual energy costs.

"(d) ALLOCATION OF DEDUCTION FOR PUBLIC PROPERTY.—In the case of energy efficient commercial building property installed on or in public property, the Secretary shall promulgate a regulation to allow the allocation of the deduction to the person primarily responsible

for designing the property in lieu of the public entity which is the owner of such property. Such person shall be treated as the taxpayer for purposes of this section.

''(e) NOTICE TO OWNER.—The qualified individual shall provide an explanation to the owner of the building regarding the energy efficiency features of the building and its projected annual energy costs as provided in the notice under subsection (c)(3)(B)(iii).

''(f) CERTIFICATION.—The Secretary, in consultation with the Secretary of Energy, shall establish requirements for certification and compliance procedures similar to the procedures under section 45H(d).

''(g) BASIS REDUCTION.—For purposes of this title, the basis of any property shall be reduced by the amount of the deduction with respect to such property which is allowed by subsection (a).

''(h) TERMINATION.—This section shall not apply to property placed in service after December 31, 2006.''.

(b) CONFORMING AMENDMENTS.—

(1) Section 1016(a) is amended by striking ''and'' at the end of paragraph (31), by striking the period at the end of paragraph (32) and inserting '', and'', and by inserting the following new paragraph:

''(33) to the extent provided in section 179B(g).''.

(2) Section 1245(a) is amended by inserting ''179B,'' after ''179A,'' both places it appears in paragraphs (2)(C) and (3)(C).

(3) Section 1250(b)(3) is amended by inserting before the period at the end of the first sentence ''or by section 179B''.

(4) Section 263(a)(1) is amended by striking ''or'' at the end of subparagraph (G), by striking the period at the end of subparagraph (H) and inserting '', or'', and by inserting after subparagraph (H) the following new subparagraph:

''(I) expenditures for which a deduction is allowed under section 179B.''.

(5) Section 312(k)(3)(B) is amended by striking ''or 179A'' each place it appears in the heading and text and inserting '', 179A, or 179B''.

(c) CLERICAL AMENDMENT.—The table of sections for part VI of subchapter B of chapter 1 is amended by adding after section 179A the following new item:

''Sec. 179B. Deduction for energy efficient commercial building property.''.

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years beginning after December 31, 2001.

SEC. 3111. ALLOWANCE OF DEDUCTION FOR QUALIFIED ENERGY MANAGEMENT DEVICES AND RETROFITTED QUALIFIED METERS.

(a) IN GENERAL.—Part VI of subchapter B of chapter 1 (relating to itemized deductions for individuals and corporations) is amended by inserting after section 179B the following new section:

"SEC. 179C. DEDUCTION FOR QUALIFIED ENERGY MANAGEMENT DEVICES AND RETROFITTED METERS.

''(a) ALLOWANCE OF DEDUCTION.—In the case of a taxpayer who is a supplier of electric energy or natural gas or a provider of electric energy or natural gas services, there shall be allowed as a deduction an amount equal to the cost of each qualified energy management device placed in service during the taxable year.

''(b) MAXIMUM DEDUCTION.—The deduction allowed by this section with respect to each qualified energy management device shall not exceed $30.

''(c) QUALIFIED ENERGY MANAGEMENT DEVICE.—The term 'qualified energy management device' means any tangible property to which section 168 applies if such property is a meter or metering device—

''(1) which is acquired and used by the taxpayer to enable consumers to manage their purchase or use of electricity or natural gas in response to energy price and usage signals, and

"(2) which permits reading of energy price and usage signals on at least a daily basis.

"(d) PROPERTY USED OUTSIDE THE UNITED STATES NOT QUALIFIED.—No deduction shall be allowed under subsection (a) with respect to property which is used predominantly outside the United States or with respect to the portion of the cost of any property taken into account under section 179.

"(e) BASIS REDUCTION.—

"(1) IN GENERAL.—For purposes of this title, the basis of any property shall be reduced by the amount of the deduction with respect to such property which is allowed by subsection (a).

"(2) ORDINARY INCOME RECAPTURE.—For purposes of section 1245, the amount of the deduction allowable under subsection (a) with respect to any property that is of a character subject to the allowance for depreciation shall be treated as a deduction allowed for depreciation under section 167.".

(b) CONFORMING AMENDMENTS.—

(1) Section 263(a)(1) is amended by striking "or" at the end of subparagraph (H), by striking the period at the end of subparagraph (I) and inserting ", or", and by inserting after subparagraph (I) the following new subparagraph:

"(J) expenditures for which a deduction is allowed under section 179C.".

(2) Section 312(k)(3)(B) is amended by striking "or 179B" each place it appears in the heading and text and inserting ", 179B, or 179C".

(3) Section 1016(a) is amended by striking "and" at the end of paragraph (32), by striking the period at the end of paragraph (33) and inserting ", and", and by inserting after paragraph (33) the following new paragraph:

"(34) to the extent provided in section 179C(e)(1).".

(4) Section 1245(a) is amended by inserting "179C," after "179B," both places it appears in paragraphs (2)(C) and (3)(C).

(5) The table of contents for subpart B of part IV of subchapter A of chapter 1 is amended by inserting after the item relating to section 179B the following new item:

"Sec. 179C. Deduction for qualified energy management devices and retrofitted meters.".

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to qualified energy management devices placed in service after the date of the enactment of this Act.

SEC. 3112. 3-YEAR APPLICABLE RECOVERY PERIOD FOR DEPRECIATION OF QUALIFIED ENERGY MANAGEMENT DEVICES.

(a) IN GENERAL.—Subparagraph (A) of section 168(e)(3) (relating to classification of property) is amended by striking ''and'' at the end of clause (ii), by striking the period at the end of clause (iii) and inserting '', and'', and by adding at the end the following new clause:

''(iv) any qualified energy management device.''.

(b) DEFINITION OF QUALIFIED ENERGY MANAGEMENT DEVICE.—Section 168(i) (relating to definitions and special rules) is amended by inserting at the end the following new paragraph:

''(15) QUALIFIED ENERGY MANAGEMENT DEVICE.—The term 'qualified energy management device' means any qualified energy management device as defined in section 179C(c) which is placed in service by a taxpayer who is a supplier of electric energy or natural gas or a provider of electric energy or natural gas services.''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after the date of the enactment of this Act.

SEC. 3113. ENERGY CREDIT FOR COMBINED HEAT AND POWER SYSTEM PROPERTY.

(a) IN GENERAL.—Subparagraph (A) of section 48(a)(3) (defining energy property) is amended by striking ''or'' at the end of clause (ii), by adding ''or'' at the end of clause (iii), and by inserting after clause (iii) the following new clause:

''(iv) combined heat and power system property,''.

(b) COMBINED HEAT AND POWER SYSTEM PROPERTY.—Subsection (a) of section 48 is amended by redesignating paragraphs (5) and (6) as paragraphs (6) and (7), respectively, and by inserting after paragraph (4) the following new paragraph:

''(5) COMBINED HEAT AND POWER SYSTEM PROPERTY.—For purposes of this subsection—

''(A) COMBINED HEAT AND POWER SYSTEM PROPERTY.—The term 'combined heat and power system property' means property comprising a system—

''(i) which uses the same energy source for the simultaneous or sequential generation of electrical power, mechanical shaft power, or both, in combination with the generation of steam or other forms of

useful thermal energy (including heating and cooling applications),

"(ii) which has an electrical capacity of more than 50 kilowatts or a mechanical energy capacity of more than 67 horsepower or an equivalent combination of electrical and mechanical energy capacities,

"(iii) which produces—

"(I) at least 20 percent of its total useful energy in the form of thermal energy, and

"(II) at least 20 percent of its total useful energy in the form of electrical or mechanical power (or combination thereof),

"(iv) the energy efficiency percentage of which exceeds 60 percent (70 percent in the case of a system with an electrical capacity in excess of 50 megawatts or a mechanical energy capacity in excess of 67,000 horsepower, or an equivalent combination of electrical and mechanical energy capacities), and

"(v) which is placed in service after December 31, 2001, and before January 1, 2007.

"(B) SPECIAL RULES.—

"(i) ENERGY EFFICIENCY PERCENTAGE.—For purposes of subparagraph (A)(iv), the energy efficiency percentage of a system is the fraction—

"(I) the numerator of which is the total useful electrical, thermal, and mechanical power produced by the system at normal operating rates, and

"(II) the denominator of which is the lower heating value of the primary fuel source for the system.

"(ii) DETERMINATIONS MADE ON BTU BASIS.—The energy efficiency percentage and the percentages under subparagraph (A)(iii) shall be determined on a Btu basis.

"(iii) INPUT AND OUTPUT PROPERTY NOT INCLUDED.—The term 'combined heat and power system property' does not include property used to transport the en-

ergy source to the facility or to distribute energy produced by the facility.

"(iv) PUBLIC UTILITY PROPERTY.—

"(I) ACCOUNTING RULE FOR PUBLIC UTILITY PROPERTY.—If the combined heat and power system property is public utility property (as defined in section 168(i)(1)), the taxpayer may only claim the credit under the subsection if, with respect to such property, the taxpayer uses a normalization method of accounting.

"(II) CERTAIN EXCEPTION NOT TO APPLY.—The matter in paragraph (3) which follows subparagraph (D) shall not apply to combined heat and power system property.

"(C) EXTENSION OF DEPRECIATION RECOVERY PERIOD.—If a taxpayer is allowed credit under this section for combined heat and power system property and such property would (but for this subparagraph) have a class life of 15 years or less under section 168, such property shall be treated as having a 22-year class life for purposes of section 168.".

(c) NO CARRYBACK OF ENERGY CREDIT BEFORE EFFECTIVE DATE.—Subsection (d) of section 39 is amended by adding at the end the following new paragraph:

"(13) NO CARRYBACK OF ENERGY CREDIT BEFORE EFFECTIVE DATE.—No portion of the unused business credit for any taxable year which is attributable to the energy credit with respect to property described in section 48(a)(5) may be carried back to a taxable year ending before January 1, 2002.".

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after December 31, 2001.

SEC. 3114. NEW NONREFUNDABLE PERSONAL CREDITS ALLOWED AGAINST REGULAR AND MINIMUM TAXES.

(a) IN GENERAL.—Paragraph (1) of section 26(a) is amended by striking "and 25B" and inserting "25B, 25C, 25D, and 25E".

(b) CONFORMING AMENDMENTS.—

(1) Section 24(b)(3)(B) is amended by striking "and 25B" and inserting ", 25B, 25C, 25D, and 25E".

(2) Section 25(e)(1)(C) is amended by inserting "25C, 25D, and 25E" after "25B,".

(3) Section 25B(g)(2) is amended by striking ''section 23'' and inserting ''sections 23, 25C, 25D, and 25E''.

(4) Section 904(h) is amended by striking ''and 25B'' and inserting ''25B, 25C, 25D, and 25E''.

(5) Section 1400C(d) is amended by striking ''and 25B'' and inserting ''25B, 25C, 25D, and 25E''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years beginning after December 31, 2001.

SEC. 3115. PHASEOUT OF 4.3-CENT MOTOR FUEL EXCISE TAXES ON RAILROADS AND INLAND WATERWAY TRANSPORTATION WHICH REMAIN IN GENERAL FUND.

(a) TAXES ON TRAINS.—

(1) IN GENERAL.—Clause (ii) of section 4041(a)(1)(C) is amended by striking subclauses (I), (II), and (III) and inserting the following new subclauses:

''(I) 3.3 cents per gallon after September 30, 2001, and before January 1, 2005,

"(II) 2.3 cents per gallon after December 31, 2004, and before January 1, 2007,

"(III) 1.3 cents per gallon after December 31, 2006, and before January 1, 2009,

"(IV) 0.3 cent per gallon after December 31, 2008, and before January 1, 2010, and

"(V) 0 after December 31, 2009.".

(2) CONFORMING AMENDMENTS.—

(A) Subsection (d) of section 4041 is amended by redesignating paragraph (3) as paragraph (4) and by inserting after paragraph (2) the following new paragraph:

"(3) DIESEL FUEL USED IN TRAINS.—In the case of any sale for use (or use) after September 30, 2010, there is hereby imposed a tax of 0.1 cent per gallon on any liquid other than gasoline (as defined in section 4083)—

"(A) sold by any person to an owner, lessee, or other operator of a diesel-powered train for use as a fuel in such train, or

"(B) used by any person as a fuel in a diesel-powered train unless there was a taxable sale of such fuel under subparagraph (A).

No tax shall be imposed by this paragraph on the sale or use of any liquid if tax was imposed on such liquid under section 4081."

(B) Subsection (f) of section 4082 is amended by striking "section 4041(a)(1)" and inserting "subsections (a)(1) and (d)(3) of section 4041".

(C) Subparagraph (B) of section 6421(f)(3) is amended to read as follows:

"(B) so much of the rate specified in section 4081(a)(2)(A) as does not exceed the rate applicable under section 4041(a)(1)(C)(ii).".

(D) Subparagraph (B) of section 6427(l)(3) is amended to read as follows:

"(B) so much of the rate specified in section 4081(a)(2)(A) as does not exceed the rate applicable under section 4041(a)(1)(C)(ii).".

(b) FUEL USED ON INLAND WATERWAYS.—Subparagraph (C) of section 4042(b)(2) is amended to read as follows:

"(C) The deficit reduction rate is—

"(i) 3.3 cents per gallon after September 30, 2001, and before January 1, 2005,

"(ii) 2.3 cents per gallon after December 31, 2004, and before January 1, 2007,

"(iii) 1.3 cents per gallon after December 31, 2006, and before January 1, 2009,

"(iv) 0.3 cent per gallon after December 31, 2008, and before January 1, 2010, and

"(v) 0 after December 31, 2009.".

(c) EFFECTIVE DATE.—The amendments made by this section shall take effect on October 1, 2001.

SEC. 3116. REDUCED MOTOR FUEL EXCISE TAX ON CERTAIN MIXTURES OF DIESEL FUEL.

(a) IN GENERAL.—Clause (iii) of section 4081(a)(2)(A) is amended by inserting before the period "(19.7 cents per gallon in the case of a diesel-water fuel emulsion at least 14 percent of which is water)".

(b) REFUNDS FOR TAX-PAID PURCHASES.—

(1) IN GENERAL.—Section 6427 is amended by redesignating subsections (m) through (p) as subsections (n) through (q), respectively, and by inserting after subsection (l) the following new subsection:

"(m) DIESEL FUEL USED TO PRODUCE EMULSION.—

"(1) IN GENERAL.—Except as provided in subsection (k), if any diesel fuel on which tax was imposed by section 4081 at the regular tax rate is used by any person in producing an emulsion described in section 4081(a)(2)(A) which is sold or used in such person's trade or business, the Secretary shall pay (without interest) to such person an amount equal to the excess of the regular tax rate over the incentive tax rate with respect to such fuel.

"(2) DEFINITIONS.—For purposes of paragraph (1)—

"(A) REGULAR TAX RATE.—The term 'regular tax rate' means the aggregate rate of tax imposed by section 4081 determined without regard to the parenthetical in section 4081(a)(2)(A).

"(B) INCENTIVE TAX RATE.—The term 'incentive tax rate' means the aggregate rate of tax imposed by section 4081 determined with regard to the parenthetical in section 4081(a)(2)(A)."

(c) EFFECTIVE DATE.—The amendments made by this section shall take effect on October 1, 2001.

SEC. 3117. CREDIT FOR INVESTMENT IN QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY.

(a) ALLOWANCE OF QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITY CREDIT.—Section 46 (relating to amount of credit) is amended by striking ''and'' at the end of paragraph (2), by striking the period at the end of paragraph (3) and inserting '', and'', and by adding at the end the following:

''(4) the qualifying advanced clean coal technology facility credit.''.

(b) AMOUNT OF QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITY CREDIT.—Subpart E of part IV of subchapter A of chapter 1 (relating to rules for computing investment credit) is amended by inserting after section 48 the following:

''SEC. 48A. QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITY CREDIT.

''(a) IN GENERAL.—For purposes of section 46, the qualifying advanced clean coal technology facility credit for any taxable year is an amount equal to 10 percent of the qualified investment in a qualifying advanced clean coal technology facility for such taxable year.

''(b) QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITY.—

''(1) IN GENERAL.—For purposes of subsection (a), the term 'qualifying advanced clean coal tech-

nology facility' means a facility of the taxpayer which—

"(A)(i)(I) original use of which commences with the taxpayer, or

"(II) is a retrofitted or repowered conventional technology facility, the retrofitting or repowering of which is completed by the taxpayer (but only with respect to that portion of the basis which is properly attributable to such retrofitting or repowering), or

"(ii) is acquired through purchase (as defined by section 179(d)(2)),

"(B) is depreciable under section 167,

"(C) has a useful life of not less than 4 years,

"(D) is located in the United States, and

"(E) uses qualifying advanced clean coal technology.

"(2) SPECIAL RULE FOR SALE-LEASEBACKS.—For purposes of subparagraph (A) of paragraph (1), in the case of a facility which—

"(A) is originally placed in service by a person, and

"(B) is sold and leased back by such person, or is leased to such person, within 3

months after the date such facility was originally placed in service, for a period of not less than 12 years,

such facility shall be treated as originally placed in service not earlier than the date on which such property is used under the leaseback (or lease) referred to in subparagraph (B). The preceding sentence shall not apply to any property if the lessee and lessor of such property make an election under this sentence. Such an election, once made, may be revoked only with the consent of the Secretary.

''(c) QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY.—For purposes of this section—

''(1) IN GENERAL.—The term 'qualifying advanced clean coal technology' means, with respect to clean coal technology—

''(A) which has—

''(i) multiple applications, with a combined capacity of not more than 5,000 megawatts (4,000 megawatts before 2009), of advanced pulverized coal or atmospheric fluidized bed combustion technology—

''(I) installed as a new, retrofit, or repowering application,

"(II) operated between 2000 and 2012, and

"(III) having a design net heat rate of not more than 9,500 Btu per kilowatt hour when the design coal has a heat content of more than 9,000 Btu per pound, or a design net heat rate of not more than 9,900 Btu per kilowatt hour when the design coal has a heat content of 9,000 Btu per pound or less,

"(ii) multiple applications, with a combined capacity of not more than 1,000 megawatts (500 megawatts before 2009 and 750 megawatts before 2013), of pressurized fluidized bed combustion technology—

"(I) installed as a new, retrofit, or repowering application,

"(II) operated between 2000 and 2016, and

"(III) having a design net heat rate of not more than 8,400 Btu per kilowatt hour when the design coal has a heat content of more than 9,000

Btu per pound, or a design net heat rate of not more than 9,900 Btu's per kilowatt hour when the design coal has a heat content of 9,000 Btu per pound or less, and

''(iii) multiple applications, with a combined capacity of not more than 2,000 megawatts (1,000 megawatts before 2009 and 1,500 megawatts before 2013), of integrated gasification combined cycle technology, with or without fuel or chemical co-production—

''(I) installed as a new, retrofit, or repowering application,

''(II) operated between 2000 and 2016,

''(III) having a design net heat rate of not more than 8,550 Btu per kilowatt hour when the design coal has a heat content of more than 9,000 Btu per pound, or a design net heat rate of not more than 9,900 Btu per kilowatt hour when the design coal has a heat content of 9,000 Btu per pound or less, and

"(IV) having a net thermal efficiency on any fuel or chemical co-production of not less than 39 percent (higher heating value), or

"(iv) multiple applications, with a combined capacity of not more than 2,000 megawatts (1,000 megawatts before 2009 and 1,500 megawatts before 2013) of technology for the production of electricity—

"(I) installed as a new, retrofit, or repowering application,

"(II) operated between 2000 and 2016, and

"(III) having a carbon emission rate which is not more than 85 percent of conventional technology, and

"(B) which reduces the discharge into the atmosphere of 1 or more of the following pollutants to not more than—

"(i) 5 percent of the potential combustion concentration sulfur dioxide emissions for a coal with a potential combustion concentration sulfur emission of 1.2 lb/million btu of heat input or greater,

"(ii) 15 percent of the potential combustion concentration sulfur dioxide emissions for a coal with a potential combustion concentration sulfur emission of less than 1.2 lb/million btu of heat input,

"(iii) nitrogen oxide emissions of 0.1 lb per million btu of heat input from other than cyclone-fired boilers,

"(iv) 15 percent of the uncontrolled nitrogen oxide emissions from cyclone-fired boilers,

"(v) particulate emissions of 0.02 lb per million btu of heat input, and

"(vi) the emission levels specified in the new source performance standards of the Clean Air Act (42 U.S.C. 7411) in effect at the time of retrofitting, repowering, or replacement of the qualifying clean coal technology unit for the category of source if such level is lower than the levels specified in clause (i), (ii), (iii), (iv), or (v).

"(2) EXCEPTIONS.—Such term shall not include any projects receiving or scheduled to receive funding under the Clean Coal Technology Program,

or the Power Plant Improvement administered by the Secretary of the Department of Energy.

''(d) CLEAN COAL TECHNOLOGY.—For purposes of this section, the term 'clean coal technology' means advanced technology which uses coal to produce 75 percent or more of its thermal output as electricity including advanced pulverized coal or atmospheric fluidized bed combustion, pressurized fluidized bed combustion, integrated gasification combined cycle with or without fuel or chemical co-production, and any other technology for the production of electricity which exceeds the performance of conventional technology.

''(e) CONVENTIONAL TECHNOLOGY.—The term 'conventional technology' means—

''(1) coal-fired combustion technology with a design net heat rate of not less than 9,500 Btu per kilowatt hour (HHV) and a carbon equivalents emission rate of not more than 0.54 pounds of carbon per kilowatt hour when the design coal has a heat content of more than 9,000 Btu per pound,

''(2) coal-fired combustion technology with a design net heat rate of not less than 10,500 Btu per kilowatt hour (HHV) and a carbon equivalents emission rate of not more than 0.60 pounds of carbon

per kilowatt hour when the design coal has a heat content of 9,000 Btu per pound or less, or

"(3) natural gas-fired combustion technology with a design net heat rate of not less than 7,500 Btu per kilowatt hour (HHV) and a carbon equivalents emission rate of not more than 0.24 pounds of carbon per kilowatt hour.

"(f) DESIGN NET HEAT RATE.—The design net heat rate shall be based on the design annual heat input to and the design annual net electrical output from the qualifying advanced clean coal technology (determined without regard to such technology's co-generation of steam).

"(g) SELECTION CRITERIA.—Selection criteria for qualifying advanced clean coal technology facilities—

"(1) shall be established by the Secretary of Energy as part of a competitive solicitation,

"(2) shall include primary criteria of minimum design net heat rate, maximum design thermal efficiency, environmental performance, and lowest cost to the government, and

"(3) shall include supplemental criteria as determined appropriate by the Secretary of Energy.

