108th CONGRESS
1st SESSION

S. _____

To enhance the energy security of the United States, and for other purposes

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IN THE SENATE OF THE UNITED STATES

MAY ___, 2003

Mr. DOMENICI, from the Committee on Energy and Natural Resources, reported the following original bill; which was read twice and placed on the calendar.

A BILL

To enhance the energy security of the United States, and for other purposes

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

SECTION 1. SHORT TITLE

This Act may be cited as "The Energy Policy Act of 2003".

SEC. 2. TABLE OF CONTENTS

The table of contents for this Act is as follows:

TITLE I — OIL AND GAS

Subtitle A—Production Incentives

SEC. 101. PERMANENT AUTHORITY TO OPERATE THE STRATEGIC PETROLEUM RESERVE AND OTHER ENERGY PROGRAMS.

(a) AMENDMENT TO TITLE I OF THE ENERGY POLICY AND CONSERVATION ACT.—Title I of the Energy Policy and Conservation Act (42 U.S.C. 6211 et seq.) is amended—

(1) by striking section 166 (42 U.S.C. 6246) and inserting—

"AUTHORIZATION OF APPROPRIATIONS

"SEC. 166. There are authorized to be appropriated to the Secretary such sums as may be necessary to carry out this part and part D, to remain available until expended.";

(2) by striking section 186 (42 U.S.C. 6250(e)); and

(3) by striking part E (42 U.S.C. 6251); relating to the expiration of title I of the Act).

(b) AMENDMENT TO TITLE II OF THE ENERGY POLICY AND CONSERVATION ACT.—Title II of the Energy Policy and Conservation Act (42 U.S.C. 6271 et seq.) is amended—

(1) by striking section 256(h) (42 U.S.C. 6276(h)) and inserting—

"(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary such sums as may be necessary to carry out this part, to remain available until expended.";

(2) by inserting before section 273 (42 U.S.C. 6283) the following:

"PART C—SUMMER FILL AND FUEL BUDGETING PROGRAMS";

(3) by striking section 273(e) (42 U.S.C. 6283(e)); relating to the expiration of summer fill and fuel budgeting programs); and

(4) by striking part D (42 U.S.C. 6285); relating to the expiration of title II of the Act).

(c) TECHNICAL AMENDMENTS.—The table of contents for the Energy Policy and Conservation Act is amended—

(1) by amending the items relating to part D of title I to read as follows:

"PART D—NORTHEAST HOME HEATING OIL RESERVE

"Sec. 181. Establishment.
"Sec. 182. Authority.
"Sec. 183. Conditions for release; plan.
"Sec. 184. Northeast Home Heating Oil Reserve Account.
"Sec. 185. Exemptions.'';

(2) by amending the items relating to part C of title II to read as follows:

"PART C—SUMMER FILL AND FUEL BUDGETING PROGRAMS

"Sec. 273. Summer fill and fuel budgeting programs."; and

(3) by striking the items relating to part D of title II.

(d) NORTHEAST HOME HEATING OIL.—Section 183(b)(1) of the Energy Policy and Conservation Act (42 U.S.C. 6250(b)(1)) is amended by striking all after "increases" through to "mid-October through March" and inserting "by more than 60 percent over its 5-year rolling average for the months of mid-October through March (considered as a heating season average)".

SEC. 102. STUDY ON INVENTORY OF PETROLEUM AND NATURAL GAS STORAGE.

(a) DEFINITION.—For purposes of this section "petroleum" means crude oil, motor gasoline, jet fuel, distillates and propane.

(b) STUDY.—The Secretary of Energy shall conduct a study on petroleum and natural gas storage capacity and operational inventory levels, nationwide and by major geographical regions.

(c) CONTENTS.—The study shall address—

(1) historical normal ranges for petroleum and natural gas inventory levels;

(2) historical and projected storage capacity trends;

(3) estimated operation inventory levels below which outages, delivery slowdown, rationing, interruptions in service or other indicators of shortage begin to appear;

(4) explanations for inventory levels dropping below normal ranges; and

(5) the ability of industry to meet U.S. demand for petroleum and natural gas without shortages or price spikes, when inventory levels are below normal ranges.

(d) REPORT TO CONGRESS.—Not later than one year from enactment of this Act, the Secretary of Energy shall submit a report to Congress on the results of the study, including findings and any recommendations for preventing future supply shortages.

SEC. 103. 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 royalties-in-kind accepted by the Secretary (referred to in this section as "Secretary") 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 beginning on the date of the enactment of this Act through September 30, 2013.

(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, be paid in oil or gas. If the Secretary 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 may—

(A) sell or otherwise dispose of any royalty production taken in kind (other than oil or gas transferred under section 27(a)(3) of the Outer Continental Shelf Lands Act (43 U.S.C. 1353(a)(3)) for not less than the market price; and

(B) transport or process (or both) any royalty production taken in kind.

(4) The Secretary 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 royalty production;

(B) processing the royalty production;

(C) disposing of the royalty production; or

(D) any combination of transporting, processing, and disposing of the royalty production.

(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.

(6) Notwithstanding the provisions of paragraph 5, the Secretary may use a portion of the revenues from the sale of oil royalties taken in kind, without fiscal year limitation, to pay transportation costs, salaries, and other administrative costs directly related to filling the Strategic Petroleum Reserve.

(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 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) 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 likely to have been received had royalties been taken in value.

(e) REPORT TO CONGRESS.—

(1) No later than September 30, 2005, the Secretary shall provide a report to Congress that addresses—

(A) actions taken to develop businesses processes and automated systems to fully support the royalty-in-kind capability to be used in tandem with the royalty-in-value approach in managing Federal oil and gas revenue; and

(B) future royalty-in-kind businesses operation plans and objectives.

(2) For each of the fiscal years 2004 through 2013 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 subsections (h), the Secretary shall provide a report to Congress describing—

(A) the methodology or methodologies used by the Secretary to determine compliance with subsection (d) , including performance standard for comparing amounts received by the United States derived from such royalties in kind to amount likely to have been received had royalties been taken in value;

(B) 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;

(C) actual amounts received by the United States derived from taking royalties in kind and cost and savings incurred by the United

States associated with taking royalties in kind, including but not limited to administrative savings and any new or increased administrative costs; and

(D) an evaluation of other relevant public benefits or detriments associated with taking royalties in kind.

(f) DEDUCTION OF EXPENSES.—

(1) 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 (43 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) If the Secretary 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 shall consult—

(1) with a State before conducting a royalty in-kind program under this section 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) 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 likely to have been received had royalties been taken in value.

(h) PROVISIONS FOR SMALL REFINERIES.—

(1) If the Secretary 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) In disposing of oil under this subsection, the Secretary may prorate such oil among such refineries in the area in which the oil is produced.

(i) DISPOSITION TO FEDERAL AGENCIES.—

(1) Any royalty oil or gas taken by the Secretary in kind from onshore oil and gas leases may be sold at not less than market price to any department or agency of the United States.