"(h) QUALIFIED INVESTMENT.—For purposes of subsection (a), the term 'qualified investment' means, with respect to any taxable year, the basis of a qualifying ad-

vanced clean coal technology facility placed in service by the taxpayer during such taxable year.

"(i) QUALIFIED PROGRESS EXPENDITURES.—

"(1) INCREASE IN QUALIFIED INVESTMENT.—In the case of a taxpayer who has made an election under paragraph (5), the amount of the qualified investment of such taxpayer for the taxable year (determined under subsection (c) without regard to this section) shall be increased by an amount equal to the aggregate of each qualified progress expenditure for the taxable year with respect to progress expenditure property.

"(2) PROGRESS EXPENDITURE PROPERTY DEFINED.—For purposes of this subsection, the term 'progress expenditure property' means any property being constructed by or for the taxpayer and which it is reasonable to believe will qualify as a qualifying advanced clean coal technology facility which is being constructed by or for the taxpayer when it is placed in service.

"(3) QUALIFIED PROGRESS EXPENDITURES DEFINED.—For purposes of this subsection—

"(A) SELF-CONSTRUCTED PROPERTY.—In the case of any self-constructed property, the term 'qualified progress expenditures' means

the amount which, for purposes of this subpart, is properly chargeable (during such taxable year) to capital account with respect to such property.

"(B) NONSELF-CONSTRUCTED PROPERTY.—In the case of nonself-constructed property, the term 'qualified progress expenditures' means the amount paid during the taxable year to another person for the construction of such property.

"(4) OTHER DEFINITIONS.—For purposes of this subsection—

"(A) SELF-CONSTRUCTED PROPERTY.—The term 'self-constructed property' means property for which it is reasonable to believe that more than half of the construction expenditures will be made directly by the taxpayer.

"(B) NONSELF-CONSTRUCTED PROPERTY.—The term 'nonself-constructed property' means property which is not self-constructed property.

"(C) CONSTRUCTION, ETC.—The term 'construction' includes reconstruction and erection, and the term 'constructed' includes reconstructed and erected.

"(D) ONLY CONSTRUCTION OF QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITY TO BE TAKEN INTO ACCOUNT.—Construction shall be taken into account only if, for purposes of this subpart, expenditures therefor are properly chargeable to capital account with respect to the property.

"(5) ELECTION.—An election under this subsection may be made at such time and in such manner as the Secretary may by regulations prescribe. Such an election shall apply to the taxable year for which made and to all subsequent taxable years. Such an election, once made, may not be revoked except with the consent of the Secretary.

"(j) COORDINATION WITH OTHER CREDITS.—This section shall not apply to any property with respect to which the rehabilitation credit under section 47 or the energy credit under section 48 is allowed unless the taxpayer elects to waive the application of such credit to such property.

"(k) TERMINATION.—This section shall not apply with respect to any qualified investment made after December 31, 2011.

"(l) NATIONAL LIMITATION.—

"(1) IN GENERAL.—Notwithstanding any other provision of this section, the term 'qualifying advanced clean coal technology facility' shall include such a facility only to the extent that such facility is allocated a portion of the national megawatt limitation under this subsection.

"(2) NATIONAL MEGAWATT LIMITATION.—The national megawatt limitation under this subsection is 7,500 megawatts.

"(3) ALLOCATION OF LIMITATION.—The national megawatt limitation shall be allocated by the Secretary under rules prescribed by the Secretary. Not later than 6 months after the date of enactment of this subsection, the Secretary shall prescribe such regulations as may be necessary or appropriate to carry out the purposes of this section, including regulations—

"(A) to limit which facility qualifies as 'qualified advanced clean coal technology' in subsection (c) to particular facilities, a portion of particular facilities, or a portion of the production from particular facilities, so that when all such facilities (or portions thereof) are placed in service over the ten year period in section (k), the combination of facilities approved

for tax credits (and/or portions of facilities approved for tax credits) will not exceed a combined capacity of 7,500 megawatts;

"(B) to provide a certification process in consultation with the Secretary of Energy under subsection (g) that will approve and allocate the 7,500 megawatts of available tax credits authority—

"(i) to encourage that facilities with the highest thermal efficiencies and environmental performance be placed in service as soon as possible;

"(ii) to allocate credits to taxpayers that have a definite and credible plan for placing into commercial operation a qualifying advanced clean coal technology facility, including—

"(I) a site,

"(II) contractual commitments for procurement and construction,

"(III) filings for all necessary preconstruction approvals,

"(IV) a demonstrated record of having successfully completed comparable projects on a timely basis, and

"(V) such other factors that the Secretary shall determine are appropriate;

"(iii) to allocate credits to a portion of a facility (or a portion of the production from a facility) if the Secretary determines that such an allocation should maximize the amount of efficient production encouraged with the available tax credits;

"(C) to set progress requirements and conditional approvals so that credits for approved projects that become unlikely to meet the necessary conditions that can be reallocated by the Secretary to other projects;

"(D) to reallocate credits that are not allocated to 1 technology described in clauses (i) through (iv) of subsection (c)(1)(A) because an insufficient number of qualifying facilities requested credits for one technology, to another technology described in another subparagraph of subsection (c) in order to maximize the amount of energy efficient production encouraged with the available tax credits; and

"(E) to provide taxpayers with opportunities to correct administrative errors and omis-

sions with respect to allocations and record-keeping within a reasonable period after their discovery, taking into account the availability of regulations and other administrative guidance from the Secretary.''.

(c) RECAPTURE.—Section 50(a) (relating to other special rules) is amended by adding at the end the following:

''(6) SPECIAL RULES RELATING TO QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITY.—For purposes of applying this subsection in the case of any credit allowable by reason of section 48A, the following shall apply:

''(A) GENERAL RULE.—In lieu of the amount of the increase in tax under paragraph (1), the increase in tax shall be an amount equal to the investment tax credit allowed under section 38 for all prior taxable years with respect to a qualifying advanced clean coal technology facility (as defined by section 48A(b)(1)) multiplied by a fraction whose numerator is the number of years remaining to fully depreciate under this title the qualifying advanced clean coal technology facility disposed of, and whose denominator is the total number of years over

which such facility would otherwise have been subject to depreciation. For purposes of the preceding sentence, the year of disposition of the qualifying advanced clean coal technology facility property shall be treated as a year of remaining depreciation.

"(B) PROPERTY CEASES TO QUALIFY FOR PROGRESS EXPENDITURES.—Rules similar to the rules of paragraph (2) shall apply in the case of qualified progress expenditures for a qualifying advanced clean coal technology facility under section 48A, except that the amount of the increase in tax under subparagraph (A) of this paragraph shall be substituted in lieu of the amount described in such paragraph (2).

"(C) APPLICATION OF PARAGRAPH.—This paragraph shall be applied separately with respect to the credit allowed under section 38 regarding a qualifying advanced clean coal technology facility.".

(d) TRANSITIONAL RULE.—Section 39(d) (relating to transitional rules) is amended by adding at the end the following:

"(14) NO CARRYBACK OF SECTION 48A CREDIT BEFORE EFFECTIVE DATE.—No portion of the un-

used business credit for any taxable year which is attributable to the qualifying advanced clean coal technology facility credit determined under section 48A may be carried back to a taxable year ending before January 1, 2002.''.

(e) TECHNICAL AMENDMENTS.—

(1) Section 49(a)(1)(C) is amended by striking ''and'' at the end of clause (ii), by striking the period at the end of clause (iii) and inserting '', and'', and by adding at the end the following:

''(iv) the portion of the basis of any qualifying advanced clean coal technology facility attributable to any qualified investment (as defined by section 48A(c)).''

(2) Section 50(a)(4) is amended by striking ''and (2)'' and inserting '', (2), and (6)''.

(3) Section 50(c) is amended by adding at the end the following new paragraph:

''(6) SPECIAL RULE FOR QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY FACILITIES.—Paragraphs (1) and (2) shall not apply to any property with respect to the credit determined under section 48A.''

(4) The table of sections for subpart E of part IV of subchapter A of chapter 1 is amended by in-

serting after the item relating to section 48 the following:

"Sec. 48A. Qualifying advanced clean coal technology facility credit.".

(f) EFFECTIVE DATE.—The amendments made by this section shall apply to periods after December 31, 2001, under rules similar to the rules of section 48(m) of the Internal Revenue Code of 1986 (as in effect on the day before the date of enactment of the Revenue Reconciliation Act of 1990).

SEC. 3118. CREDIT FOR PRODUCTION FROM QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY.

(a) CREDIT FOR PRODUCTION FROM QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY.—Subpart D of part IV of subchapter A of chapter 1 (relating to business related credits) is amended by adding after section 45J the following:

"SEC. 45K. CREDIT FOR PRODUCTION FROM QUALIFYING ADVANCED CLEAN COAL TECHNOLOGY.

"(a) GENERAL RULE.—For purposes of section 38, the qualifying advanced clean coal technology production credit of any taxpayer for any taxable year is equal to—

"(1) the applicable amount of advanced clean coal technology production credit, multiplied by

"(2) the sum of—

"(A) the kilowatt hours of electricity, plus

"(B) each 3,413 Btu of fuels or chemicals, produced by the taxpayer during such taxable year at a qualifying advanced clean coal technology facility during the 10-year period beginning on the date the facility was originally placed in service.

"(b) APPLICABLE AMOUNT.—For purposes of this section, the applicable amount of advanced clean coal technology production credit with respect to production from a qualifying advanced clean coal technology facility shall be determined as follows:

"(1) Where the design coal has a heat content of more than 9,000 Btu per pound:

"(A) In the case of a facility originally placed in service before 2009, if—

"The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,400	$.0060	$.0038
More than 8,400 but not more than 8,550	$.0025	$.0010
More than 8,550 but not more than 8,750	$.0010	$.0010.

"(B) In the case of a facility originally placed in service after 2008 and before 2013, if—

"The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,770	$.0105	$.0090
More than 7,770 but not more than 8,125	$.0085	$.0068
More than 8,125 but not more than 8,350	$.0075	$.0055.

"(C) In the case of a facility originally placed in service after 2012 and before 2017, if—

"The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,380	$.0140	$.01
More than 7,380 but not more than 7,720	$.0120	$.0090.

"(2) Where the design coal has a heat content of not more than 9,000 Btu per pound:

"(A) In the case of a facility originally placed in service before 2009, if—

"The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,500	$.0060	$.0038
More than 8,500 but not more than 8,650	$.0025	$.0010
More than 8,650 but not more than 8,750	$.0010	$.0010.

"(B) In the case of a facility originally placed in service after 2008 and before 2013, if—

"The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 8,000	$.0105	$.009
More than 8,000 but not more than 8,250	$.0085	$.0068
More than 8,250 but not more than 8,400	$.0075	$.0055.

"(C) In the case of a facility originally placed in service after 2012 and before 2017, if—

"The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not more than 7,800	$.0140	$.0115

"The facility design net heat rate, Btu/kWh (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
More than 7,800 but not more than 7,950	$.0120	$.0090.

"(3) Where the clean coal technology facility is producing fuel or chemicals:

"(A) In the case of a facility originally placed in service before 2009, if—

"The facility design net thermal efficiency (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 40.6 percent	$.0060	$.0038
Less than 40.6 but not less than 40 percent	$.0025	$.0010
Less than 40 but not less than 39 percent	$.0010	$.0010.

"(B) In the case of a facility originally placed in service after 2008 and before 2013, if—

"The facility design net thermal efficiency (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 43.9 percent	$.0105	$.009
Less than 43.9 but not less than 42 percent	$.0085	$.0068
Less than 42 but not less than 40.9 percent	$.0075	$.0055.

"(C) In the case of a facility originally placed in service after 2012 and before 2017, if—

"The facility design net thermal efficiency (HHV) is equal to:	The applicable amount is:	
	For 1st 5 years of such service	For 2d 5 years of such service
Not less than 44.2 percent	$.0140	$.0115
Less than 44.2 but not less than 43.6 percent	$.0120	$.0090.

"(c) INFLATION ADJUSTMENT FACTOR.—For calendar years after 2001, each amount in paragraphs (1),

(2), and (3) shall be adjusted by multiplying such amount by the inflation adjustment factor for the calendar year in which the amount is applied. If any amount as increased under the preceding sentence is not a multiple of 0.01 cent, such amount shall be rounded to the nearest multiple of 0.01 cent.

"(d) DEFINITIONS AND SPECIAL RULES.—For purposes of this section—

"(1) IN GENERAL.—Any term used in this section which is also used in section 48A shall have the meaning given such term in section 48A.

"(2) APPLICABLE RULES.—The rules of paragraphs (3), (4), and (5) of section 45 shall apply.

"(3) INFLATION ADJUSTMENT FACTOR.—The term 'inflation adjustment factor' means, with respect to a calendar year, a fraction the numerator of which is the GDP implicit price deflator for the preceding calendar year and the denominator of which is the GDP implicit price deflator for the calendar year 2001.

"(4) GDP IMPLICIT PRICE DEFLATOR.—The term 'GDP implicit price deflator' means the most recent revision of the implicit price deflator for the gross domestic product as computed by the Depart-

ment of Commerce before March 15 of the calendar year.''.

(b) CREDIT TREATED AS BUSINESS CREDIT.—Section 38(b) is amended by striking ''plus'' at the end of paragraph (18), by striking the period at the end of paragraph (19) and inserting '', plus'', and by adding at the end the following:

''(20) the qualifying advanced clean coal technology production credit determined under section 45K(a).''.

(c) TRANSITIONAL RULE.—Section 39(d) (relating to transitional rules) is amended by adding after paragraph (14) the following:

''(15) NO CARRYBACK OF SECTION 45K CREDIT BEFORE EFFECTIVE DATE.—No portion of the unused business credit for any taxable year which is attributable to the qualifying advanced clean coal technology production credit determined under section 45K may be carried back to a taxable year ending before the date of enactment of section 45K.''.

(d) CLERICAL AMENDMENT.—The table of sections for subpart D of part IV of subchapter A of chapter 1 is amended by adding at the end the following:

''Sec. 45K. Credit for production from qualifying advanced clean coal technology.''.

(e) EFFECTIVE DATE.—The amendments made by this section shall apply to production after the date of enactment of this Act.

TITLE II—RELIABILITY

SEC. 3201. NATURAL GAS GATHERING LINES TREATED AS 7-YEAR PROPERTY.

(a) IN GENERAL.—Subparagraph (C) of section 168(e)(3) (relating to classification of certain property) is amended by striking ''and'' at the end of clause (i), by redesignating clause (ii) as clause (iii), and by inserting after clause (i) the following new clause:

''(ii) any natural gas gathering line, and''.

(b) NATURAL GAS GATHERING LINE.—Subsection (i) of section 168 is amended by adding after paragraph (15) the following new paragraph:

''(16) NATURAL GAS GATHERING LINE.—The term 'natural gas gathering line' means—

''(A) the pipe, equipment, and appurtenances determined to be a gathering line by the Federal Energy Regulatory Commission, or

''(B) the pipe, equipment, and appurtenances used to deliver natural gas from the wellhead or a commonpoint to the point at which such gas first reaches—

"(i) a gas processing plant,

"(ii) an interconnection with a transmission pipeline certificated by the Federal Energy Regulatory Commission as an interstate transmission pipeline,

"(iii) an interconnection with an intrastate transmission pipeline, or

"(iv) a direct interconnection with a local distribution company, a gas storage facility, or an industrial consumer.".

(c) ALTERNATIVE SYSTEM.—The table contained in section 168(g)(3)(B) is amended by inserting after the item relating to subparagraph (C)(i) the following:

"(C)(ii) ..... 10".

(d) ALTERNATIVE MINIMUM TAX EXCEPTION.—Subparagraph (B) of section 56(a)(1) is amended by inserting before the period the following: "or in clause (ii) of section 168(e)(3)(C)".

(e) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after the date of the enactment of this Act.

SEC. 3202. NATURAL GAS DISTRIBUTION LINES TREATED AS 10-YEAR PROPERTY.

(a) IN GENERAL.—Subparagraph (D) of section 168(e)(3) (relating to classification of certain property) is amended by striking "and" at the end of clause (i), by

striking the period at the end of clause (ii) and by inserting ", and", and by adding at the end the following new clause:

"(iii) any natural gas distribution line."

(b) ALTERNATIVE SYSTEM.—The table contained in section 168(g)(3)(B) is amended by inserting after the item relating to subparagraph (D)(ii) the following:

"(D)(iii) ..... 20".

(c) ALTERNATIVE MINIMUM TAX EXCEPTION.—Subparagraph (B) of section 56(a)(1) is amended by inserting before the period the following: "or in clause (iii) of section 168(e)(3)(D)".

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after the date of the enactment of this Act.

SEC. 3203. PETROLEUM REFINING PROPERTY TREATED AS 7-YEAR PROPERTY.

(a) IN GENERAL.—Subparagraph (C) of section 168(e)(3) (relating to classification of certain property), as amended by section 3201, is amended by striking "and" at the end of clause (ii), by redesignating clause (iii) as clause (iv), and by inserting after clause (ii) the following new clause:

"(iii) any property used for the distillation, fractionation, and catalytic crack-

ing of crude petroleum into gasoline and its other components, and''.

(b) ALTERNATIVE SYSTEM.—The table contained in section 168(g)(3)(B), as amended by section 3201, is amended by inserting after the item relating to subparagraph (C)(ii) the following:

''(C)(iii) ..... 10''.

(c) ALTERNATIVE MINIMUM TAX EXCEPTION.—Subparagraph (B) of section 56(a)(1), as amended by section 3201, is amended by inserting ''or (iii)'' after ''clause (ii)''.

(d) EFFECTIVE DATE.—The amendment made by this section shall apply to property placed in service after the date of the enactment of this Act.

SEC. 3204. EXPENSING OF CAPITAL COSTS INCURRED IN COMPLYING WITH ENVIRONMENTAL PROTECTION AGENCY SULFUR REGULATIONS.

(a) IN GENERAL.—Section 179(b) (relating to election to expense certain depreciable business assets) is amended by adding at the end the following new paragraph:

''(5) LIMITATION FOR SMALL BUSINESS REFINERS.—

''(A) IN GENERAL.—In the case of a small business refiner electing to expense qualified costs, in lieu of the dollar limitations in para-

graph (1), the limitation on the aggregate costs which may be taken into account under subsection (a) for any taxable year shall not exceed 75 percent of the qualified costs.

"(B) QUALIFIED COSTS.—For purposes of this paragraph, the term 'qualified costs' means costs paid or incurred by a small business refiner for the purpose of complying with the Highway Diesel Fuel Sulfur Control Requirements of the Environmental Protection Agency.

"(C) SMALL BUSINESS REFINER.—For purposes of this paragraph, the term 'small business refiner' means, with respect to any taxable year, a refiner which, within the refining operations of the business, employs not more than 1,500 employees on business days during such taxable year performing services in the refining operations of such businesses and has an average total capacity of 155,000 barrels per day or less.".

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to expenses paid or incurred after the date of the enactment of this Act.

SEC. 3205. ENVIRONMENTAL TAX CREDIT.

(a) IN GENERAL.—Subpart D of part IV of subchapter A of chapter 1 (relating to business-related credits) is amended by adding at the end the following new section:

"SEC. 45I. ENVIRONMENTAL TAX CREDIT.

''(a) IN GENERAL.—For purposes of section 38, the amount of the environmental tax credit determined under this section with respect to any small business refiner for any taxable year is an amount equal to 5 cents for every gallon of 15 parts per million or less sulfur diesel produced at a facility by such small business refiner.

''(b) MAXIMUM CREDIT.—For any small business refiner, the aggregate amount allowable as a credit under subsection (a) for any taxable year with respect to any facility shall not exceed 25 percent of the qualified capital costs incurred by such small business refiner with respect to such facility not taken into account in determining the credit under subsection (a) for any preceding taxable year.

''(c) DEFINITIONS.—For purposes of this section—

''(1) SMALL BUSINESS REFINER.—The term 'small business refiner' means, with respect to any taxable year, a refiner which, within the refining operations of the business, employs not more than 1,500 employees on business days during such taxable year performing services in the refining oper-

ations of such businesses and has an average total capacity of 155,000 barrels per day or less.

"(2) QUALIFIED CAPITAL COSTS.—The term 'qualified capital costs' means, with respect to any facility, those costs paid or incurred during the applicable period for compliance with the applicable EPA regulations with respect to such facility, including expenditures for the construction of new process operation units or the dismantling and reconstruction of existing process units to be used in the production of 15 parts per million or less sulfur diesel fuel, associated adjacent or offsite equipment (including tankage, catalyst, and power supply), engineering, construction period interest, and sitework.

"(3) APPLICABLE EPA REGULATIONS.—The term 'applicable EPA regulations' means the Highway Diesel Fuel Sulfur Control Requirements of the Environmental Protection Agency.

"(4) APPLICABLE PERIOD.—The term 'applicable period' means, with respect to any facility, the period beginning on the day after the date of the enactment of this section and ending with the date which is one year after the date on which the taxpayer must comply with the applicable EPA regulations with respect to such facility.

"(d) REDUCTION IN BASIS.—For purposes of this subtitle, if a credit is determined under this section with respect to any property by reason of qualified capital costs, the basis of such property shall be reduced by the amount of the credit so determined.

"(e) CERTIFICATION.—

"(1) REQUIRED.—Not later than the date which is 30 months after the first day of the first taxable year in which the environmental tax credit is allowed with respect to a facility, the small business refiner must obtain certification from the Secretary, in consultation with the Administrator of the Environmental Protection Agency, that the taxpayer's qualified capital costs with respect to such facility will result in compliance with the applicable EPA regulations.

"(2) CONTENTS OF APPLICATION.—An application for certification shall include relevant information regarding unit capacities and operating characteristics sufficient for the Secretary, in consultation with the Administrator of the Environmental Protection Agency, to determine that such qualified capital costs are necessary for compliance with the applicable EPA regulations.

"(3) REVIEW PERIOD.—Any application shall be reviewed and notice of certification, if applicable, shall be made within 60 days of receipt of such application.

"(4) RECAPTURE.—Notwithstanding subsection (f), failure to obtain certification under paragraph (1) constitutes a recapture event under subsection (f) with an applicable percentage of 100 percent.

"(f) RECAPTURE OF ENVIRONMENTAL TAX CREDIT.—

"(1) IN GENERAL.—Except as provided in subsection (e), if, as of the close of any taxable year, there is a recapture event with respect to any facility of the small business refiner, then the tax of such refiner under this chapter for such taxable year shall be increased by an amount equal to the product of—

"(A) the applicable recapture percentage, and

"(B) the aggregate decrease in the credits allowed under section 38 for all prior taxable years which would have resulted if the qualified capital costs of the taxpayer described in subsection (c)(2) with respect to such facility had been zero.

"(2) APPLICABLE RECAPTURE PERCENTAGE.—

"(A) IN GENERAL.—For purposes of this subsection, the applicable recapture percentage shall be determined from the following table:

"If the recapture event occurs in:	The applicable recapture percentage is:
Year 1	100
Year 2	80
Year 3	60
Year 4	40
Year 5	20
Years 6 and thereafter	0.

"(B) YEARS.—For purposes of subparagraph (A), year 1 shall begin on the first day of the taxable year in which the qualified capital costs with respect to a facility described in subsection (c)(2) are paid or incurred by the taxpayer.

"(3) RECAPTURE EVENT DEFINED.—For purposes of this subsection, the term 'recapture event' means—

"(A) FAILURE TO COMPLY.—The failure by the small business refiner to meet the applicable EPA regulations within the applicable period with respect to the facility.

"(B) CESSATION OF OPERATION.—The cessation of the operation of the facility as a facility which produces 15 parts per million or less sulfur diesel after the applicable period.

"(C) CHANGE IN OWNERSHIP.—

"(i) IN GENERAL.—Except as provided in clause (ii), the disposition of a small business refiner's interest in the facility with respect to which the credit described in subsection (a) was allowable.

"(ii) AGREEMENT TO ASSUME RECAPTURE LIABILITY.—Clause (i) shall not apply if the person acquiring such interest in the facility agrees in writing to assume the recapture liability of the person disposing of such interest in effect immediately before such disposition. In the event of such an assumption, the person acquiring the interest in the facility shall be treated as the taxpayer for purposes of assessing any recapture liability (computed as if there had been no change in ownership).

"(4) SPECIAL RULES.—

"(A) TAX BENEFIT RULE.—The tax for the taxable year shall be increased under paragraph (1) only with respect to credits allowed by reason of this section which were used to reduce tax liability. In the case of credits not so used to reduce tax liability, the carryforwards

and carrybacks under section 39 shall be appropriately adjusted.

"(B) NO CREDITS AGAINST TAX.—Any increase in tax under this subsection shall not be treated as a tax imposed by this chapter for purposes of determining the amount of any credit under this chapter or for purposes of section 55.

"(C) NO RECAPTURE BY REASON OF CASUALTY LOSS.—The increase in tax under this subsection shall not apply to a cessation of operation of the facility by reason of a casualty loss to the extent such loss is restored by reconstruction or replacement within a reasonable period established by the Secretary.

"(g) CONTROLLED GROUPS.—For purposes of this section, all persons treated as a single employer under subsection (b), (c), (m), or (o) of section 414 shall be treated as a single employer.".

(b) CREDIT MADE PART OF GENERAL BUSINESS CREDIT.—Subsection (b) of section 38 (relating to general business credit) is amended by striking "plus" at the end of paragraph (16), by striking the period at the end of paragraph (17) and inserting ", plus", and by adding at the end the following new paragraph:

"(18) in the case of a small business refiner, the environmental tax credit determined under section 45I(a).".

(c) DENIAL OF DOUBLE BENEFIT.—Section 280C (relating to certain expenses for which credits are allowable) is amended by adding after subsection (d) the following new subsection:

"(e) ENVIRONMENTAL TAX CREDIT.—No deduction shall be allowed for that portion of the expenses otherwise allowable as a deduction for the taxable year which is equal to the amount of the credit determined for the taxable year under section 45I(a).".

(d) BASIS ADJUSTMENT.—Section 1016(a) (relating to adjustments to basis) is amended by striking "and" at the end of paragraph (33), by striking the period at the end of paragraph (34) and inserting ", and", and by adding at the end the following new paragraph:

"(35) in the case of a facility with respect to which a credit was allowed under section 45I, to the extent provided in section 45I(d).".

(e) CLERICAL AMENDMENT.—The table of sections for subpart D of part IV of subchapter A of chapter 1 is amended by adding at the end the following new item:

"Sec. 45I. Environmental tax credit.".

(f) EFFECTIVE DATE.—The amendments made by this section shall apply to expenses paid or incurred after the date of the enactment of this Act.

SEC. 3206. DETERMINATION OF SMALL REFINER EXCEPTION TO OIL DEPLETION DEDUCTION.

(a) IN GENERAL.—Paragraph (4) of section 613A(d) (relating to certain refiners excluded) is amended to read as follows:

"(4) CERTAIN REFINERS EXCLUDED.—If the taxpayer or a related person engages in the refining of crude oil, subsection (c) shall not apply to the taxpayer for a taxable year if the average daily refinery runs of the taxpayer and the related person for the taxable year exceed 75,000 barrels. For purposes of this paragraph, the average daily refinery runs for any taxable year shall be determined by dividing the aggregate refinery runs for the taxable year by the number of days in the taxable year.".

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to taxable years beginning after December 31, 2001.

SEC. 3207. TAX-EXEMPT BOND FINANCING OF CERTAIN ELECTRIC FACILITIES.

(a) IN GENERAL.—Subpart A of part IV of subchapter B of chapter 1 (relating to tax exemption require-

ments for State and local bonds) is amended by inserting after section 141 the following new section:

"SEC. 141A. TREATMENT OF GOVERNMENT-OWNED ELECTRIC OUTPUT FACILITIES.

"(a) EXCEPTIONS FROM PRIVATE BUSINESS USE LIMITATIONS WHERE OPEN ACCESS REQUIREMENTS MET.—

"(1) GENERAL RULE.—For purposes of this part, the term 'private business use' shall not include—

"(A) any permitted open access activity by a governmental unit with respect to an electric output facility owned by such unit, or

"(B) any permitted sale of electricity by a governmental unit which is generated at an existing generation facility owned by such unit.

"(2) PERMITTED OPEN ACCESS ACTIVITY.—For purposes of this section—

"(A) IN GENERAL.—The term 'permitted open access activity' means any activity meeting the open access requirements of any of the following clauses with respect to such electric output facility:

"(i) TRANSMISSION AND ANCILLARY FACILITY.—In the case of a transmission

facility or a facility providing ancillary services, the provision of transmission service and ancillary services meets the open access requirements of this clause only if such services are provided on a nondiscriminatory open access basis—

"(I) pursuant to an open access transmission tariff filed with and approved by FERC, including an acceptable reciprocity tariff, or

"(II) under a regional transmission organization agreement approved by FERC.

"(ii) DISTRIBUTION FACILITIES.—In the case of a distribution facility, the delivery of electric energy meets the open access requirements of this clause only if such delivery is made on a nondiscriminatory open access basis.

"(iii) GENERATION FACILITIES.—In the case of a generation facility, the delivery of electric energy generated by such facility meets the open access requirements of this clause only if—

"(I) such facility is directly connected to distribution facilities owned by the governmental unit which owns the generation facility, and

"(II) such distribution facilities meet the open access requirements of clause (ii).

"(B) SPECIAL RULES.—

"(i) VOLUNTARILY FILED TARIFFS.—Subparagraph (A)(i)(I) shall apply in the case of a voluntarily filed tariff only if the governmental unit files a report with FERC within 90 days after the date of the enactment of this section relating to whether or not such governmental unit will join a regional transmission organization.

"(ii) CONTROL OF TRANSMISSION FACILITIES BY REGIONAL TRANSMISSION ORGANIZATION.—A governmental unit shall be treated as meeting the open access requirements of subparagraph (A)(i) if a regional transmission organization controls the transmission facilities.

"(iii) ERCOT UTILITY.—References to FERC in subparagraph (A) shall be

treated as references to the Public Utility Commission of Texas with respect to any ERCOT utility (as defined in section 212(k)(2)(B) of the Federal Power Act (16 U.S.C. 824k(k)(2)(B))).

"(3) PERMITTED SALE.—For purposes of this subsection—

"(A) IN GENERAL.—The term 'permitted sale' means—

"(i) any sale of electricity to an on-system purchaser if the seller meets the open access requirements of paragraph (2) with respect to all distribution and transmission facilities (if any) owned by such seller, and

"(ii) subject to subparagraphs (B) and (C), any sale of electricity to a wholesale native load purchaser, and any load loss sale, if—

"(I) the seller meets the open access requirements of paragraph (2) with respect to all transmission facilities (if any) owned by such seller, or

"(II) in any case in which the seller does not own any transmission

facilities, all persons providing transmission services to the seller's wholesale native load purchasers meet the open access requirements of paragraph (2) with respect to all transmission facilities owned by such persons.

"(B) LIMITATION ON SALES TO WHOLESALE NATIVE LOAD PURCHASERS.—A sale to a wholesale native load purchaser shall be treated as a permitted sale only to the extent that—

"(i) such purchaser resells the electricity directly at retail to persons within the purchaser's distribution area, or

"(ii) such electricity is resold by such purchaser through one or more wholesale purchasers (each of whom as of June 30, 2000, was a party to a requirements contract or a firm power contract described in paragraph (5)(B)(ii)) to retail purchasers in the ultimate wholesale purchaser's distribution area.

"(C) LOAD LOSS SALES.—

"(i) IN GENERAL.—The term 'load loss sale' means any sale at wholesale to the extent that—

"(I) the aggregate sales at wholesale during the recovery period does not exceed the load loss mitigation sales limit for such period, and

"(II) the aggregate sales at wholesale during the first calendar year after the recovery period does not exceed the excess carried under clause (iv) to such year.

"(ii) LOAD LOSS MITIGATION SALES LIMIT.—For purposes of clause (i), the load loss mitigation sales limit for the recovery period is the sum of the annual load losses for each year of such period.

"(iii) ANNUAL LOAD LOSS.—A governmental unit's annual load loss for each year of the recovery period is the amount (if any) by which—

"(I) the megawatt hours of electric energy sold during such year to wholesale native load purchasers

which do not constitute private business use are less than

"(III) the megawatt hours of electric energy sold during the base year to wholesale native load purchasers which do not constitute private business use.

The annual load loss for any year shall not exceed the portion of the amount determined under the preceding sentence which is attributable to open access requirements.

"(iv) CARRYOVERS.—If the limitation under clause (i) for the recovery period exceeds the aggregate sales during such period which are taken into account under clause (i), such excess (but not more than 10 percent of such limitation) may be carried over to the first calendar year following the recovery period.

"(v) RECOVERY PERIOD.—The recovery period is the 7-year period beginning with the start-up year.

"(vi) START-UP YEAR.—The start-up year is the calendar year which includes the date of the enactment of this section

or, if later, at the election of the governmental unit—

"(I) the first year that the governmental unit offers nondiscriminatory open transmission access, or

"(II) the first year in which at least 10 percent of the governmental unit's wholesale customers' aggregate retail native load is open to retail competition.

"(4) ON-SYSTEM PURCHASER.—For purposes of this section, the term 'on-system purchaser' means any person whose electric equipment is directly connected with any transmission or distribution facility owned by the governmental unit owning the existing generation facility if—

"(A) such person—

"(i) purchases electric energy from such governmental unit at retail, and

"(ii)(I) was within such unit's distribution area at the close of the base year or

"(II) is a person as to whom the governmental unit has a statutory service obligation, or

"(B) is a wholesale native load purchaser from such governmental unit.

"(5) WHOLESALE NATIVE LOAD PURCHASER.—For purposes of this section—

"(A) IN GENERAL.—The term 'wholesale native load purchaser' means a wholesale purchaser as to whom the governmental unit had—

"(i) a statutory service obligation at wholesale at the close of the base year, or

"(ii) an obligation at the close of the base year under a requirements or firm sales contract if, as of June 30, 2000, such contract had been in effect for (or had an initial term of) at least 10 years.

"(B) PERMITTED SALES UNDER EXISTING CONTRACTS.—A private business use sale during any year to a wholesale native load purchaser (other than a person to whom the governmental unit had a statutory service obligation) under a contract shall be treated as a permitted sale by reason of being a load loss sale only to the extent that the private business use sales under the contract during such year exceed the lesser of—

"(i) the private business use sales under the contract during the base year, or

"(ii) the maximum private business use sales which would (but for this section) be permitted without causing the bonds to be private activity bonds.

This subparagraph shall only apply to the extent that the sale is allocable to bonds issued before the date of the enactment of this section (or bonds issued to refund such bonds).

"(6) SPECIAL RULES.—

"(A) TIME OF SALE RULE.—For purposes of paragraphs (3)(C)(iii) and (5)(B), the determination of whether a sale after the date of the enactment of this section is a private business use shall be made with regard to this section.

"(B) JOINT ACTION AGENCIES.—To the extent provided in regulations, a joint action agency, or a member of (or a wholesale native load purchaser from) a joint action agency, which is entitled to make a sale described in subparagraph (A) or (B) in a year, may transfer the entitlement to make that sale to the member (or purchaser), or the joint action agency, respectively.

"(b) CERTAIN BONDS FOR TRANSMISSION AND DISTRIBUTION FACILITIES NOT TAX EXEMPT.—

"(1) IN GENERAL.—Section 103 shall not apply to any bond issued on or after the date of the enactment of this section if any portion of the proceeds of the issue of which such bond is a part is used (directly or indirectly) to finance—

"(A) any electric transmission facility, or

"(B) any start-up electric utility distribution facility.

"(2) EXCEPTIONS RELATING TO TRANSMISSION FACILITIES.—Paragraph (1)(A) shall not apply to any bond issued to finance—

"(A) any repair of a transmission facility in service on the date of the enactment of this section, so long as the repair does not—

"(i) increase the voltage level of such facility over its level at the close of the base year, or

"(ii) increase the thermal load limit of such facility by more than 3 percent over such limit at the close of the base year,

"(B) any qualifying upgrade of an electric transmission facility in service on the date of the enactment of this section, or

"(C) any transmission facility necessary to comply with an obligation under a shared or reciprocal transmission agreement in effect on such date.

"(3) EXCEPTION FOR LOCAL ELECTRIC TRANSMISSION FACILITY.—For purposes of this subsection—

"(A) IN GENERAL.—In the case of a governmental unit which owns distribution facilities, paragraph (1)(A) shall not apply to any bond issued to finance an electric transmission facility owned by such governmental unit and located within such governmental unit's distribution area, but only to the extent such facility is, or will be, necessary to supply electricity to serve the retail native load, or wholesale native load, of such governmental unit or of 1 or more other governmental units owning distribution facilities which are directly connected to such electric transmission facility.

"(B) RETAIL LOAD.—The term 'retail load' means, with respect to a governmental unit, the electric load of end-users in the distribution area of the governmental unit.

"(C) WHOLESALE NATIVE LOAD.—The term 'wholesale native load' means—

"(i) the retail load of such unit's wholesale native load purchasers (or of an ultimate wholesale purchaser described in subsection (a)(3)(B)(ii)), and

"(ii) the electric load of purchasers (not described in clause (i)) under wholesale requirements contracts which—

"(I) do not constitute private business use (determined without regard to this section), and

"(II) were in effect in the base year.

"(D) NECESSARY TO SERVE LOAD.—For purposes of determining whether a transmission facility is, or will be, necessary to supply electricity to retail native load or wholesale native load—

"(i) the governmental unit's available transmission rights shall be taken into account,

"(ii) electric reliability standards or requirements of national or regional reliability organizations, regional transmission

organizations and the Electric Reliability Council of Texas shall be taken into account, and

"(iii) transmission, siting and construction decisions of regional transmission organizations and State and Federal regulatory and siting agencies, after a proceeding that provides for public input, shall be presumptive evidence regarding whether transmission facilities are necessary to serve native load.

"(E) QUALIFYING UPGRADE.—The term 'qualifying upgrade' means an improvement or addition to transmission facilities of the governmental unit in service on the date of the enactment of this section which—

"(i) is ordered or approved by a regional transmission organization or by a State regulatory or siting agency, after a proceeding that provides for public input, and

"(ii) is, or will be, necessary to supply electricity to serve the retail native load, or wholesale native load, of such governmental unit or of one or more govern-

mental units owning distribution facilities which are directly connected to such transmission facility.

"(4) START-UP ELECTRIC UTILITY DISTRIBUTION FACILITY DEFINED.—For purposes of this subsection, the term 'start-up electric utility distribution facility' means any distribution facility to provide electric service for sale to the public if such facility is placed in service—

"(A) by a governmental unit that did not operate an electric utility on the date of the enactment of this section, and

"(B) during the first 10 years after the date such governmental unit begins operating an electric utility.

A governmental unit is treated as having operated an electric utility on the date of the enactment of this section if it operates electric output facilities which were (on such date) operated by another governmental unit to provide electric service for sale to the public.

"(5) EXCEPTION FOR REFUNDING BONDS.—

"(A) IN GENERAL.—Paragraph (1) shall not apply to any eligible refunding bond.

"(B) ELIGIBLE REFUNDING BOND.—For purposes of subparagraph (A), the term 'eligible refunding bond' means any bond (or series of bonds) issued to refund any bond issued before the date of the enactment of this section if the average maturity date of the issue of which the refunding bond is a part is not later than the average maturity date of the bonds to be refunded by such issue.

"(c) DEFINITIONS; SPECIAL RULES.—For purposes of this section—

"(1) BASE YEAR.—The term 'base year' means—

"(A) the calendar year preceding the start-up year, or

"(B) at the election of the governmental unit, the second or third calendar years preceding the start-up year.

"(2) DISTRIBUTION AREA.—The term 'distribution area' means the area in which a governmental unit owns distribution facilities.

"(3) ELECTRIC OUTPUT FACILITY.—The term 'electric output facility' means an output facility that is an electric generation, transmission, or distribution facility.

"(4) DISTRIBUTION FACILITY.—The term 'distribution facility' means an electric output facility that is not a generation or transmission facility.

"(5) TRANSMISSION FACILITY.—The term 'transmission facility' means an electric output facility (other than a generation facility) that operates at an electric voltage of 69 kV or greater. To the extent provided in regulations, such term includes any output facility that FERC determines is a transmission facility under standards applied by FERC under the Federal Power Act (as in effect on the date of the enactment of this section).

"(6) EXISTING GENERATION FACILITY.—

"(A) IN GENERAL.—The term 'existing generation facility' means any electric generation facility if—

"(i) such facility is originally placed in service on or before the date of enactment of this Act and is owned by any governmental unit on such date, or

"(ii) such facility is originally placed in service after such date if the construction of the facility commenced before June 1, 2000, and such facility is owned by any

governmental unit when it is placed in service.

"(B) DENIAL OF TREATMENT TO EXPANSIONS.—Such term shall not include any facility to the extent the generating capacity of such facility as of any date is 3 percent above the greater of its nameplate or rated capacity as of the date of the enactment of this section (or, in the case of a facility described in subparagraph (A)(ii), the date that the facility is placed in service).

"(7) REGIONAL TRANSMISSION ORGANIZATION.—The term 'regional transmission organization' includes an independent system operator.

"(8) FERC.—The term 'FERC' means the Federal Energy Regulatory Commission.

"(9) GOVERNMENT-OWNED FACILITY.—An electric transmission facility shall be treated as owned by a governmental unit as of any date to the extent that—

"(A) such unit acquired (before the base year) long-term firm transmission capacity (as determined under regulations) of such facility for the purposes of serving customers to which such unit had at the close of the base year—

"(i) a statutory service obligation, or

"(ii) an obligation under a requirements contract, and

"(B) such unit holds such capacity as of such date.

"(10) STATUTORY SERVICE OBLIGATION.—The term 'statutory service obligation' means an obligation under State or Federal law (exclusive of an obligation arising solely under a contract entered into with a person) to provide electric distribution services or electric sales services, as provided in such law.

"(11) CONTRACT MODIFICATIONS.—A material modification of a contract shall be treated as a new contract.

"(d) ELECTION TO TERMINATE TAX-EXEMPT BOND FINANCING FOR CERTAIN ELECTRIC OUTPUT FACILITIES.—

"(1) IN GENERAL.—At the election of a governmental unit, section 103(a) shall not apply to any bond issued by or on behalf of such unit after the date of such election if any portion of the proceeds of the issue of which such bond is a part are used to provide any electric output facilities. Such an election, once made, shall be irrevocable.

"(2) OTHER EFFECTS OF ELECTION.—During the period that the election under paragraph (1) is in effect with respect to a governmental unit, the term 'private activity bond' shall not include—

"(A) any bond issued by such unit before the date of the enactment of this section to provide an electric output facility if, as of the date of the election, such bond was not a private activity bond, and

"(B) any bond to which paragraph (1) does not apply by reason of paragraph (3).

"(3) EXCEPTIONS FOR CERTAIN PROPERTY.—

"(A) IN GENERAL.—Paragraph (1) shall not apply to any bond issued to provide property owned by a governmental unit if such property is—

"(i) any qualifying transmission facility,

"(ii) any qualifying distribution facility,

"(iii) any facility necessary to meet Federal or State environmental requirements applicable to an existing generation facility owned by the governmental unit as of the date of the election,

"(iv) any property to repair any existing generation facility owned by the governmental unit as of the date of the election,

"(v) any qualified facility (as defined in section 45(c)(3)) producing electricity from any qualified energy resource (as defined in section 45(c)(1)), and

"(vi) any energy property (as defined in section 48(a)(3)) placed in service during a period that the energy percentage under section 48(a) is greater than zero.

"(B) LIMITATION ON USE BY NONGOVERNMENTAL PERSONS.—Subparagraph (A) shall not apply to any property constructed, acquired or financed for a principal purpose of providing the facility (or the output thereof) to nongovernmental persons.

"(4) DEFINITIONS.—For purposes of this subsection—

"(A) QUALIFYING DISTRIBUTION FACILITY.—The term 'qualifying distribution facility' means a distribution facility meeting the open access requirements of subsection (a)(2)(A)(ii).

"(B) QUALIFYING TRANSMISSION FACILITY.—The term 'qualifying transmission facility' means a local transmission facility (as defined in subsection (b)(3)) meeting the open access requirements of subsection (a)(2)(A)(i).

"(5) EFFECT OF ELECTION.—

"(A) IN GENERAL.—An election under paragraph (1) shall be binding on any successor in interest to, or any related party with respect to, the electing governmental unit. For purposes of this paragraph, a governmental unit shall be treated as related to another governmental unit if it is a member of the same controlled group (as determined under regulations).

"(B) TREATMENT OF ELECTING GOVERNMENTAL UNIT.—A governmental unit which makes an election under paragraph (1) shall be treated for purposes of section 141 as a person—

"(i) which is not a governmental unit, and

"(ii) which is engaged in a trade or business,

with respect to its purchase of electricity generated by an electric output facility placed in

service after the date of such election if such purchase is under a contract executed after such date.''

(b) WAIVER OF CERTAIN LIMITATIONS NOT TO APPLY TO DISTRIBUTION FACILITIES.—Section 141(d)(5) is amended by inserting ''(except in the case of an electric output facility that is a distribution facility)'' after ''this subsection''.

(c) CLERICAL AMENDMENT.—The table of sections for subpart A of part IV of subchapter B of chapter 1 is amended by inserting after the item relating to section 141 the following new item:

''Sec. 141A. Treatment of government-owned electric output facilities.''

(d) EFFECTIVE DATE.—

(1) IN GENERAL.—The amendments made by this section shall take effect on the date of the enactment of this Act, except that a governmental unit may elect to have section 141A(a)(1) of the Internal Revenue Code of 1986, as added by subsection (a), take effect on April 14, 1996.

(2) BINDING CONTRACTS.—The amendment made by subsection (b) (relating to waiver of certain limitations not to apply to distribution facilities) shall not apply to facilities acquired pursuant to a contract which was entered into before the date of

the enactment of this Act and which was binding on such date and at all times thereafter before such acquisition.

(3) COMPARABLE TREATMENT TO BONDS UNDER 1954 CODE RULES.—References in the amendments made by this Act to sections of the Internal Revenue Code of 1986 shall be deemed to include references to comparable sections of the Internal Revenue Code of 1954.

SEC. 3208. SALES OR DISPOSITIONS TO IMPLEMENT FEDERAL ENERGY REGULATORY COMMISSION OR STATE ELECTRIC RESTRUCTURING POLICY.

(a) IN GENERAL.—Section 1033 (relating to involuntary conversions) is amended by redesignating subsection (k) as subsection (l) and by inserting after subsection (j) the following new subsection:

"(k) SALES OR DISPOSITIONS TO IMPLEMENT FEDERAL ENERGY REGULATORY COMMISSION OR STATE ELECTRIC RESTRUCTURING POLICY.—

"(1) IN GENERAL.—For purposes of this subtitle, if a taxpayer elects the application of this subsection to a qualifying electric transmission transaction—

"(A) such transaction shall be treated as an involuntary conversion to which this section applies, and

"(B) exempt utility property shall be treated as property which is similar or related in service or use to the property disposed of in such transaction.

"(2) EXTENSION OF REPLACEMENT PERIOD.—In the case of any involuntary conversion described in paragraph (1), subsection (a)(2)(B) shall be applied by substituting '4 years' for '2 years' in clause (i) thereof.

"(3) QUALIFYING ELECTRIC TRANSMISSION TRANSACTION.—For purposes of this subsection, the term 'qualifying electric transmission transaction' means any sale or other disposition before January 1, 2009, of—

"(A) property used in the trade or business of providing electric transmission services, or

"(B) any stock or partnership interest in a corporation or partnership, as the case may be, whose principal trade or business consists of providing electric transmission services,

but only if such sale or disposition is to an independent transmission company.

"(4) INDEPENDENT TRANSMISSION COMPANY.—For purposes of this subsection, the term 'independent transmission company' means—

"(A) a regional transmission organization approved by the Federal Energy Regulatory Commission,

"(B) a person—

"(i) who the Federal Energy Regulatory Commission determines in its authorization of the transaction under section 203 of the Federal Power Act (16 U.S.C. 823b) is not a market participant within the meaning of such Commission's rules applicable to regional transmission organizations, and

"(ii) whose transmission facilities to which the election under this subsection applies are under the operational control of a Federal Energy Regulatory Commission-approved regional transmission organization before the close of the period specified in such authorization, but not later than the close of the period applicable under subsection (a)(2)(B) as extended under paragraph (2), or

"(C) in the case of facilities subject to the exclusive jurisdiction of the Public Utility Commission of Texas, a person which is approved by that Commission as consistent with Texas State law regarding an independent transmission organization.

"(5) EXEMPT UTILITY PROPERTY.—For purposes of this subsection—

"(A) IN GENERAL.—The term 'exempt utility property' means property used in the trade or business of—

"(i) generating, transmitting, distributing, or selling electricity, or

"(ii) producing, transmitting, distributing, or selling natural gas.

"(B) NONRECOGNITION OF GAIN BY REASON OF ACQUISITION OF STOCK.—Acquisition of control of a corporation shall be taken into account under this section with respect to a qualifying electric transmission transaction only if the principal trade or business of such corporation is a trade or business referred to in subparagraph (A).

"(6) SPECIAL RULE FOR CONSOLIDATED GROUPS.—In the case of a corporation which is a

member of an affiliated group filing a consolidated return, such corporation shall be treated as satisfying the purchase requirement of subsection (a)(2) with respect to any qualifying electric transmission transaction engaged in by such corporation to the extent such requirement is satisfied by another member of such group.

"(7) ELECTION.—An election under paragraph (1), once made, shall be irrevocable."

(b) EXCEPTION FROM GAIN RECOGNITION UNDER SECTION 1245.—Subsection (b) of section 1245 is amended by adding at the end the following new paragraph:

"(9) DISPOSITIONS TO IMPLEMENT FEDERAL ENERGY REGULATORY COMMISSION OR STATE ELECTRIC RESTRUCTURING POLICY.—At the election of the taxpayer, the amount of gain which would (but for this paragraph) be recognized under this section on any qualified electric transmission transaction (as defined in section 1033(k)) for which an election under section 1033 is made shall be reduced by the aggregate reduction in the basis of section 1245 property held by the taxpayer or, if insufficient, by a member of an affiliated group which includes the taxpayer at any time during the taxable year in which such transaction occurred. The manner and

amount of such reduction shall be determined under regulations prescribed by the Secretary.''

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to transactions occurring after the date of the enactment of this Act.

SEC. 3209. DISTRIBUTIONS OF STOCK TO IMPLEMENT FEDERAL ENERGY REGULATORY COMMISSION OR STATE ELECTRIC RESTRUCTURING POLICY.

(a) IN GENERAL.—Subparagraph (A) of section 355(e)(3) (relating to special rules relating to acquisitions) is amended by inserting after clause (iv) the following new clause:

''(v) The acquisition of stock in any controlled corporation in a qualifying electric transmission transaction (as defined in section 1033(k)).''.

(b) EFFECTIVE DATE.—The amendment made by subsection (a) shall apply to distributions after the date of the enactment of this Act.

SEC. 3210. MODIFICATIONS TO SPECIAL RULES FOR NUCLEAR DECOMMISSIONING COSTS.

(a) REPEAL OF LIMITATION ON DEPOSITS INTO FUND BASED ON COST OF SERVICE; CONTRIBUTIONS

AFTER FUNDING PERIOD.—Subsection (b) of section 468A is amended to read as follows:

"(b) LIMITATION ON AMOUNTS PAID INTO FUND.—

"(1) IN GENERAL.—The amount which a taxpayer may pay into the Fund for any taxable year shall not exceed the ruling amount applicable to such taxable year.

"(2) CONTRIBUTIONS AFTER FUNDING PERIOD.—Notwithstanding any other provision of this section, a taxpayer may pay into the Fund in any taxable year after the last taxable year to which the ruling amount applies. Payments may not be made under the preceding sentence to the extent such payments would cause the assets of the Fund to exceed the nuclear decommissioning costs allocable to the taxpayer's current or former interest in the nuclear powerplant to which the Fund relates. The limitation under the preceding sentence shall be determined by taking into account a reasonable rate of inflation for the nuclear decommissioning costs and a reasonable after-tax rate of return on the assets of the Fund until such assets are anticipated to be expended.".

(b) CLARIFICATION OF TREATMENT OF FUND TRANSFERS.—Subsection (e) of section 468A is amended by adding at the end the following new paragraph:

"(8) TREATMENT OF FUND TRANSFERS.—If, in connection with the transfer of the taxpayer's interest in a nuclear powerplant, the taxpayer transfers the Fund with respect to such powerplant to the transferee of such interest and the transferee elects to continue the application of this section to such Fund—

"(A) the transfer of such Fund shall not cause such Fund to be disqualified from the application of this section, and

"(B) no amount shall be treated as distributed from such Fund, or be includible in gross income, by reason of such transfer.".

(c) TREATMENT OF CERTAIN DECOMMISSIONING COSTS.—

(1) IN GENERAL.—Section 468A is amended by redesignating subsections (f) and (g) as subsections (g) and (h), respectively, and by inserting after subsection (e) the following new subsection:

"(f) TRANSFERS INTO QUALIFIED FUNDS.—

"(1) IN GENERAL.—Notwithstanding subsection (b), any taxpayer maintaining a Fund to which this

section applies with respect to a nuclear powerplant may transfer into such Fund up to an amount equal to the excess of the total nuclear decommissioning costs with respect to such nuclear powerplant over the portion of such costs taken into account in determining the ruling amount in effect immediately before the transfer.

"(2) DEDUCTION FOR AMOUNTS TRANSFERRED.—

"(A) IN GENERAL.—The deduction allowed by subsection (a) for any transfer permitted by this subsection shall be allowed ratably over the remaining estimated useful life (within the meaning of subsection (d)(2)(A)) of the nuclear powerplant beginning with the taxable year during which the transfer is made.

"(B) DENIAL OF DEDUCTION FOR PREVIOUSLY DEDUCTED AMOUNTS.—No deduction shall be allowed for any transfer under this subsection of an amount for which a deduction was previously allowed or a corresponding amount was not included in gross income. For purposes of the preceding sentence, a ratable portion of each transfer shall be treated as being from

previously deducted or excluded amounts to the extent thereof.

"(C) TRANSFERS OF QUALIFIED FUNDS.—If—

"(i) any transfer permitted by this subsection is made to any Fund to which this section applies, and

"(ii) such Fund is transferred thereafter,

any deduction under this subsection for taxable years ending after the date that such Fund is transferred shall be allowed to the transferee and not to the transferor. The preceding sentence shall not apply if the transferor is an organization exempt from tax imposed by this chapter.

"(D) SPECIAL RULES.—

"(i) GAIN OR LOSS NOT RECOGNIZED.—No gain or loss shall be recognized on any transfer permitted by this subsection.

"(ii) TRANSFERS OF APPRECIATED PROPERTY.—If appreciated property is transferred in a transfer permitted by this subsection, the amount of the deduction

shall be the adjusted basis of such property.

"(3) NEW RULING AMOUNT REQUIRED.—Paragraph (1) shall not apply to any transfer unless the taxpayer requests from the Secretary a new schedule of ruling amounts in connection with such transfer.

"(4) NO BASIS IN QUALIFIED FUNDS.—Notwithstanding any other provision of law, the taxpayer's basis in any Fund to which this section applies shall not be increased by reason of any transfer permitted by this subsection.".

(2) NEW RULING AMOUNT TO TAKE INTO ACCOUNT TOTAL COSTS.—Subparagraph (A) of section 468A(d)(2) is amended to read as follows:

"(A) fund the total nuclear decommissioning costs with respect to such powerplant over the estimated useful life of such powerplant, and".

(d) DEDUCTION FOR NUCLEAR DECOMMISSIONING COSTS WHEN PAID.—Paragraph (2) of section 468A(c) is amended to read as follows:

"(2) DEDUCTION OF NUCLEAR DECOMMISSIONING COSTS.—In addition to any deduction under subsection (a), nuclear decommissioning costs paid or incurred by the taxpayer during any taxable year

shall constitute ordinary and necessary expenses in carrying on a trade or business under section 162.''.

(e) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years beginning after December 31, 2001.

SEC. 3211. TREATMENT OF CERTAIN INCOME OF COOPERATIVES.

(a) INCOME FROM OPEN ACCESS AND NUCLEAR DECOMMISSIONING TRANSACTIONS.—

(1) IN GENERAL.—Subparagraph (C) of section 501(c)(12) is amended by striking ''or'' at the end of clause (i), by striking the period at the end of clause (ii) and inserting a comma, and by adding at the end the following new clauses:

''(iii) from any open access transaction (other than income received or accrued directly or indirectly from a member), or

''(iv) from any nuclear decommissioning transaction.''

(2) DEFINITIONS.—Paragraph (12) of section 501(c) is amended by adding at the end the following new subparagraph:

''(E) For purposes of subparagraph (C)—

"(i) The term 'open access transaction' means any activity which would be a permitted open access activity (as defined in section 141A(a)(2)) if the cooperative were a governmental unit.

"(ii) The term 'nuclear decommissioning transaction' means—

"(I) any transfer into a trust, fund, or instrument established to pay any nuclear decommissioning costs if the transfer is in connection with the transfer of the cooperative's interest in a nuclear powerplant or nuclear powerplant unit,

"(II) any distribution from such a trust, fund, or instrument, or

"(III) any earnings from such a trust, fund, or instrument."

(b) INCOME FROM LOAD LOSS TRANSACTIONS TREATED AS MEMBER INCOME.—Paragraph (12) of section 501(c) is amended by adding after subparagraph (E) the following new subparagraph:

"(F)(i) In the case of a mutual or cooperative electric company, income received or accrued from a load loss transaction shall be

treated as an amount collected from members for the sole purpose of meeting losses and expenses.

"(ii) For purposes of clause (i), the term 'load loss transaction' means any sale (whether at wholesale or at retail) which would be a load loss sale under rules similar to the rules of section 141A(a)(3)(C).

"(iii) A company shall not fail to be treated as a mutual cooperative company for purposes of this paragraph by reason of the treatment under clause (i).

"(iv) A rule similar to the rule of this subparagraph shall apply to an organization to which section 1381 does not apply by reason of section 1381(a)(2)(C)."

(c) EXCEPTION FROM UNRELATED BUSINESS TAXABLE INCOME.—Subsection (b) of section 512 (relating to modifications) is amended by adding at the end the following new paragraph:

"(18) TREATMENT OF LOAD LOSS SALES OF MUTUAL OR COOPERATIVE ELECTRIC COMPANIES.—In the case of a mutual or cooperative electric company described in section 501(c)(12), there shall be

excluded income which is treated as member income under subparagraph (F) thereof.''

(d) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years beginning after the date of the enactment of this Act.

SEC. 3212. REPEAL OF REQUIREMENT OF CERTAIN APPROVED TERMINALS TO OFFER DYED DIESEL FUEL AND KEROSENE FOR NONTAXABLE PURPOSES.

Section 4101 (relating to certain approved terminals of registered persons required to offer dyed diesel fuel and kerosene for nontaxable purposes) is amended by striking subsection (e).

SEC. 3213. ARBITRAGE RULES NOT TO APPLY TO PREPAYMENTS FOR NATURAL GAS.

(a) IN GENERAL.—Subsection (b) of section 148 (defining higher yielding investments) is amended by adding at the end the following new paragraph:

''(4) EXCEPTION FOR CERTAIN PREPAYMENTS TO ENSURE NATURAL GAS SUPPLY.—The term 'investment property' shall not include any prepayment for the purpose of obtaining a supply of a natural gas—

"(A) at least 85 percent of which is to be used in the State in which the issuer is located, and

"(B) which is to be used in a business of one or more utilities each of which is owned and operated by a State or local government, any political subdivision or instrumentality thereof, or any governmental unit acting for or on behalf of such a utility.".

(b) PRIVATE LOAN FINANCING TEST NOT TO APPLY TO PREPAYMENTS FOR NATURAL GAS.—Paragraph (2) of section 141(c) (providing exceptions to the private loan financing test) is amended by striking "or" at the end of subparagraph (A), by striking the period at the end of subparagraph (B) and inserting ", or", and by adding at the end the following new subparagraph:

"(C) arises from a transaction described in section 148(b)(4).".

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to obligations issued after October 22, 1986; except that section 148(b)(4)(A) of the Internal Revenue Code of 1986, as added by this section, shall apply only to obligations issued after the date of the enactment of this Act.

TITLE III—PRODUCTION

SEC. 3301. OIL AND GAS FROM MARGINAL WELLS.

(a) IN GENERAL.—Subpart D of part IV of subchapter A of chapter 1 (relating to business credits) is amended by adding at the end the following:

"SEC. 45J. CREDIT FOR PRODUCING OIL AND GAS FROM MARGINAL WELLS.

''(a) GENERAL RULE.—For purposes of section 38, the marginal well production credit for any taxable year is an amount equal to the product of—

''(1) the credit amount, and

''(2) the qualified credit oil production and the qualified natural gas production which is attributable to the taxpayer.

''(b) CREDIT AMOUNT.—For purposes of this section—

''(1) IN GENERAL.—The credit amount is—

''(A) $3 per barrel of qualified crude oil production, and

''(B) 50 cents per 1,000 cubic feet of qualified natural gas production.

''(2) REDUCTION AS OIL AND GAS PRICES INCREASE.—

''(A) IN GENERAL.—The $3 and 50 cents amounts under paragraph (1) shall each be re-

duced (but not below zero) by an amount which bears the same ratio to such amount (determined without regard to this paragraph) as—

"(i) the excess (if any) of the applicable reference price over $15 ($1.67 for qualified natural gas production), bears to

"(ii) $3 ($0.33 for qualified natural gas production).

The applicable reference price for a taxable year is the reference price of the calendar year preceding the calendar year in which the taxable year begins.

"(B) INFLATION ADJUSTMENT.—In the case of any taxable year beginning in a calendar year after 2001, each of the dollar amounts contained in subparagraph (A) shall be increased to an amount equal to such dollar amount multiplied by the inflation adjustment factor for such calendar year (determined under section 43(b)(3)(B) by substituting '2000' for '1990').

"(C) REFERENCE PRICE.—For purposes of this paragraph, the term 'reference price' means, with respect to any calendar year—

"(i) in the case of qualified crude oil production, the reference price determined under section 29(d)(2)(C), and

"(ii) in the case of qualified natural gas production, the Secretary's estimate of the annual average wellhead price per 1,000 cubic feet for all domestic natural gas.

"(c) QUALIFIED CRUDE OIL AND NATURAL GAS PRODUCTION.—For purposes of this section—

"(1) IN GENERAL.—The terms 'qualified crude oil production' and 'qualified natural gas production' mean domestic crude oil or natural gas which is produced from a qualified marginal well.

"(2) LIMITATION ON AMOUNT OF PRODUCTION WHICH MAY QUALIFY.—

"(A) IN GENERAL.—Crude oil or natural gas produced during any taxable year from any well shall not be treated or qualified crude oil production or qualified natural gas production to the extent production from the well during the taxable year exceeds 1,095 barrels or barrel equivalents.

"(B) PROPORTIONATE REDUCTIONS.—

"(i) SHORT TAXABLE YEARS.—In the case of a short taxable year, the limitations under this paragraph shall be proportionately reduced to reflect the ratio which the number of days in such taxable year bears to 365.

"(ii) WELLS NOT IN PRODUCTION ENTIRE YEAR.—In the case of a well which is not capable of production during each day of a taxable year, the limitations under this paragraph applicable to the well shall be proportionately reduced to reflect the ratio which the number of days of production bears to the total number of days in the taxable year.

"(3) DEFINITIONS.—

"(A) QUALIFIED MARGINAL WELL.—The term 'qualified marginal well' means a domestic well—

"(i) the production from which during the taxable year is treated as marginal production under section 613A(c)(6), or

"(ii) which, during the taxable year—

"(I) has average daily production of not more than 25 barrel equivalents, and

"(II) produces water at a rate not less than 95 percent of total well effluent.

"(B) CRUDE OIL, ETC.—The terms 'crude oil', 'natural gas', 'domestic', and 'barrel' have the meanings given such terms by section 613A(e).

"(C) BARREL EQUIVALENT.—The term 'barrel equivalent' means, with respect to natural gas, a conversation ratio of 6,000 cubic feet of natural gas to 1 barrel of crude oil.

"(d) OTHER RULES.—

"(1) PRODUCTION ATTRIBUTABLE TO THE TAXPAYER.—In the case of a qualified marginal well in which there is more than one owner of operating interests in the well and the crude oil or natural gas production exceeds the limitation under subsection (c)(2), qualifying crude oil production or qualifying natural gas production attributable to the taxpayer shall be determined on the basis of the ratio which taxpayer's revenue interest in the production bears

to the aggregate of the revenue interests of all operating interest owners in the production.

"(2) OPERATING INTEREST REQUIRED.—Any credit under this section may be claimed only on production which is attributable to the holder of an operating interest.

"(3) PRODUCTION FROM NONCONVENTIONAL SOURCES EXCLUDED.—In the case of production from a qualified marginal well which is eligible for the credit allowed under section 29 for the taxable year, no credit shall be allowable under this section unless the taxpayer elects not to claim the credit under section 29 with respect to the well.

"(4) NONCOMPLIANCE WITH POLLUTION LAWS.—For purposes of subsection (c)(3)(A), a marginal well which is not in compliance with the applicable State and Federal pollution prevention, control, and permit requirements for any period of time shall not be considered to be a qualified marginal well during such period.".

(b) CREDIT TREATED AS BUSINESS CREDIT.—Section 38(b) is amended by striking "plus" at the end of paragraph (17), by striking the period at the end of paragraph (18) and inserting ", plus", and by adding at the end the following:

"(19) the marginal oil and gas well production credit determined under section 45J(a).".

(c) CARRYBACK.—Subsection (a) of section 39 (relating to carryback and carryforward of unused credits generally) is amended by adding at the end the following:

"(3) 10-YEAR CARRYBACK FOR MARGINAL OIL AND GAS WELL PRODUCTION CREDIT.—In the case of the marginal oil and gas well production credit—

"(A) this section shall be applied separately from the business credit (other than the marginal oil and gas well production credit),

"(B) paragraph (1) shall be applied by substituting '10 taxable years' for '1 taxable years' in subparagraph (A) thereof, and

"(C) paragraph (2) shall be applied—

"(i) by substituting '31 taxable years' for '21 taxable years' in subparagraph (A) thereof, and

"(ii) by substituting '30 taxable years' for '20 taxable years' in subparagraph (A) thereof.".

(d) COORDINATION WITH SECTION 29.—Section 29(a) is amended by striking "There" and inserting "At the election of the taxpayer, there".

(e) CLERICAL AMENDMENT.—The table of sections for subpart D of part IV of subchapter A of chapter I is amended by adding at the end the following:

"Sec. 45J. Credit for producing oil and gas from marginal wells.".

(f) EFFECTIVE DATE.—The amendments made by this section shall apply to production in taxable years beginning after December 31, 2001.

SEC. 3302. TEMPORARY SUSPENSION OF LIMITATION BASED ON 65 PERCENT OF TAXABLE INCOME AND EXTENSION OF SUSPENSION OF TAXABLE INCOME LIMIT WITH RESPECT TO MARGINAL PRODUCTION.

(a) LIMITATION BASED ON 65 PERCENT OF TAXABLE INCOME.—Subsection (d) of section 613A (relating to limitation on percentage depletion in case of oil and gas wells) is amended by adding at the end the following new paragraph:

"(6) TEMPORARY SUSPENSION OF TAXABLE INCOME LIMIT.—Paragraph (1) shall not apply to taxable years beginning after December 31, 2001, and before January 1, 2007, including with respect to amounts carried under the second sentence of paragraph (1) to such taxable years.".

(b) EXTENSION OF SUSPENSION OF TAXABLE INCOME LIMIT WITH RESPECT TO MARGINAL PRODUCTION.—Subparagraph (H) of section 613A(c)(6) (relating

to temporary suspension of taxable income limit with respect to marginal production) is amended by striking ''2002'' and inserting ''2007''.

(c) EFFECTIVE DATE.—The amendment made by subsection (a) shall apply to taxable years beginning after December 31, 2001.

SEC. 3303. DEDUCTION FOR DELAY RENTAL PAYMENTS.

(a) IN GENERAL.—Section 263 (relating to capital expenditures) is amended by adding after subsection (i) the following:

''(j) DELAY RENTAL PAYMENTS FOR DOMESTIC OIL AND GAS WELLS.—

''(1) IN GENERAL.—Notwithstanding subsection (a), a taxpayer may elect to treat delay rental payments incurred in connection with the development of oil or gas within the United States (as defined in section 638) as payments which are not chargeable to capital account. Any payments so treated shall be allowed as a deduction in the taxable year in which paid or incurred.

''(2) DELAY RENTAL PAYMENTS.—For purposes of paragraph (1), the term 'delay rental payment' means an amount paid for the privilege of deferring development of an oil or gas well under an oil or gas lease.''.

(b) CONFORMING AMENDMENT.—Section 263A(c)(3) is amended by inserting ''263(j),'' after '263(i),'.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to amounts paid or incurred in taxable years beginning after December 31, 2001.

SEC. 3304. ELECTION TO EXPENSE GEOLOGICAL AND GEOPHYSICAL EXPENDITURES.

(a) IN GENERAL.—Section 263 (relating to capital expenditures) is amended by adding after subsection (j) the following:

''(k) GEOLOGICAL AND GEOPHYSICAL EXPENDITURES FOR DOMESTIC OIL AND GAS WELLS.—Notwithstanding subsection (a), a taxpayer may elect to treat geological and geophysical expenses incurred in connection with the exploration for, or development of, oil or gas within the United States (as defined in section 638) as expenses which are not chargeable to capital account. Any expenses so treated shall be allowed as a deduction in the taxable year in which paid or incurred.''.

(b) CONFORMING AMENDMENT.—Section 263A(c)(3), as amended by section 3303(b), is amended by inserting ''263(k),'' after ''263(j),''.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to costs paid or incurred in taxable years beginning after December 31, 2001.

SEC. 3305. 5-YEAR NET OPERATING LOSS CARRYBACK FOR LOSSES ATTRIBUTABLE TO OPERATING MINERAL INTERESTS OF OIL AND GAS PRODUCERS.

(a) IN GENERAL.—Paragraph (1) of section 172(b) (relating to years to which loss may be carried) is amended by adding at the end the following new subparagraph:

"(H) LOSSES ON OPERATING MINERAL INTERESTS OF OIL AND GAS PRODUCERS.—In the case of a taxpayer which has an eligible oil and gas loss (as defined in subsection (j)) for a taxable year, such eligible oil and gas loss shall be a net operating loss carryback to each of the 5 taxable years preceding the taxable year of such loss.".

(b) ELIGIBLE OIL AND GAS LOSS.—Section 172 is amended by redesignating subsection (j) as subsection (k) and by inserting after subsection (i) the following new subsection:

"(j) ELIGIBLE OIL AND GAS LOSS.—For purposes of this section—

"(1) IN GENERAL.—The term 'eligible oil and gas loss' means the lesser of—

"(A) the amount which would be the net operating loss for the taxable year if only income and deductions attributable to operating

mineral interests (as defined in section 614(d)) in oil and gas wells are taken into account, or

"(B) the amount of the net operating loss for such taxable year.

"(2) COORDINATION WITH SUBSECTION (b)(2).—For purposes of applying subsection (b)(2), an eligible oil and gas loss for any taxable year shall be treated in a manner similar to the manner in which a specified liability loss is treated.

"(3) ELECTION.—Any taxpayer entitled to a 5-year carryback under subsection (b)(1)(H) from any loss year may elect to have the carryback period with respect to such loss year determined without regard to subsection (b)(1)(H).".

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to net operating losses for taxable years beginning after December 31, 2001.

SEC. 3306. EXTENSION AND MODIFICATION OF CREDIT FOR PRODUCING FUEL FROM A NONCONVENTIONAL SOURCE.

(a) IN GENERAL.—Section 29 is amended by adding at the end the following new subsection:

"(h) EXTENSION FOR OTHER FACILITIES.—

"(1) EXTENSION FOR OIL AND CERTAIN GAS.—In the case of a well for producing qualified fuels de-

scribed in subparagraph (A) or (B)(i) of subsection (c)(1)—

"(A) APPLICATION OF CREDIT FOR NEW WELLS.—Notwithstanding subsection (f), this section shall apply with respect to such fuels—

"(i) which are produced from a well drilled after the date of the enactment of this subsection and before January 1, 2007, and

"(ii) which are sold not later than the close of the 4-year period beginning on the date that such well is drilled, or, if earlier, January 1, 2010.

"(B) EXTENSION OF CREDIT FOR OLD WELLS.—Subsection (f)(2) shall be applied by substituting '2007' for '2003' with respect to wells described in subsection (f)(1)(A) with respect to such fuels.

"(2) EXTENSION FOR FACILITIES PRODUCING QUALIFIED FUEL FROM LANDFILL GAS.—

"(A) IN GENERAL.—In the case of a facility for producing qualified fuel from landfill gas which was placed in service after June 30, 1998, and before January 1, 2007, this section shall apply to fuel produced at such facility dur-

ing the 5-year period beginning on the later of—

"(i) the date such facility was placed in service, or

"(ii) the date of the enactment of this subsection.

"(B) REDUCTION OF CREDIT FOR CERTAIN LANDFILL FACILITIES.—In the case of a facility to which paragraph (1) applies and which is subject to the 1996 New Source Performance Standards/Emmissions Guidelines of the Environmental Protection Agency, subsection (a)(1) shall be applied by substituting '$2' for '$3'.

"(3) SPECIAL RULES.—In determining the amount of credit allowable under this section solely by reason of this subsection—

"(A) DAILY LIMIT.—The amount of qualified fuels sold during any taxable year which may be taken into account by reason of this subsection with respect to any project shall not exceed an average barrel-of-oil equivalent of 200,000 cubic feet of natural gas per day. Days before the date the project is placed in service shall not be taken into account in determining such average.

"(B) EXTENSION PERIOD TO COMMENCE WITH UNADJUSTED CREDIT AMOUNT.—In the case of fuels sold during 2001 and 2002, the dollar amount applicable under subsection (a)(1) shall be $3 (without regard to subsection (b)(2)). In the case of fuels sold after 2002, subparagraph (B) of subsection (d)(2) shall be applied by substituting '2002' for '1979'.".

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to fuel sold after the date of the enactment of this Act.

SEC. 3307. BUSINESS RELATED ENERGY CREDITS ALLOWED AGAINST REGULAR AND MINIMUM TAX.

(a) IN GENERAL.—Subsection (c) of section 38 (relating to limitation based on amount of tax) is amended by redesignating paragraph (3) as paragraph (4) and by inserting after paragraph (2) the following new paragraph:

"(3) SPECIAL RULES FOR SPECIFIED ENERGY CREDITS.—

"(A) IN GENERAL.—In the case of specified energy credits—

"(i) this section and section 39 shall be applied separately with respect to such credits, and

"(ii) in applying paragraph (1) to such credits—

"(I) the tentative minimum tax shall be treated as being zero, and

"(II) the limitation under paragraph (1) (as modified by subclause (I)) shall be reduced by the credit allowed under subsection (a) for the taxable year (other than the specified energy credits).

"(B) SPECIFIED ENERGY CREDITS.—For purposes of this subsection, the term 'specified energy credits' means the credits determined under sections 45G, 45H, 45I, 45J, and 45K.".

(b) CONFORMING AMENDMENT.—Subclause (II) of section 38(c)(2)(A)(ii) is amended by inserting "or the specified energy credits" after "employment credit".

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after the date of enactment of this Act.

SEC. 3308. TEMPORARY REPEAL OF ALTERNATIVE MINIMUM TAX PREFERENCE FOR INTANGIBLE DRILLING COSTS.

(a) IN GENERAL.—Clause (ii) of section 57(a)(2)(E) is amended by adding at the end the following new sen-

tence: ''The preceding sentence shall not apply to taxable years beginning after December 31, 2001, and before January 1, 2005.''.

(b) EFFECTIVE DATES.—The amendment made by this section shall apply to taxable years beginning after December 31, 2001.

SEC. 3309. ALLOWANCE OF ENHANCED RECOVERY CREDIT AGAINST THE ALTERNATIVE MINIMUM TAX.

(a) IN GENERAL.—Subparagraph (B) of section 38(c)(3), as amended by section 3307, is amended by adding at the end the following new sentence: ''For taxable years beginning before January 1, 2005, such term includes the credit determined under section 43.''

(b) EFFECTIVE DATE.—The amendment made by this section shall apply to taxable years beginning after December 31, 2001.

SEC. 3310. EXTENSION OF CERTAIN BENEFITS FOR ENERGY-RELATED BUSINESSES ON INDIAN RESERVATIONS.

(a) DEPRECIATION FOR PROPERTY ON INDIAN RESERVATIONS.—Paragraph (8) of section 168(j) (relating to termination) is amended by adding at the end the following new sentence: ''The preceding sentence shall be applied by substituting 'December 31, 2006' for 'December

31, 2003' in the case of property placed in service as part of a facility for—

"(A) the generation or transmission of electricity (including from any qualified energy resource, as defined in section 45(c)),

"(B) an oil or gas well,

"(C) the transmission or refining of oil or gas, or

"(D) the production of any qualified fuel (as defined in section 29(c))."

(b) EMPLOYMENT OF INDIANS.—Subsection (f) of section 45A (relating to termination) is amended by adding at the end the following new sentence: "The preceding sentence shall be applied by substituting 'December 31, 2006' for 'December 31, 2003' in the case of wages paid for services performed at a facility described in section 168(j)(8)."

DIVISION D

SEC. 4101. CAPACITY BUILDING FOR ENERGY-EFFICIENT, AFFORDABLE HOUSING.

Section 4(b) of the HUD Demonstration Act of 1993 (42 U.S.C. 9816 note) is amended—

(1) in paragraph (1), by inserting before the semicolon at the end the following: ‘‘, including capabilities regarding the provision of energy efficient, affordable housing and residential energy conservation measures’’; and

(2) in paragraph (2), by inserting before the semicolon the following: ‘‘, including such activities relating to the provision of energy efficient, affordable housing and residential energy conservation measures that benefit low-income families’’.

SEC. 4102. INCREASE OF CDBG PUBLIC SERVICES CAP FOR ENERGY CONSERVATION AND EFFICIENCY ACTIVITIES.

Section 105(a)(8) of the Housing and Community Development Act of 1974 (42 U.S.C. 5305(a)(8)) is amended—

(1) by inserting ‘‘or efficiency’’ after ‘‘energy conservation’’;

(2) by striking ‘‘, and except that’’ and inserting ‘‘; except that’’; and

(3) by inserting before the period at the end the following: ''; and except that each percentage limitation under this paragraph on the amount of assistance provided under this title that may be used for the provision of public services is hereby increased by 10 percent, but such percentage increase may be used only for the provision of public services concerning energy conservation or efficiency''.

SEC. 4103. FHA MORTGAGE INSURANCE INCENTIVES FOR ENERGY EFFICIENT HOUSING.

(a) SINGLE FAMILY HOUSING MORTGAGE INSURANCE.—Section 203(b)(2) of the National Housing Act (12 U.S.C. 1709(b)(2)) is amended, in the first undesignated paragraph beginning after subparagraph (B)(iii) (relating to solar energy systems)—

(1) by inserting ''or paragraph (10)''; and

(2) by striking ''20 percent'' and inserting ''30 percent''.

(b) MULTIFAMILY HOUSING MORTGAGE INSURANCE.—Section 207(c) of the National Housing Act (12 U.S.C. 1713(c)) is amended, in the second undesignated paragraph beginning after paragraph (3) (relating to solar energy systems and residential energy conservation measures), by striking ''20 percent'' and inserting ''30 percent''.

(c) COOPERATIVE HOUSING MORTGAGE INSURANCE.—Section 213(p) of the National Housing Act (12 U.S.C. 1715e(p)) is amended by striking ''20 per centum'' and inserting ''30 percent''.

(d) REHABILITATION AND NEIGHBORHOOD CONSERVATION HOUSING MORTGAGE INSURANCE.—Section 220(d)(3)(B)(iii) of the National Housing Act (12 U.S.C. 1715k(d)(3)(B)(iii)) is amended by striking ''20 per centum'' and inserting ''30 percent''.

(e) LOW-INCOME MULTIFAMILY HOUSING MORTGAGE INSURANCE.—Section 221(k) of the National Housing Act (12 U.S.C. 1715l(k)) is amended by striking ''20 per centum'' and inserting ''30 percent''.

(f) ELDERLY HOUSING MORTGAGE INSURANCE.—The proviso at the end of section 213(c)(2) of the National Housing Act (12 U.S.C. 1715v(c)(2)) is amended by striking ''20 per centum'' and inserting ''30 percent''.

(g) CONDOMINIUM HOUSING MORTGAGE INSURANCE.—Section 234(j) of the National Housing Act (12 U.S.C. 1715y(j)) is amended by striking ''20 per centum'' and inserting ''30 percent''.

SEC. 4104. PUBLIC HOUSING CAPITAL FUND.

Section 9(d)(1) of the United States Housing Act of 1937 (42 U.S.C. 1437g(d)(1)) is amended—

(1) in subparagraph (I), by striking ''and'' at the end;

(2) in subparagraph (K), by striking the period at the end and inserting ''; and''; and

(3) by adding at the end the following new subparagraph:

''(L) improvement of energy and water-use efficiency by installing fixtures and fittings that conform to the American Society of Mechanical Engineers/American National Standards Institute standards A112.19.2-1998 and A112.18.1-2000, or any revision thereto, applicable at the time of installation, and by increasing energy efficiency and water conservation by such other means as the Secretary determines are appropriate.''.

SEC. 4105. GRANTS FOR ENERGY-CONSERVING IMPROVEMENTS FOR ASSISTED HOUSING.

Section 251(b)(1) of the National Energy Conservation Policy Act (42 U.S.C. 8231(1)) is amended—

(1) by striking ''financed with loans'' and inserting ''assisted'';

(2) by inserting after ''1959,'' the following: ''which are eligible multifamily housing projects (as such term is defined in section 512 of the Multi-

family Assisted Housing Reform and Affordability Act of 1997 (42 U.S.C. 1437f note)) and are subject to a mortgage restructuring and rental assistance sufficiency plans under such Act,''; and

(3) by inserting after the period at the end of the first sentence the following new sentence: ''Such improvements may also include the installation of energy and water conserving fixtures and fittings that conform to the American Society of Mechanical Engineers/American National Standards Institute standards A112.19.2-1998 and A112.18.1-2000, or any revision thereto, applicable at the time of installation.''.

SEC. 4106. NORTH AMERICAN DEVELOPMENT BANK.

Part 2 of subtitle D of title V of the North American Free Trade Agreement Implementation Act (22 U.S.C. 290m–290m-3) is amended by adding at the end the following:

''SEC. 545. SUPPORT FOR CERTAIN ENERGY POLICIES.

''Consistent with the focus of the Bank's Charter on environmental infrastructure projects, the Board members representing the United States should use their voice and vote to encourage the Bank to finance projects related to clean and efficient energy, including energy conservation,

that prevent, control, or reduce environmental pollutants or contaminants.''.

DIVISION E

SEC. 5000. SHORT TITLE.

This division may be cited as the ''Clean Coal Power Initiative Act of 2001''.

SEC. 5001. FINDINGS.

Congress finds that—

(1) reliable, affordable, increasingly clean electricity will continue to power the growing United States economy;

(2) an increasing use of electrotechnologies, the desire for continuous environmental improvement, a more competitive electricity market, and concerns about rising energy prices add importance to the need for reliable, affordable, increasingly clean electricity;

(3) coal, which, as of the date of enactment of this Act, accounts for more than ½ of all electricity generated in the United States, is the most abundant fossil energy resource of the United States;

(4) coal comprises more than 85 percent of all fossil resources in the United States and exists in quantities sufficient to supply the United States for 250 years at current usage rates;

(5) investments in electricity generating facility emissions control technology over the past 30 years have reduced the aggregate emissions of pollutants from coal-based generating facilities by 21 percent, even as coal use for electricity generation has nearly tripled;

(6) continuous improvement in efficiency and environmental performance from electricity generating facilities would allow continued use of coal and preserve less abundant energy resources for other energy uses;

(7) new ways to convert coal into electricity can effectively eliminate health-threatening emissions and improve efficiency by as much as 50 percent, but initial deployment of new coal generation methods and equipment entails significant risk that generators may be unable to accept in a newly competitive electricity market; and

(8) continued environmental improvement in coal-based generation and increasing the production and supply of power generation facilities with less air emissions, with the ultimate goal of near-zero emissions, is important and desirable.

SEC. 5002. DEFINITIONS.

In this division:

(1) COST AND PERFORMANCE GOALS.—The term ''cost and performance goals'' means the cost and performance goals established under section 5004.

(2) SECRETARY.—The term ''Secretary'' means the Secretary of Energy.

SEC. 5003. CLEAN COAL POWER INITIATIVE.

(a) IN GENERAL.—The Secretary shall carry out a program under—

(1) this division;

(2) the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.);

(3) the Energy Reorganization Act of 1974 (42 U.S.C. 5801 et seq.); and

(4) title XIII of the Energy Policy Act of 1992 (42 U.S.C. 13331 et seq.),

to achieve cost and performance goals established by the Secretary under section 5004.

SEC. 5004. COST AND PERFORMANCE GOALS.

(a) REVIEW AND ASSESSMENT.—The Secretary shall perform an assessment that establishes measurable cost and performance goals for 2005, 2010, 2015, and 2020 for the programs authorized by this division. Such assess-

ment shall be based on the latest scientific, economic, and technical knowledge.

(b) CONSULTATION.—In establishing the cost and performance goals, the Secretary shall consult with representatives of—

(1) the United States coal industry;

(2) State coal development agencies;

(3) the electric utility industry;

(4) railroads and other transportation industries;

(5) manufacturers of advanced coal-based equipment;

(6) institutions of higher learning, national laboratories, and professional and technical societies;

(7) organizations representing workers;

(8) organizations formed to—

(A) promote the use of coal;

(B) further the goals of environmental protection; and

(C) promote the production and generation of coal-based power from advanced facilities; and

(9) other appropriate Federal and State agencies.

(c) TIMING.—The Secretary shall—

(1) not later than 120 days after the date of enactment of this Act, issue a set of draft cost and performance goals for public comment; and

(2) not later than 180 days after the date of enactment of this Act, after taking into consideration any public comments received, submit to the Committee on Energy and Commerce and the Committee on Science of the House of Representatives, and to the Senate, the final cost and performance goals.

SEC. 5005. AUTHORIZATION OF APPROPRIATIONS.

(a) CLEAN COAL POWER INITIATIVE.—Except as provided in subsection (c), there are authorized to be appropriated to the Secretary to carry out the Clean Coal Power Initiative under section 5003 $200,000,000 for each of the fiscal years 2002 through 2011, to remain available until expended.

(b) LIMIT ON USE OF FUNDS.—Notwithstanding subsection (a), no funds may be used to carry out the activities authorized by this Act after September 30, 2002, unless the Secretary has transmitted to the Committee on Energy and Commerce and the Committee on Science of the House of Representatives, and to the Senate, the report required by this subsection and 1 month has elapsed

since that transmission. The report shall include, with respect to subsection (a), a 10-year plan containing—

(1) a detailed assessment of whether the aggregate funding levels provided under subsection (a) are the appropriate funding levels for that program;

(2) a detailed description of how proposals will be solicited and evaluated, including a list of all activities expected to be undertaken;

(3) a detailed list of technical milestones for each coal and related technology that will be pursued;

(4) recommendations for a mechanism for recoupment of Federal funding for successful commercial projects; and

(5) a detailed description of how the program will avoid problems enumerated in General Accounting Office reports on the Clean Coal Technology Program, including problems that have resulted in unspent funds and projects that failed either financially or scientifically.

(c) APPLICABILITY.—Subsection (b) shall not apply to any project begun before September 30, 2002.

SEC. 5006. PROJECT CRITERIA.

(a) IN GENERAL.—The Secretary shall not provide funding under this division for any project that does not

advance efficiency, environmental performance, and cost competitiveness well beyond the level of technologies that are in operation or have been demonstrated as of the date of the enactment of this Act.

(b) TECHNICAL CRITERIA FOR CLEAN COAL POWER INITIATIVE.—

(1) GASIFICATION.—(A) In allocating the funds authorized under section 5005(a), the Secretary shall ensure that at least 80 percent of the funds are used only for projects on coal-based gasification technologies, including gasification combined cycle, gasification fuel cells, gasification coproduction and hybrid gasification/combustion.

(B) The Secretary shall set technical milestones specifying emissions levels that coal gasification projects must be designed to and reasonably expected to achieve. The milestones shall get more restrictive through the life of the program. The milestones shall be designed to achieve by 2020 coal gasification projects able—

(i) to remove 99 percent of sulfur dioxide;

(ii) to emit no more than .05 lbs of NOx per million BTU;

(iii) to achieve substantial reductions in mercury emissions; and

(iv) to achieve a thermal efficiency of 60 percent (higher heating value).

(2) OTHER PROJECTS.—For projects not described in paragraph (1), the Secretary shall set technical milestones specifying emissions levels that the projects must be designed to and reasonably expected to achieve. The milestones shall get more restrictive through the life of the program. The milestones shall be designed to achieve by 2010 projects able—

(A) to remove 97 percent of sulfur dioxide;

(B) to emit no more than .08 lbs of NOx per million BTU;

(C) to achieve substantial reductions in mercury emissions; and

(D) to achieve a thermal efficiency of 45 percent (higher heating value).

(c) FINANCIAL CRITERIA.—The Secretary shall not provide a funding award under this division unless the recipient has documented to the satisfaction of the Secretary that—

(1) the award recipient is financially viable without the receipt of additional Federal funding;

(2) the recipient will provide sufficient information to the Secretary for the Secretary to ensure

that the award funds are spent efficiently and effectively; and

(3) a market exists for the technology being demonstrated or applied, as evidenced by statements of interest in writing from potential purchasers of the technology.

(d) FEDERAL SHARE.—The Federal share of the cost of a coal or related technology project funded by the Secretary shall not exceed 50 percent.

(e) APPLICABILITY.—Neither the use of any particular technology, nor the achievement of any emission reduction, by any facility receiving assistance under this title shall be taken into account for purposes of making any determination under the Clean Air Act in applying the provisions of that Act to a facility not receiving assistance under this title, including any determination concerning new source performance standards, lowest achievable emission rate, best available control technology, or any other standard, requirement, or limitation.

SEC. 5007. STUDY.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, and once every 2 years thereafter through 2016, the Secretary, in cooperation with other appropriate Federal agencies, shall transmit to the Committee on Energy and Commerce and the Com-

mittee on Science of the House of Representatives, and to the Senate, a report containing the results of a study to—

(1) identify efforts (and the costs and periods of time associated with those efforts) that, by themselves or in combination with other efforts, may be capable of achieving the cost and performance goals;

(2) develop recommendations for the Department of Energy to promote the efforts identified under paragraph (1); and

(3) develop recommendations for additional authorities required to achieve the cost and performance goals.

(b) EXPERT ADVICE.—In carrying out this section, the Secretary shall give due weight to the expert advice of representatives of the entities described in section 5004(b).

DIVISION F

SEC. 6001. SHORT TITLE.

This division may be cited as the ''Energy Security Act''.

TITLE I—GENERAL PROTECTIONS FOR ENERGY SUPPLY AND SECURITY

SEC. 6101. STUDY OF EXISTING RIGHTS-OF-WAY ON FEDERAL LANDS TO DETERMINE CAPABILITY TO SUPPORT NEW PIPELINES OR OTHER TRANSMISSION FACILITIES.

(a) IN GENERAL.—Within one year after the date of enactment of this Act, the head of each Federal agency that has authorized a right-of-way across Federal lands for transportation of energy supplies or transmission of electricity shall review each such right-of-way and submit a report to the Secretary of Energy and the Chairman of the Federal Energy Regulatory Commission regarding—

(1) whether the right-of-way can be used to support new or additional capacity; and

(2) what modifications or other changes, if any, would be necessary to accommodate such additional capacity.

(b) CONSULTATIONS AND CONSIDERATIONS.—In performing the review, the head of each agency shall—

(1) consult with agencies of State, tribal, or local units of government as appropriate; and

(2) consider whether safety or other concerns related to current uses might preclude the availability of a right-of-way for additional or new transportation or transmission facilities, and set forth those considerations in the report.

SEC. 6102. INVENTORY OF ENERGY PRODUCTION POTENTIAL OF ALL FEDERAL PUBLIC LANDS.

(a) INVENTORY REQUIREMENT.—The Secretary of the Interior, in consultation with the Secretary of Agriculture and the Secretary of Energy, shall conduct an inventory of the energy production potential of all Federal public lands other than national park lands and lands in any wilderness area, with respect to wind, solar, coal, and geothermal power production.

(b) LIMITATIONS.—

(1) IN GENERAL.—The Secretary shall not include in the inventory under this section the matters to be identified in the inventory under section 604 of the Energy Act of 2000 (42 U.S.C. 6217).

(2) WIND AND SOLAR POWER.—The inventory under this section—

(A) with respect to wind power production shall be limited to sites having a mean average wind speed—

(i) exceeding 12.5 miles per hour at a height of 33 feet; and

(ii) exceeding 15.7 miles per hour at a height of 164 feet; and

(B) with respect to solar power production shall be limited to areas rated as receiving 450 watts per square meter or greater.

(c) EXAMINATION OF RESTRICTIONS AND IMPEDIMENTS.—The inventory shall identify the extent and nature of any restrictions or impediments to the development of such energy production potential.

(d) GEOTHERMAL POWER.—The inventory shall include an update of the 1978 Assessment of Geothermal Resources by the United States Geological Survey.

(e) COMPLETION AND UPDATING.—The Secretary—

(1) shall complete the inventory by not later than 2 years after the date of the enactment of this Act; and

(2) shall update the inventory regularly thereafter.

(f) REPORTS.—The Secretary shall submit to the Committee on Resources of the House of Representatives and to the Committee on Energy and Natural Resources of the Senate and make publicly available—

(1) a report containing the inventory under this section, by not later than 2 years after the effective date of this section; and

(2) each update of such inventory.

SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BARRIERS TO EMERGING ENERGY TECHNOLOGY.

(a) IN GENERAL.—Each Federal agency shall carry out a review of its regulations and standards to determine those that act as a barrier to market entry for emerging energy-efficient technologies, including fuel cells, combined heat and power, and distributed generation (including small-scale renewable energy).

(b) REPORT TO CONGRESS.—No later than 18 months after date of enactment of this Act, each agency shall provide a report to the Congress and the President detailing all regulatory barriers to emerging energy-efficient technologies, along with actions the agency intends to take, or has taken, to remove such barriers.

(c) PERIODIC REVIEW.—Each agency shall subsequently review its regulations and standards in this manner no less frequently than every 5 years, and report their findings to the Congress and the President. Such reviews shall include a detailed analysis of all agency actions taken to remove existing barriers to emerging energy technologies.

SEC. 6104. INTERAGENCY AGREEMENT ON ENVIRONMENTAL REVIEW OF INTERSTATE NATURAL GAS PIPELINE PROJECTS.

(a) IN GENERAL.—The Secretary of Energy, in coordination with the Federal Energy Regulatory Commission, shall establish an administrative interagency task force to develop an interagency agreement to expedite and facilitate the environmental review and permitting of interstate natural gas pipeline projects.

(b) TASK FORCE MEMBERS.—The task force shall include a representative of each of the Bureau of Land Management, the United States Fish and Wildlife Service, the Army Corps of Engineers, the Forest Service, the Environmental Protection Agency, the Advisory Council on Historic Preservation, and such other agencies as the Secretary of Energy and the Federal Energy Regulatory Commission consider appropriate.

(c) TERMS OF AGREEMENT.—The interagency agreement shall require that agencies complete their review of interstate pipeline projects within a specific period of time after referral of the matter by the Federal Energy Regulatory Commission.

(d) SUBMITTAL OF AGREEMENT.—The Secretary of Energy shall submit a final interagency agreement under this section to the Congress by not later than 6 months after the effective date of this section.

SEC. 6105. ENHANCING ENERGY EFFICIENCY IN MANAGEMENT OF FEDERAL LANDS.

(a) SENSE OF THE CONGRESS.—It is the sense of Congress that Federal land managing agencies should enhance the use of energy efficient technologies in the management of natural resources.

(b) ENERGY EFFICIENT BUILDINGS.—To the extent economically practicable, the Secretary of the Interior and the Secretary of Agriculture shall seek to incorporate energy efficient technologies in public and administrative buildings associated with management of the National Park System, National Wildlife Refuge System, National Forest System, and other public lands and resources managed by such Secretaries.

(c) ENERGY EFFICIENT VEHICLES.—To the extent economically practicable, the Secretary of the Interior and the Secretary of Agriculture shall seek to use energy efficient motor vehicles, including vehicles equipped with biodiesel or hybrid engine technologies, in the management of the National Park System, National Wildlife Refuge System, and other public lands and managed by the Secretaries.

TITLE II—OIL AND GAS DEVELOPMENT

Subtitle A—Offshore Oil and Gas

SEC. 6201. SHORT TITLE.

This subtitle may be referred to as the ''Royalty Relief Extension Act of 2001''.

SEC. 6202. LEASE SALES IN WESTERN AND CENTRAL PLANNING AREA OF THE GULF OF MEXICO.

(a) IN GENERAL.—For all tracts located in water depths of greater than 200 meters in the Western and Central Planning Area of the Gulf of Mexico, including that portion of the Eastern Planning Area of the Gulf of Mexico encompassing whole lease blocks lying west of 87 degrees, 30 minutes West longitude, any oil or gas lease sale under the Outer Continental Shelf Lands Act occurring within 2 years after the date of enactment of this Act shall use the bidding system authorized in section 8(a)(1)(H) of the Outer Continental Shelf Lands Act (30 U.S.C. 1337(a)(1)(H)), except that the suspension of royalties shall be set at a volume of not less than the following:

(1) 5 million barrels of oil equivalent for each lease in water depths of 400 to 800 meters.

(2) 9 million barrels of oil equivalent for each lease in water depths of 800 to 1,600 meters.

(3) 12 million barrels of oil equivalent for each lease in water depths greater than 1,600 meters.

(b) RELATIONSHIP TO EXISTING AUTHORITY.—Except as expressly provided in this section, nothing in this section is intended to limit the authority of the Secretary of the Interior under the Outer Continental Shelf Lands Act (43 U.S.C. 1301 et seq.) to provide royalty suspension.

SEC. 6203. SAVINGS CLAUSE.

Nothing in this subtitle shall be construed to affect any offshore pre-leasing, leasing, or development moratorium, including any moratorium applicable to the Eastern Planning Area of the Gulf of Mexico located off the Gulf Coast of Florida.

SEC. 6204. ANALYSIS OF GULF OF MEXICO FIELD SIZE DISTRIBUTION, INTERNATIONAL COMPETITIVENESS, AND INCENTIVES FOR DEVELOPMENT.

(a) IN GENERAL.—The Secretary of the Interior and the Secretary of Energy shall enter into appropriate arrangements with the National Academy of Sciences to commission the Academy to perform the following:

(1) Conduct an analysis and review of existing Gulf of Mexico oil and natural gas resource assessments, including—

(A) analysis and review of assessments recently performed by the Minerals Management Service, the 1999 National Petroleum Council Gas Study, the Department of Energy's Offshore Marginal Property Study, and the Advanced Resources International, Inc. Deepwater Gulf of Mexico model; and

(B) evaluation and comparison of the accuracy of assumptions of the existing assessments with respect to resource field size distribution, hydrocarbon potential, and scenarios for leasing, exploration, and development.

(2) Evaluate the lease terms and conditions offered by the Minerals Management Service for Lease Sale 178, and compare the financial incentives offered by such terms and conditions to financial incentives offered by the terms and conditions that apply under leases for other offshore areas that are competing for the same limited offshore oil and gas exploration and development capital, including offshore areas of West Africa and Brazil.

(3) Recommend what level of incentives for all water depths are appropriate in order to ensure that the United States optimizes the domestic supply of oil and natural gas from the offshore areas of the

Gulf of Mexico that are not subject to current leasing moratoria. Recommendations under this paragraph should be made in the context of the importance of the oil and natural gas resources of the Gulf of Mexico to the future energy and economic needs of the United States.

(b) REPORT.—Not later than 180 days after the date of enactment of this Act, the Secretary of the Interior shall submit a report to the Committee on Resources in the House of Representatives and the Committee on Energy and Natural Resources in the Senate, summarizing the findings of the National Academy of Sciences pursuant to subsection (a) and providing recommendations of the Secretary for new policies or other actions that could help to further increase oil and natural gas production from the Gulf of Mexico.

Subtitle B—Improvements to Federal Oil and Gas Management

SEC. 6221. SHORT TITLE.

This subtitle may be cited as the ''Federal Oil and Gas Lease Management Improvement Demonstration Program Act of 2001''.

SEC. 6222. STUDY OF IMPEDIMENTS TO EFFICIENT LEASE OPERATIONS.

(a) IN GENERAL.—The Secretary of the Interior and the Secretary of Agriculture shall jointly undertake a study of the impediments to efficient oil and gas leasing and operations on Federal onshore lands in order to identify means by which unnecessary impediments to the expeditious exploration and production of oil and natural gas on such lands can be removed.

(b) CONTENTS.—The study under subsection (a) shall include the following:

(1) A review of the process by which Federal land managers accept or reject an offer to lease, including the timeframes in which such offers are acted upon, the reasons for any delays in acting upon such offers, and any recommendations for expediting the response to such offers.

(2) A review of the approval process for applications for permits to drill, including the timeframes in which such applications are approved, the impact of compliance with other Federal laws on such timeframes, any other reasons for delays in making such approvals, and any recommendations for expediting such approvals.

(3) A review of the approval process for surface use plans of operation, including the timeframes in

which such applications are approved, the impact of compliance with other Federal laws on such timeframes, any other reasons for delays in making such approvals, and any recommendations for expediting such approvals.

(4) A review of the process for administrative appeal of decisions or orders of officers or employees of the Bureau of Land Management with respect to a Federal oil or gas lease, including the timeframes in which such appeals are heard and decided, any reasons for delays in hearing or deciding such appeals, and any recommendations for expediting the appeals process.

(c) REPORT.—The Secretaries shall report the findings and recommendations resulting from the study required by this section to the Committee on Resources of the House of Representatives and to the Committee on Energy and Natural Resources of the Senate no later than 6 months after the date of the enactment of this Act.

SEC. 6223. ELIMINATION OF UNWARRANTED DENIALS AND STAYS.

(a) IN GENERAL.—The Secretary shall ensure that unwarranted denials and stays of lease issuance and unwarranted restrictions on lease operations are eliminated

from the administration of oil and natural gas leasing on Federal land.

(b) LAND DESIGNATED FOR MULTIPLE USE.—Federal land available for oil and natural gas leasing under any Bureau of Land Management resource management plan or Forest Service leasing analysis shall be available without lease stipulations more stringent than restrictions on surface use and operations imposed under the laws (including regulations) of the oil and natural gas conservation authority of the State in which the lands are located, unless the Secretary includes in the decision approving the management plan or leasing analysis or in the Secretary's acceptance of an offer to lease a written explanation why more stringent stipulations are warranted.

(c) REJECTION OF OFFER TO LEASE.—

(1) IN GENERAL.—If the Secretary rejects an offer to lease Federal lands for oil or natural gas development on the ground that the land is unavailable for oil and natural gas leasing, the Secretary shall provide a written, detailed explanation of the reasons the land is unavailable for leasing.

(2) PREVIOUS RESOURCE MANAGEMENT DECISION.—If the determination of unavailability is based on a previous resource management decision, the explanation shall include a careful assessment of

whether the reasons underlying the previous decision are still persuasive.

(3) SEGREGATION OF AVAILABLE LAND FROM UNAVAILABLE LAND.—The Secretary may not reject an offer to lease Federal land for oil and natural gas development that is available for such leasing on the ground that the offer includes land unavailable for leasing. The Secretary shall segregate available land from unavailable land, on the offeror's request following notice by the Secretary, before acting on the offer to lease.

(d) DISAPPROVAL OR REQUIRED MODIFICATION OF SURFACE USE PLANS OF OPERATIONS AND APPLICATION FOR PERMIT TO DRILL.—The Secretary shall provide a written, detailed explanation of the reasons for disapproving or requiring modifications of any surface use plan of operations or application for permit to drill with respect to oil or natural gas development on Federal lands.

SEC. 6224. LIMITATION ON COST RECOVERY FOR APPLICATIONS.

Notwithstanding sections 304 and 504 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1734, 1764) and section 9701 of title 31, United States Code, the Secretary shall not recover the Secretary's costs

with respect to applications and other documents relating to oil and gas leases.

SEC. 6225. CONSULTATION WITH SECRETARY OF AGRICULTURE.

Section 17(h) of the Mineral Leasing Act (30 U.S.C. 226(h)) is amended to read as follows:

''(h)(1) In issuing any lease on National Forest System lands reserved from the public domain, the Secretary of the Interior shall consult with the Secretary of Agriculture in determining stipulations on surface use under the lease.

''(2)(A) A lease on lands referred to in paragraph (1) may not be issued if the Secretary of Agriculture determines, after consultation under paragraph (1), that the terms and conditions of the lease, including any prohibition on surface occupancy for lease operations, will not be sufficient to adequately protect such lands under the National Forest Management Act of 1976 (16 U.S.C. 1600 et seq.).

''(B) The authority of the Secretary of Agriculture under this paragraph may be delegated only to the Undersecretary of Agriculture for Natural Resources and Environment.''.

Subtitle C—Miscellaneous

SEC. 6231. OFFSHORE SUBSALT DEVELOPMENT.

Section 5 of the Outer Continental Shelf Lands Act of 1953 (43 U.S.C. 1334) is amended by adding at the end the following:

''(k) SUSPENSION OF OPERATIONS FOR SUBSALT EXPLORATION.—Notwithstanding any other provision of law or regulation, to prevent waste caused by the drilling of unnecessary wells and to facilitate the discovery of additional hydrocarbon reserves, the Secretary may grant a request for a suspension of operations under any lease to allow the reprocessing and reinterpretation of geophysical data to identify and define drilling objectives beneath allocthonus salt sheets.''.

SEC. 6232. PROGRAM ON OIL AND GAS ROYALTIES IN KIND.

(a) APPLICABILITY OF SECTION.—Notwithstanding any other provision of law, the provisions of this section shall apply to all royalty in kind accepted by the Secretary of the Interior under any Federal oil or gas lease or permit under section 36 of the Mineral Leasing Act (30 U.S.C. 192), section 27 of the Outer Continental Shelf Lands Act (43 U.S.C. 1353), or any other mineral leasing law, in the period beginning on the date of enactment of this Act through September 30, 2006.

(b) TERMS AND CONDITIONS.—All royalty accruing to the United States under any Federal oil or gas lease or permit under the Mineral Leasing Act (30 U.S.C. 181 et seq.) or the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.) shall, on the demand of the Secretary of the Interior, be paid in oil or gas. If the Secretary of the Interior makes such a demand, the following provisions apply to such payment:

(1) Delivery by, or on behalf of, the lessee of the royalty amount and quality due under the lease satisfies the lessee's royalty obligation for the amount delivered, except that transportation and processing reimbursements paid to, or deductions claimed by, the lessee shall be subject to review and audit.

(2) Royalty production shall be placed in marketable condition by the lessee at no cost to the United States.

(3) The Secretary of the Interior may—

(A) sell or otherwise dispose of any royalty oil or gas taken in kind (other than oil or gas taken under section 27(a)(3) of the Outer Continental Shlef Lands Act (43 U.S.C. 1353(a)(3)) for not less than the market price; and

(B) transport or process any oil or gas royalty taken in kind.

(4) The Secretary of the Interior may, notwithstanding section 3302 of title 31, United States Code, retain and use a portion of the revenues from the sale of oil and gas royalties taken in kind that otherwise would be deposited to miscellaneous receipts, without regard to fiscal year limitation, or may use royalty production, to pay the cost of—

(A) transporting the oil or gas,

(B) processing the gas, or

(C) disposing of the oil or gas.

(5) The Secretary may not use revenues from the sale of oil and gas royalties taken in kind to pay for personnel, travel, or other administrative costs of the Federal Government.

(c) REIMBURSEMENT OF COST.—If the lessee, pursuant to an agreement with the United States or as provided in the lease, processes the royalty gas or delivers the royalty oil or gas at a point not on or adjacent to the lease area, the Secretary of the Interior shall—

(1) reimburse the lessee for the reasonable costs of transportation (not including gathering) from the lease to the point of delivery or for processing costs; or

(2) at the discretion of the Secretary of the Interior, allow the lessee to deduct such transportation or processing costs in reporting and paying royalties in value for other Federal oil and gas leases.

(d) BENEFIT TO THE UNITED STATES REQUIRED.—The Secretary may receive oil or gas royalties in kind only if the Secretary determines that receiving such royalties provides benefits to the United States greater than or equal to those that would be realized under a comparable royalty in value program.

(e) REPORT TO CONGRESS.—For each of the fiscal years 2002 through 2006 in which the United States takes oil or gas royalties in kind from production in any State or from the Outer Continental Shelf, excluding royalties taken in kind and sold to refineries under subsection (h), the Secretary of the Interior shall provide a report to the Congress describing—

(1) the methodology or methodologies used by the Secretary to determine compliance with subsection (d), including performance standards for comparing amounts received by the United States derived from such royalties in kind to amounts likely to have been received had royalties been taken in value;

(2) an explanation of the evaluation that led the Secretary to take royalties in kind from a lease or group of leases, including the expected revenue effect of taking royalties in kind;

(3) actual amounts received by the United States derived from taking royalties in kind, and costs and savings incurred by the United States associated with taking royalties in kind; and

(4) an evaluation of other relevant public benefits or detriments associated with taking royalties in kind.

(f) DEDUCTION OF EXPENSES.—

(1) IN GENERAL.—Before making payments under section 35 of the Mineral Leasing Act (30 U.S.C. 191) or section 8(g) of the Outer Continental Shelf Lands Act (30 U.S.C. 1337(g)) of revenues derived from the sale of royalty production taken in kind from a lease, the Secretary of the Interior shall deduct amounts paid or deducted under subsections (b)(4) and (c), and shall deposit such amounts to miscellaneous receipts.

(2) ACCOUNTING FOR DEDUCTIONS.—If the Secretary of the Interior allows the lessee to deduct transportation or processing costs under subsection (c), the Secretary may not reduce any payments to

recipients of revenues derived from any other Federal oil and gas lease as a consequence of that deduction.

(g) CONSULTATION WITH STATES.—The Secretary of the Interior—

(1) shall consult with a State before conducting a royalty in kind program under this title within the State, and may delegate management of any portion of the Federal royalty in kind program to such State except as otherwise prohibited by Federal law; and

(2) shall consult annually with any State from which Federal oil or gas royalty is being taken in kind to ensure to the maximum extent practicable that the royalty in kind program provides revenues to the State greater than or equal to those which would be realized under a comparable royalty in value program.

(h) PROVISIONS FOR SMALL REFINERIES.—

(1) PREFERENCE.—If the Secretary of the Interior determines that sufficient supplies of crude oil are not available in the open market to refineries not having their own source of supply for crude oil, the Secretary may grant preference to such refineries in the sale of any royalty oil accruing or reserved to the United States under Federal oil and gas leases

issued under any mineral leasing law, for processing or use in such refineries at private sale at not less than the market price.

(2) PRORATION AMONG REFINERIES IN PRODUCTION AREA.—In disposing of oil under this subsection, the Secretary of the Interior may, at the discretion of the Secretary, prorate such oil among such refineries in the area in which the oil is produced.

(i) DISPOSITION TO FEDERAL AGENCIES.—

(1) ONSHORE ROYALTY.—Any royalty oil or gas taken by the Secretary in kind from onshore oil and gas leases may be sold at not less than the market price to any department or agency of the United States.

(2) OFFSHORE ROYALTY.—Any royalty oil or gas taken in kind from Federal oil and gas leases on the Outer Continental Shelf may be disposed of only under section 27 of the Outer Continental Shelf Lands Act (43 U.S.C. 1353).

(j) PREFERENCE FOR FEDERAL LOW-INCOME ENERGY ASSISTANCE PROGRAMS.—In disposing of royalty oil or gas taken in kind under this section, the Secretary may grant a preference to any person, including any State or Federal agency, for the purpose of providing additional re-

sources to any Federal low-income energy assistance program.

SEC. 6233. MARGINAL WELL PRODUCTION INCENTIVES.

To enhance the economics of marginal oil and gas production by increasing the ultimate recovery from marginal wells when the cash price of West Texas Intermediate crude oil, as posted on the Dow Jones Commodities Index chart, is less than $15 per barrel for 180 consecutive pricing days or when the price of natural gas delivered at Henry Hub, Louisiana, is less than $2.00 per million British thermal units for 180 consecutive days, the Secretary shall reduce the royalty rate as production declines for—

(1) onshore oil wells producing less than 30 barrels per day;

(2) onshore gas wells producing less than 120 million British thermal units per day;

(3) offshore oil wells producing less than 300 barrels of oil per day; and

(4) offshore gas wells producing less than 1,200 million British thermal units per day.

SEC. 6234. REIMBURSEMENT FOR COSTS OF NEPA ANALYSES, DOCUMENTATION, AND STUDIES.

The Mineral Leasing Act (30 U.S.C. 181 et seq.) is amended by inserting after section 37 the following:

"REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES, DOCUMENTATION, AND STUDIES

"SEC. 38. (a) IN GENERAL.—The Secretary of the Interior may reimburse a person who is a lessee, operator, operating rights owner, or applicant for an oil or gas lease under this Act for costs incurred by the person in preparing any project-level analysis, documentation, or related study required under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect to the lease, through royalty credits attributable to the lease, unit agreement, or project area for which the analysis, documentation, or related study is prepared.

"(b) CONDITIONS.—The Secretary may provide reimbursement under subsection (b) only if—

"(1) adequate funding to enable the Secretary to timely prepare the analysis, documentation, or related study is not appropriated;

"(2) the person paid the costs voluntarily; and

"(3) the person maintains records of its costs in accordance with regulations prescribed by the Secretary.".

(c) APPLICATION.—The amendments made by this section shall apply with respect to any lease entered into before, on, or after the date of the enactment of this Act.

(d) DEADLINE FOR REGULATIONS.—The Secretary shall issue regulations implementing the amendments made by this section by not later than 90 days after the date of the enactment of this Act.

TITLE III—GEOTHERMAL ENERGY DEVELOPMENT

SEC. 6301. ROYALTY REDUCTION AND RELIEF.

(a) ROYALTY REDUCTION.—Section 5(a) of the Geothermal Steam Act of 1970 (30 U.S.C. 1004(a)) is amended by striking ''not less than 10 per centum or more than 15 per centum'' and inserting ''not more than 8 per centum''.

(b) ROYALTY RELIEF.—

(1) IN GENERAL.—Notwithstanding section 5 of the Geothermal Steam Act of 1970 (30 U.S.C. 1004(a)) and any provision of any lease under that Act, no royalty is required to be paid—

(A) under any qualified geothermal energy lease with respect to commercial production of heat or energy from a facility that begins such production in the 5-year period beginning on the date of the enactment of this Act; or

(B) on qualified expansion geothermal energy.

(2) 3-YEAR APPLICATION.—Paragraph (1) applies only to commercial production of heat or energy from a facility in the first 3 years of such production.

(c) DEFINITIONS.—In this section:

(1) QUALIFIED EXPANSION GEOTHERMAL ENERGY.—The term ''qualified expansion geothermal energy''—

(A) subject to subparagraph (B), means geothermal energy produced from a generation facility for which the rated capacity is increased by more than 10 percent as a result of expansion of the facility carried out in the 5-year period beginning on the date of enactment of this Act; and

(B) does not include the rated capacity of the generation facility on the date of enactment of this Act.

(2) QUALIFIED GEOTHERMAL ENERGY LEASE.—The term ''qualified geothermal energy lease'' means a lease under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.)—

(A) that was executed before the end of the 5-year period beginning on the date of the enactment of this Act; and

(B) under which no commercial production of any form of heat or energy occurred before the date of the enactment of this Act.

SEC. 6302. EXEMPTION FROM ROYALTIES FOR DIRECT USE OF LOW TEMPERATURE GEOTHERMAL ENERGY RESOURCES.

Section 5 of the Geothermal Steam Act of 1970 (30 U.S.C. 1004) is amended—

(1) in paragraph (c) by redesignating subparagraphs (1) and (2) as subparagraphs (A) and (B);

(2) by redesignating paragraphs (a) through (d) in order as paragraphs (1) through (4);

(3) by inserting "(a) IN GENERAL.—" after "SEC. 5."; and

(4) by adding at the end the following new subsection:

"(b) EXEMPTION FOR USE OF LOW TEMPERATURE RESOURCES.—

"(1) IN GENERAL.—In lieu of any royalty or rental under subsection (a), a lease for qualified development and direct utilization of low temperature geothermal resources shall provide for payment by the lessee of an annual fee of not less than $100, and not more than $1,000, in accordance with the schedule issued under paragraph (2).

"(2) SCHEDULE.—The Secretary shall issue a schedule of fees under this section under which a fee is based on the scale of development and utilization to which the fee applies.

"(3) DEFINITIONS.—In this subsection:

"(A) LOW TEMPERATURE GEOTHERMAL RESOURCES.—The term 'low temperature geothermal resources' means geothermal steam and associated geothermal resources having a temperature of less than 195 degrees Fahrenheit.

"(B) QUALIFIED DEVELOPMENT AND DIRECT UTILIZATION.—The term 'qualified development and direct utilization' means development and utilization in which all products of geothermal resources, other than any heat utilized, are returned to the geothermal formation from which they are produced.".

SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOREST SERVICE LANDS.

The Geothermal Steam Act of 1970 is amended—

(1) in section 15(b) (30 U.S.C. 1014(b))—

(A) by inserting "(1)" after "(b)"; and

(B) in paragraph (1) (as designated by subparagraph (A) of this paragraph) in the first sentence—

(i) by striking ''with the consent of, and'' and inserting ''after consultation with the Secretary of Agriculture and''; and

(ii) by striking ''the head of that Department'' and inserting ''the Secretary of Agriculture''; and

(2) by adding at the end the following:

''(2)(A) A geothermal lease for lands withdrawn or acquired in aid of functions of the Department of Agriculture may not be issued if the Secretary of Agriculture, after the consultation required by paragraph (1), determines that no terms or conditions, including a prohibition on surface occupancy for lease operations, would be sufficient to adequately protect such lands under the National Forest Management Act of 1976 (16 U.S.C. 1600 et seq.).

''(B) The authority of the Secretary of Agriculture under this paragraph may be delegated only to the Undersecretary of Agriculture for Natural Resources and Environment.''.

SEC. 6304. DEADLINE FOR DETERMINATION ON PENDING NONCOMPETITIVE LEASE APPLICATIONS.

Not later than 90 days after the date of the enactment of this Act, the Secretary of the Interior shall, with respect to each application pending on the date of the en-

actment of this Act for a lease under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.), issue a final determination of—

(1) whether or not to conduct a lease sale by competitive bidding; and

(2) whether or not to award a lease without competitive bidding.

SEC. 6305. OPENING OF PUBLIC LANDS UNDER MILITARY JURISDICTION.

(a) IN GENERAL.—Except as otherwise provided in the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) and other provisions of Federal law applicable to development of geothermal energy resources within public lands, all public lands under the jurisdiction of a Secretary of a military department shall be open to the operation of such laws and development and utilization of geothermal steam and associated geothermal resources, as that term is defined in section 2 of the Geothermal Steam Act of 1970 (30 U.S.C. 1001), without the necessity for further action by the Secretary or the Congress.

(b) CONFORMING AMENDMENT.—Section 2689 of title 10, United States Code, is amended by striking ''including public lands,'' and inserting ''other than public lands,''.

(c) TREATMENT OF EXISTING LEASES.—Upon the expiration of any lease in effect on the date of the enactment of this Act of public lands under the jurisdiction of a military department for the development of any geothermal resource, such lease may, at the option of the lessee—

(1) be treated as a lease under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.), and be renewed in accordance with such Act; or

(2) be renewed in accordance with the terms of the lease, if such renewal is authorized by such terms.

(d) REGULATIONS.—The Secretary of the Interior, with the advice and concurrence of the Secretary of the military department concerned, shall prescribe such regulations to carry out this section as may be necessary. Such regulations shall contain guidelines to assist in determining how much, if any, of the surface of any lands opened pursuant to this section may be used for purposes incident to geothermal energy resources development and utilization.

(e) CLOSURE FOR PURPOSES OF NATIONAL DEFENSE OR SECURITY.—In the event of a national emergency or for purposes of national defense or security, the Secretary of the Interior, at the request of the Secretary

of the military department concerned, shall close any lands that have been opened to geothermal energy resources leasing pursuant to this section.

SEC. 6306. APPLICATION OF AMENDMENTS.

The amendments made by this title apply with respect to any lease executed before, on, or after the date of the enactment of this Act.

SEC. 6307. REVIEW AND REPORT TO CONGRESS.

The Secretary of the Interior shall promptly review and report to the Congress regarding the status of all moratoria on and withdrawals from leasing under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) of known geothermal resources areas (as that term is defined in section 2 of that Act (30 U.S.C. 1001), specifying for each such area whether the basis for such moratoria or withdrawal still applies.

SEC. 6308. REIMBURSEMENT FOR COSTS OF NEPA ANALYSES, DOCUMENTATION, AND STUDIES.

(a) IN GENERAL.—The Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) is amended by adding at the end the following:

"REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES, DOCUMENTATION, AND STUDIES

"SEC. 30. (a) IN GENERAL.—The Secretary of the Interior may reimburse a person who is a lessee, operator, operating rights owner, or applicant for a lease under this

Act for costs incurred by the person in preparing any project-level analysis, documentation, or related study required under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect to the lease, through royalty credits attributable to the lease, unit agreement, or project area for which the analysis, documentation, or related study is prepared.

''(b) CONDITIONS.—The Secretary shall may provide reimbursement under subsection (a) only if—

''(1) adequate funding to enable the Secretary to timely prepare the analysis, documentation, or related study is not appropriated;

''(2) the person paid the costs voluntarily; and

''(3) the person maintains records of its costs in accordance with regulations prescribed by the Secretary.''.

(b) APPLICATION.—The amendments made by this section shall apply with respect to any lease entered into before, on, or after the date of the enactment of this Act.

(c) DEADLINE FOR REGULATIONS.—The Secretary shall issue regulations implementing the amendments made by this section by not later than 90 days after the date of the enactment of this Act.

TITLE IV—HYDROPOWER

SEC. 6401. STUDY AND REPORT ON INCREASING ELECTRIC POWER PRODUCTION CAPABILITY OF EXISTING FACILITIES.

(a) IN GENERAL.—The Secretary of the Interior shall conduct a study of the potential for increasing electric power production capability at existing facilities under the administrative jurisdiction of the Secretary.

(b) CONTENT.—The study under this section shall include identification and description in detail of each facility that is capable, with or without modification, of producing additional hydroelectric power, including estimation of the existing potential for the facility to generate hydroelectric power.

(c) REPORT.—The Secretary shall submit to the Congress a report on the findings, conclusions, and recommendations of the study under this section by not later than 12 months after the date of enactment of this Act. The Secretary shall include in the report the following:

(1) The identifications, descriptions, and estimations referred to in subsection (b).

(2) A description of activities the Secretary is currently conducting or considering, or that could be considered, to produce additional hydroelectric power from each identified facility.

(3) A summary of action that has already been taken by the Secretary to produce additional hydroelectric power from each identified facility.

(4) The costs to install, upgrade, or modify equipment or take other actions to produce additional hydroelectric power from each identified facility.

(5) The benefits that would be achieved by such installation, upgrade, modification, or other action, including quantified estimates of any additional energy or capacity from each facility identified under subsection (b).

(6) A description of actions that are planned, underway, or might reasonably be considered to increase hydroelectric power production by replacing turbine runners.

(7) A description of actions that are planned, underway, or might reasonably be considered to increase hydroelectric power production by performing generator uprates and rewinds.

(8) The impact of increased hydroelectric power production on irrigation, fish, wildlife, Indian tribes, river health, water quality, navigation, recreation, fishing, and flood control.

(9) Any additional recommendations the Secretary considers advisable to increase hydroelectric power production from, and reduce costs and improve efficiency at, facilities under the jurisdiction of the Secretary.

SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM POWER PLANT, CALIFORNIA.

(a) IN GENERAL.—The Secretary of the Interior may install a powerformer at the Bureau of Reclamation Folsom power plant in Folsom, California, to replace a generator and transformer that are due for replacement due to age.

(b) REIMBURSABLE COSTS.—Costs incurred by the United States for installation of a powerformer under this section shall be treated as reimbursable costs and shall bear interest at current long-term borrowing rates of the United States Treasury at the time of acquisition.

(c) LOCAL COST SHARING.—In addition to reimbursable costs under subsection (b), the Secretary shall seek contributions from power users toward the costs of the powerformer and its installation.

SEC. 6403. STUDY AND IMPLEMENTATION OF INCREASED OPERATIONAL EFFICIENCIES IN HYDROELECTRIC POWER PROJECTS.

(a) IN GENERAL.—The Secretary of Interior shall conduct a study of operational methods and water scheduling techniques at all hydroelectric power plants under the administrative jurisdiction of the Secretary that have an electric power production capacity greater than 50 megawatts, to—

(1) determine whether such power plants and associated river systems are operated so as to maximize energy and capacity capabilities; and

(2) identify measures that can be taken to improve operational flexibility at such plants to achieve such maximization.

(b) REPORT.—The Secretary shall submit a report on the findings, conclusions, and recommendations of the study under this section by not later than 18 months after the date of the enactment of this Act, including a summary of the determinations and identifications under paragraphs (1) and (2) of subsection (a).

(c) COOPERATION BY FEDERAL POWER MARKETING ADMINISTRATIONS.—The Secretary shall coordinate with the Administrator of each Federal power marketing administration in—

(1) determining how the value of electric power produced by each hydroelectric power facility that produces power marketed by the administration can be maximized; and

(2) implementing measures identified under subsection (a)(2).

(d) LIMITATION ON IMPLEMENTATION OF MEASURES.—Implementation under subsections (a)(2) and (b)(2) shall be limited to those measures that can be implemented within the constraints imposed on Department of the Interior facilities by other uses required by law.

SEC. 6404. SHIFT OF PROJECT LOADS TO OFF-PEAK PERIODS.

(a) IN GENERAL.—The Secretary of the Interior shall—

(1) review electric power consumption by Bureau of Reclamation facilities for water pumping purposes; and

(2) make such adjustments in such pumping as possible to minimize the amount of electric power consumed for such pumping during periods of peak electric power consumption, including by performing as much of such pumping as possible during off-peak hours at night.

(b) CONSENT OF AFFECTED IRRIGATION CUSTOMERS REQUIRED.—The Secretary may not under this section make any adjustment in pumping at a facility without the consent of each person that has contracted with the United States for delivery of water from the facility for use for irrigation and that would be affected by such adjustment.

(c) EXISTING OBLIGATIONS NOT AFFECTED.—This section shall not be construed to affect any existing obligation of the Secretary to provide electric power, water, or other benefits from Bureau of Reclamation facilities.

TITLE V—ARCTIC COASTAL PLAIN DOMESTIC ENERGY

SEC. 6501. SHORT TITLE.

This title may be cited as the ''Arctic Coastal Plain Domestic Energy Security Act of 2001''.

SEC. 6502. DEFINITIONS.

In this title:

(1) COASTAL PLAIN.—The term ''Coastal Plain'' means that area identified as such in the map entitled ''Arctic National Wildlife Refuge'', dated August 1980, as referenced in section 1002(b) of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3142(b)(1)), comprising approximately 1,549,000 acres.

(2) SECRETARY.—The term ''Secretary'', except as otherwise provided, means the Secretary of the Interior or the Secretary's designee.

SEC. 6503. LEASING PROGRAM FOR LANDS WITHIN THE COASTAL PLAIN.

(a) IN GENERAL.—The Secretary shall take such actions as are necessary—

(1) to establish and implement in accordance with this title a competitive oil and gas leasing program under the Mineral Leasing Act (30 U.S.C. 181 et seq.) that will result in an environmentally sound program for the exploration, development, and production of the oil and gas resources of the Coastal Plain; and

(2) to administer the provisions of this title through regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other provisions that ensure the oil and gas exploration, development, and production activities on the Coastal Plain will result in no significant adverse effect on fish and wildlife, their habitat, subsistence resources, and the environment, and including, in furtherance of this goal, by requiring the application of the best commercially available technology for oil and gas exploration, development, and production to all explo-

ration, development, and production operations under this title in a manner that ensures the receipt of fair market value by the public for the mineral resources to be leased.

(b) REPEAL.—Section 1003 of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3143) is repealed.

(c) COMPLIANCE WITH REQUIREMENTS UNDER CERTAIN OTHER LAWS.—

(1) COMPATIBILITY.—For purposes of the National Wildlife Refuge System Administration Act of 1966, the oil and gas leasing program and activities authorized by this section in the Coastal Plain are deemed to be compatible with the purposes for which the Arctic National Wildlife Refuge was established, and that no further findings or decisions are required to implement this determination.

(2) ADEQUACY OF THE DEPARTMENT OF THE INTERIOR'S LEGISLATIVE ENVIRONMENTAL IMPACT STATEMENT.—The ''Final Legislative Environmental Impact Statement'' (April 1987) on the Coastal Plain prepared pursuant to section 1002 of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3142) and section 102(2)(C) of the National Environmental Policy Act of 1969

(42 U.S.C. 4332(2)(C)) is deemed to satisfy the requirements under the National Environmental Policy Act of 1969 that apply with respect to actions authorized to be taken by the Secretary to develop and promulgate the regulations for the establishment of a leasing program authorized by this title before the conduct of the first lease sale.

(3) COMPLIANCE WITH NEPA FOR OTHER ACTIONS.—Before conducting the first lease sale under this title, the Secretary shall prepare an environmental impact statement under the National Environmental Policy Act of 1969 with respect to the actions authorized by this title that are not referred to in paragraph (2). Notwithstanding any other law, the Secretary is not required to identify nonleasing alternative courses of action or to analyze the environmental effects of such courses of action. The Secretary shall only identify a preferred action for such leasing and a single leasing alternative, and analyze the environmental effects and potential mitigation measures for those two alternatives. The identification of the preferred action and related analysis for the first lease sale under this title shall be completed within 18 months after the date of enactment of this Act. The Secretary shall only consider public com-

ments that specifically address the Secretary's preferred action and that are filed within 20 days after publication of an environmental analysis. Notwithstanding any other law, compliance with this paragraph is deemed to satisfy all requirements for the analysis and consideration of the environmental effects of proposed leasing under this title.

(d) RELATIONSHIP TO STATE AND LOCAL AUTHORITY.—Nothing in this title shall be considered to expand or limit State and local regulatory authority.

(e) SPECIAL AREAS.—

(1) IN GENERAL.—The Secretary, after consultation with the State of Alaska, the city of Kaktovik, and the North Slope Borough, may designate up to a total of 45,000 acres of the Coastal Plain as a Special Area if the Secretary determines that the Special Area is of such unique character and interest so as to require special management and regulatory protection. The Secretary shall designate as such a Special Area the Sadlerochit Spring area, comprising approximately 4,000 acres as depicted on the map referred to in section 6502(1).

(2) MANAGEMENT.—Each such Special Area shall be managed so as to protect and preserve the

area's unique and diverse character including its fish, wildlife, and subsistence resource values.

(3) EXCLUSION FROM LEASING OR SURFACE OCCUPANCY.—The Secretary may exclude any Special Area from leasing. If the Secretary leases a Special Area, or any part thereof, for purposes of oil and gas exploration, development, production, and related activities, there shall be no surface occupancy of the lands comprising the Special Area.

(4) DIRECTIONAL DRILLING.—Notwithstanding the other provisions of this subsection, the Secretary may lease all or a portion of a Special Area under terms that permit the use of horizontal drilling technology from sites on leases located outside the area.

(f) LIMITATION ON CLOSED AREAS.—The Secretary's sole authority to close lands within the Coastal Plain to oil and gas leasing and to exploration, development, and production is that set forth in this title.

(g) REGULATIONS.—

(1) IN GENERAL.—The Secretary shall prescribe such regulations as may be necessary to carry out this title, including rules and regulations relating to protection of the fish and wildlife, their habitat, subsistence resources, and environment of the Coast-

al Plain, by no later than 15 months after the date of enactment of this Act.

(2) REVISION OF REGULATIONS.—The Secretary shall periodically review and, if appropriate, revise the rules and regulations issued under subsection (a) to reflect any significant biological, environmental, or engineering data that come to the Secretary's attention.

SEC. 6504. LEASE SALES.

(a) IN GENERAL.—Lands may be leased pursuant to this title to any person qualified to obtain a lease for deposits of oil and gas under the Mineral Leasing Act (30 U.S.C. 181 et seq.).

(b) PROCEDURES.—The Secretary shall, by regulation, establish procedures for—

(1) receipt and consideration of sealed nominations for any area in the Coastal Plain for inclusion in, or exclusion (as provided in subsection (c)) from, a lease sale;

(2) the holding of lease sales after such nomination process; and

(3) public notice of and comment on designation of areas to be included in, or excluded from, a lease sale.

(c) LEASE SALE BIDS.—Bidding for leases under this title shall be by sealed competitive cash bonus bids.

(d) ACREAGE MINIMUM IN FIRST SALE.—In the first lease sale under this title, the Secretary shall offer for lease those tracts the Secretary considers to have the greatest potential for the discovery of hydrocarbons, taking into consideration nominations received pursuant to subsection (b)(1), but in no case less than 200,000 acres.

(e) TIMING OF LEASE SALES.—The Secretary shall—

(1) conduct the first lease sale under this title within 22 months after the date of enactment of this title; and

(2) conduct additional sales so long as sufficient interest in development exists to warrant, in the Secretary's judgment, the conduct of such sales.

SEC. 6505. GRANT OF LEASES BY THE SECRETARY.

(a) IN GENERAL.—The Secretary may grant to the highest responsible qualified bidder in a lease sale conducted pursuant to section 6504 any lands to be leased on the Coastal Plain upon payment by the lessee of such bonus as may be accepted by the Secretary.

(b) SUBSEQUENT TRANSFERS.—No lease issued under this title may be sold, exchanged, assigned, sublet, or otherwise transferred except with the approval of the

Secretary. Prior to any such approval the Secretary shall consult with, and give due consideration to the views of, the Attorney General.

SEC. 6506. LEASE TERMS AND CONDITIONS.

(a) IN GENERAL.—An oil or gas lease issued pursuant to this title shall—

(1) provide for the payment of a royalty of not less than 12½ percent in amount or value of the production removed or sold from the lease, as determined by the Secretary under the regulations applicable to other Federal oil and gas leases;

(2) provide that the Secretary may close, on a seasonal basis, portions of the Coastal Plain to exploratory drilling activities as necessary to protect caribou calving areas and other species of fish and wildlife;

(3) require that the lessee of lands within the Coastal Plain shall be fully responsible and liable for the reclamation of lands within the Coastal Plain and any other Federal lands that are adversely affected in connection with exploration, development, production, or transportation activities conducted under the lease and within the Coastal Plain by the lessee or by any of the subcontractors or agents of the lessee;

(4) provide that the lessee may not delegate or convey, by contract or otherwise, the reclamation responsibility and liability to another person without the express written approval of the Secretary;

(5) provide that the standard of reclamation for lands required to be reclaimed under this title shall be, as nearly as practicable, a condition capable of supporting the uses which the lands were capable of supporting prior to any exploration, development, or production activities, or upon application by the lessee, to a higher or better use as approved by the Secretary;

(6) contain terms and conditions relating to protection of fish and wildlife, their habitat, and the environment as required pursuant to section 6503(a)(2);

(7) provide that the lessee, its agents, and its contractors use best efforts to provide a fair share, as determined by the level of obligation previously agreed to in the 1974 agreement implementing section 29 of the Federal Agreement and Grant of Right of Way for the Operation of the Trans-Alaska Pipeline, of employment and contracting for Alaska Natives and Alaska Native Corporations from throughout the State;

(8) prohibit the export of oil produced under the lease; and

(9) contain such other provisions as the Secretary determines necessary to ensure compliance with the provisions of this title and the regulations issued under this title.

(b) PROJECT LABOR AGREEMENTS.—The Secretary, as a term and condition of each lease under this title and in recognizing the Government's proprietary interest in labor stability and in the ability of construction labor and management to meet the particular needs and conditions of projects to be developed under the leases issued pursuant to this title and the special concerns of the parties to such leases, shall require that the lessee and its agents and contractors negotiate to obtain a project labor agreement for the employment of laborers and mechanics on production, maintenance, and construction under the lease.

SEC. 6507. COASTAL PLAIN ENVIRONMENTAL PROTECTION.

(a) NO SIGNIFICANT ADVERSE EFFECT STANDARD TO GOVERN AUTHORIZED COASTAL PLAIN ACTIVITIES.—The Secretary shall, consistent with the requirements of section 6503, administer the provisions of this title through regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other provisions that—

(1) ensure the oil and gas exploration, development, and production activities on the Coastal Plain will result in no significant adverse effect on fish and wildlife, their habitat, and the environment; and

(2) require the application of the best commercially available technology for oil and gas exploration, development, and production on all new exploration, development, and production operations.

(b) SITE-SPECIFIC ASSESSMENT AND MITIGATION.—The Secretary shall also require, with respect to any proposed drilling and related activities, that—

(1) a site-specific analysis be made of the probable effects, if any, that the drilling or related activities will have on fish and wildlife, their habitat, and the environment;

(2) a plan be implemented to avoid, minimize, and mitigate (in that order and to the extent practicable) any significant adverse effect identified under paragraph (1); and

(3) the development of the plan shall occur after consultation with the agency or agencies having jurisdiction over matters mitigated by the plan.

(c) REGULATIONS TO PROTECT COASTAL PLAIN FISH AND WILDLIFE RESOURCES, SUBSISTENCE USERS, AND THE ENVIRONMENT.—Before implementing the leas-

ing program authorized by this title, the Secretary shall prepare and promulgate regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other measures designed to ensure that the activities undertaken on the Coastal Plain under this title are conducted in a manner consistent with the purposes and environmental requirements of this title.

(d) COMPLIANCE WITH FEDERAL AND STATE ENVIRONMENTAL LAWS AND OTHER REQUIREMENTS.—The proposed regulations, lease terms, conditions, restrictions, prohibitions, and stipulations for the leasing program under this title shall require compliance with all applicable provisions of Federal and State environmental law and shall also require the following:

(1) Standards at least as effective as the safety and environmental mitigation measures set forth in items 1 through 29 at pages 167 through 169 of the ''Final Legislative Environmental Impact Statement'' (April 1987) on the Coastal Plain.

(2) Seasonal limitations on exploration, development, and related activities, where necessary, to avoid significant adverse effects during periods of concentrated fish and wildlife breeding, denning, nesting, spawning, and migration.

(3) That exploration activities, except for surface geological studies, be limited to the period between approximately November 1 and May 1 each year and that exploration activities shall be supported by ice roads, winter trails with adequate snow cover, ice pads, ice airstrips, and air transport methods, except that such exploration activities may occur at other times, if—

(A) the Secretary determines, after affording an opportunity for public comment and review, that special circumstances exist necessitating that exploration activities be conducted at other times of the year; and

(B) the Secretary finds that such exploration will have no significant adverse effect on the fish and wildlife, their habitat, and the environment of the Coastal Plain.

(4) Design safety and construction standards for all pipelines and any access and service roads, that—

(A) minimize, to the maximum extent possible, adverse effects upon the passage of migratory species such as caribou; and

(B) minimize adverse effects upon the flow of surface water by requiring the use of culverts, bridges, and other structural devices.

(5) Prohibitions on public access and use on all pipeline access and service roads.

(6) Stringent reclamation and rehabilitation requirements, consistent with the standards set forth in this title, requiring the removal from the Coastal Plain of all oil and gas development and production facilities, structures, and equipment upon completion of oil and gas production operations, except that the Secretary may exempt from the requirements of this paragraph those facilities, structures, or equipment that the Secretary determines would assist in the management of the Arctic National Wildlife Refuge and that are donated to the United States for that purpose.

(7) Appropriate prohibitions or restrictions on access by all modes of transportation.

(8) Appropriate prohibitions or restrictions on sand and gravel extraction.

(9) Consolidation of facility siting.

(10) Appropriate prohibitions or restrictions on use of explosives.

(11) Avoidance, to the extent practicable, of springs, streams, and river system; the protection of natural surface drainage patterns, wetlands, and riparian habitats; and the regulation of methods or techniques for developing or transporting adequate supplies of water for exploratory drilling.

(12) Avoidance or reduction of air traffic-related disturbance to fish and wildlife.

(13) Treatment and disposal of hazardous and toxic wastes, solid wastes, reserve pit fluids, drilling muds and cuttings, and domestic wastewater, including an annual waste management report, a hazardous materials tracking system, and a prohibition on chlorinated solvents, in accordance with applicable Federal and State environmental law.

(14) Fuel storage and oil spill contingency planning.

(15) Research, monitoring, and reporting requirements.

(16) Field crew environmental briefings.

(17) Avoidance of significant adverse effects upon subsistence hunting, fishing, and trapping by subsistence users.

(18) Compliance with applicable air and water quality standards.

(19) Appropriate seasonal and safety zone designations around well sites, within which subsistence hunting and trapping shall be limited.

(20) Reasonable stipulations for protection of cultural and archeological resources.

(21) All other protective environmental stipulations, restrictions, terms, and conditions deemed necessary by the Secretary.

(e) CONSIDERATIONS.—In preparing and promulgating regulations, lease terms, conditions, restrictions, prohibitions, and stipulations under this section, the Secretary shall consider the following:

(1) The stipulations and conditions that govern the National Petroleum Reserve-Alaska leasing program, as set forth in the 1999 Northeast National Petroleum Reserve-Alaska Final Integrated Activity Plan/Environmental Impact Statement.

(2) The environmental protection standards that governed the initial Coastal Plain seismic exploration program under parts 37.31 to 37.33 of title 50, Code of Federal Regulations.

(3) The land use stipulations for exploratory drilling on the KIC–ASRC private lands that are set forth in Appendix 2 of the August 9, 1983, agree-

ment between Arctic Slope Regional Corporation and the United States.

(f) FACILITY CONSOLIDATION PLANNING.—

(1) IN GENERAL.—The Secretary shall, after providing for public notice and comment, prepare and update periodically a plan to govern, guide, and direct the siting and construction of facilities for the exploration, development, production, and transportation of Coastal Plain oil and gas resources.

(2) OBJECTIVES.—The plan shall have the following objectives:

(A) Avoiding unnecessary duplication of facilities and activities.

(B) Encouraging consolidation of common facilities and activities.

(C) Locating or confining facilities and activities to areas that will minimize impact on fish and wildlife, their habitat, and the environment.

(D) Utilizing existing facilities wherever practicable.

(E) Enhancing compatibility between wildlife values and development activities.

SEC. 6508. EXPEDITED JUDICIAL REVIEW.

(a) FILING OF COMPLAINT.—

(1) DEADLINE.—Subject to paragraph (2), any complaint seeking judicial review of any provision of this title or any action of the Secretary under this title shall be filed in any appropriate district court of the United States—

(A) except as provided in subparagraph (B), within the 90-day period beginning on the date of the action being challenged; or

(B) in the case of a complaint based solely on grounds arising after such period, within 90 days after the complainant knew or reasonably should have known of the grounds for the complaint.

(2) VENUE.—Any complaint seeking judicial review of an action of the Secretary under this title may be filed only in the United States Court of Appeals for the District of Columbia.

(3) LIMITATION ON SCOPE OF CERTAIN REVIEW.—Judicial review of a Secretarial decision to conduct a lease sale under this title, including the environmental analysis thereof, shall be limited to whether the Secretary has complied with the terms of this division and shall be based upon the administrative record of that decision. The Secretary's identification of a preferred course of action to enable

leasing to proceed and the Secretary's analysis of environmental effects under this division shall be presumed to be correct unless shown otherwise by clear and convincing evidence to the contrary.

(b) LIMITATION ON OTHER REVIEW.—Actions of the Secretary with respect to which review could have been obtained under this section shall not be subject to judicial review in any civil or criminal proceeding for enforcement.

SEC. 6509. RIGHTS-OF-WAY ACROSS THE COASTAL PLAIN.

(a) EXEMPTION.—Title XI of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3161 et seq.) shall not apply to the issuance by the Secretary under section 28 of the Mineral Leasing Act (30 U.S.C. 185) of rights-of-way and easements across the Coastal Plain for the transportation of oil and gas.

(b) TERMS AND CONDITIONS.—The Secretary shall include in any right-of-way or easement referred to in subsection (a) such terms and conditions as may be necessary to ensure that transportation of oil and gas does not result in a significant adverse effect on the fish and wildlife, subsistence resources, their habitat, and the environment of the Coastal Plain, including requirements that facilities be sited or designed so as to avoid unnecessary duplication of roads and pipelines.

(c) REGULATIONS.—The Secretary shall include in regulations under section 6503(g) provisions granting rights-of-way and easements described in subsection (a) of this section.

SEC. 6510. CONVEYANCE.

In order to maximize Federal revenues by removing clouds on title to lands and clarifying land ownership patterns within the Coastal Plain, the Secretary, notwithstanding the provisions of section 1302(h)(2) of the Alaska National Interest Lands Conservation Act (16 U.S.C. 3192(h)(2)), shall convey—

(1) to the Kaktovik Inupiat Corporation the surface estate of the lands described in paragraph 2 of Public Land Order 6959, to the extent necessary to fulfill the Corporation's entitlement under section 12 of the Alaska Native Claims Settlement Act (43 U.S.C. 1611); and

(2) to the Arctic Slope Regional Corporation the subsurface estate beneath such surface estate pursuant to the August 9, 1983, agreement between the Arctic Slope Regional Corporation and the United States of America.

SEC. 6511. LOCAL GOVERNMENT IMPACT AID AND COMMUNITY SERVICE ASSISTANCE.

(a) FINANCIAL ASSISTANCE AUTHORIZED.—

(1) IN GENERAL.—The Secretary may use amounts available from the Coastal Plain Local Government Impact Aid Assistance Fund established by subsection (d) to provide timely financial assistance to entities that are eligible under paragraph (2) and that are directly impacted by the exploration for or production of oil and gas on the Coastal Plain under this title.

(2) ELIGIBLE ENTITIES.—The North Slope Borough, Kaktovik, and other boroughs, municipal subdivisions, villages, and any other community organized under Alaska State law shall be eligible for financial assistance under this section.

(b) USE OF ASSISTANCE.—Financial assistance under this section may be used only for—

(1) planning for mitigation of the potential effects of oil and gas exploration and development on environmental, social, cultural, recreational and subsistence values;

(2) implementing mitigation plans and maintaining mitigation projects; and

(3) developing, carrying out, and maintaining projects and programs that provide new or expanded public facilities and services to address needs and problems associated with such effects, including fire-

fighting, police, water, waste treatment, medivac, and medical services.

(c) APPLICATION.—

(1) IN GENERAL.—Any community that is eligible for assistance under this section may submit an application for such assistance to the Secretary, in such form and under such procedures as the Secretary may prescribe by regulation.

(2) NORTH SLOPE BOROUGH COMMUNITIES.—A community located in the North Slope Borough may apply for assistance under this section either directly to the Secretary or through the North Slope Borough.

(3) APPLICATION ASSISTANCE.—The Secretary shall work closely with and assist the North Slope Borough and other communities eligible for assistance under this section in developing and submitting applications for assistance under this section.

(d) ESTABLISHMENT OF FUND.—

(1) IN GENERAL.—There is established in the Treasury the Coastal Plain Local Government Impact Aid Assistance Fund.

(2) USE.—Amounts in the fund may be used only for providing financial assistance under this section.

(3) DEPOSITS.—Subject to paragraph (4), there shall be deposited into the fund amounts received by the United States as revenues derived from rents, bonuses, and royalties under on leases and lease sales authorized under this title.

(4) LIMITATION ON DEPOSITS.—The total amount in the fund may not exceed $10,000,000.

(5) INVESTMENT OF BALANCES.—The Secretary of the Treasury shall invest amounts in the fund in interest bearing government securities.

(e) AUTHORIZATION OF APPROPRIATIONS.—To provide financial assistance under this section there is authorized to be appropriated to the Secretary from the Coastal Plain Local Government Impact Aid Assistance Fund $5,000,000 for each fiscal year.

SEC. 6512. REVENUE ALLOCATION.

(a) IN GENERAL.—Notwithstanding section 6504, the Mineral Leasing Act (30 U.S.C. 181 et seq.), or any other law—

(1) 50 percent of the adjusted bonus, rental, and royalty revenues from oil and gas leasing and operations authorized under this title shall be paid to the State of Alaska; and

(2) the balance of such revenues shall be deposited into the Treasury as miscellaneous receipts.

(b) ADJUSTMENTS.—Adjustments to bonus, rental, and royalty amounts from oil and gas leasing and operations authorized under this title shall be made as necessary for overpayments and refunds from lease revenues received in current or subsequent periods, prior to distribution of such revenues pursuant to this section.

(c) PAYMENTS TO STATE.—Payments to the State of Alaska under this section shall be made quarterly.

TITLE VI—CONSERVATION OF ENERGY BY THE DEPARTMENT OF THE INTERIOR

SEC. 6601. ENERGY CONSERVATION BY THE DEPARTMENT OF THE INTERIOR.

(a) IN GENERAL.—The Secretary of the Interior shall—

(1) conduct a study to identify, evaluate, and recommend opportunities for conserving energy by reducing the amount of energy used by facilities of the Department of the Interior; and

(2) wherever feasible and appropriate, reduce the use of energy from traditional sources by encouraging use of alternative energy sources, including solar power and power from fuel cells, throughout such facilities and the public lands of the United States.

(b) REPORTS.—The Secretary shall submit to the Congress—

(1) by not later than 90 days after the date of the enactment of this Act, a report containing the findings, conclusions, and recommendations of the study under subsection (a)(1); and

(2) by not later than December 31 each year, an annual report describing progress made in—

(A) conserving energy through opportunities recommended in the report under paragraph (1); and

(B) encouraging use of alternative energy sources under subsection (a)(2).

TITLE VII—COAL

SEC. 6701. LIMITATION ON FEES WITH RESPECT TO COAL LEASE APPLICATIONS AND DOCUMENTS.

Notwithstanding sections 304 and 504 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1734, 1764) and section 9701 of title 31, United States Code, the Secretary shall not recover the Secretary's costs with respect to applications and other documents relating coal leases.

SEC. 6702. MINING PLANS.

Section 2(d)(2) of the Mineral Leasing Act (30 U.S.C. 202a(2)) is amended—

(1) by inserting ''(A)'' after ''(2)''; and

(2) by adding at the end the following:

''(B) The Secretary may establish a period of more than 40 years if the Secretary determines that the longer period—

''(i) will ensure the maximum economic recovery of a coal deposit; or

''(ii) the longer period is in the interest of the orderly, efficient, or economic development of a coal resources.''.

SEC. 6703. PAYMENT OF ADVANCE ROYALTIES UNDER COAL LEASES.

(a) IN GENERAL.—Section 7(b) of the Mineral Leasing Act of 1920 (30 U.S.C. 207(b)) is amended to read as follows:

''(b)(1) Each lease shall be subjected to the condition of diligent development and continued operation of the mine or mines, except where operations under the lease are interrupted by strikes, the elements, or casualties not attributable to the lessee.

''(2)(A) The Secretary of the Interior, upon determining that the public interest will be served thereby, may suspend the condition of continued operation upon the payment of advance royalties.

"(B) Such advance royalties shall be computed based on the average price for coal sold in the spot market from the same region during the last month of each applicable continued operation year.

"(C) The aggregate number of years during the initial and any extended term of any lease for which advance royalties may be accepted in lieu of the condition of continued operation shall not exceed 20.

"(3) The amount of any production royalty paid for any year shall be reduced (but not below zero) by the amount of any advance royalties paid under such lease to the extent that such advance royalties have not been used to reduce production royalties for a prior year.

"(4) This subsection shall be applicable to any lease or logical mining unit in existence on the date of the enactment of this paragraph or issued or approved after such date.

"(5) Nothing in this subsection shall be construed to affect the requirement contained in the second sentence of subsection (a) relating to commencement of production at the end of 10 years.".

(b) AUTHORITY TO WAIVE, SUSPEND, OR REDUCE ADVANCE ROYALTIES.—Section 39 of the Mineral Leasing Act (30 U.S.C. 209) is amended by striking the last sentence.

SEC. 6704. ELIMINATION OF DEADLINE FOR SUBMISSION OF COAL LEASE OPERATION AND RECLAMATION PLAN.

Section 7(c) of the Mineral Leasing Act (30 U.S.C. 207(c)) is amended by striking ''and not later than three years after a lease is issued,''.

TITLE VIII—INSULAR AREAS ENERGY SECURITY

SEC. 6801. INSULAR AREAS ENERGY SECURITY.

Section 604 of the Act entitled ''An Act to authorize appropriations for certain insular areas of the United States, and for other purposes'', approved December 24, 1980 (Public Law 96–597; 94 Stat. 3480–3481), is amended—

(1) in subsection (a)(4) by striking the period and inserting a semicolon;

(2) by adding at the end of subsection (a) the following new paragraphs:

''(5) electric power transmission and distribution lines in insular areas are inadequate to withstand damage caused by the hurricanes and typhoons which frequently occur in insular areas and such damage often costs millions of dollars to repair; and

''(6) the refinement of renewable energy technologies since the publication of the 1982 Territorial

Energy Assessment prepared pursuant to subsection (c) reveals the need to reassess the state of energy production, consumption, infrastructure, reliance on imported energy, and indigenous sources in regard to the insular areas.'';

(3) by amending subsection (e) to read as follows:

''(e)(1) The Secretary of the Interior, in consultation with the Secretary of Energy and the chief executive officer of each insular area, shall update the plans required under subsection (c) by—

''(A) updating the contents required by subsection (c);

''(B) drafting long-term energy plans for such insular areas with the objective of reducing, to the extent feasible, their reliance on energy imports by the year 2010 and maximizing, to the extent feasible, use of indigenous energy sources; and

''(C) drafting long-term energy transmission line plans for such insular areas with the objective that the maximum percentage feasible of electric power transmission and distribution lines in each insular area be protected from damage caused by hurricanes and typhoons.

"(2) Not later than May 31, 2003, the Secretary of the Interior shall submit to Congress the updated plans for each insular area required by this subsection."; and

(4) by amending subsection (g)(4) to read as follows:

"(4) POWER LINE GRANTS FOR TERRITORIES.—

"(A) IN GENERAL.—The Secretary of the Interior is authorized to make grants to governments of territories of the United States to carry out eligible projects to protect electric power transmission and distribution lines in such territories from damage caused by hurricanes and typhoons.

"(B) ELIGIBLE PROJECTS.—The Secretary may award grants under subparagraph (A) only to governments of territories of the United States that submit written project plans to the Secretary for projects that meet the following criteria:

"(i) The project is designed to protect electric power transmission and distribution lines located in one or more of the territories of the United States from damage caused by hurricanes and typhoons.

"(ii) The project is likely to substantially reduce the risk of future damage, hardship, loss, or suffering.

"(iii) The project addresses one or more problems that have been repetitive or that pose a significant risk to public health and safety.

"(iv) The project is not likely to cost more than the value of the reduction in direct damage and other negative impacts that the project is designed to prevent or mitigate. The cost benefit analysis required by this criterion shall be computed on a net present value basis.

"(v) The project design has taken into consideration long-term changes to the areas and persons it is designed to protect and has manageable future maintenance and modification requirements.

"(vi) The project plan includes an analysis of a range of options to address the problem it is designed to prevent or mitigate and a justification for the selection of the project in light of that analysis.

"(vii) The applicant has demonstrated to the Secretary that the matching funds required by subparagraph (D) are available.

"(C) PRIORITY.—When making grants under this paragraph, the Secretary shall give priority to grants for projects which are likely to—

"(i) have the greatest impact on reducing future disaster losses; and

"(ii) best conform with plans that have been approved by the Federal Government or the government of the territory where the project is to be carried out for development or hazard mitigation for that territory.

"(D) MATCHING REQUIREMENT.—The Federal share of the cost for a project for which a grant is provided under this paragraph shall not exceed 75 percent of the total cost of that project. The non-Federal share of the cost may be provided in the form of cash or services.

"(E) TREATMENT OF FUNDS FOR CERTAIN PURPOSES.—Grants provided under this paragraph shall not be considered as income, a re-

source, or a duplicative program when determining eligibility or benefit levels for Federal major disaster and emergency assistance.

"(F) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this paragraph $5,000,000 for each fiscal year beginning after the date of the enactment of this paragraph.".

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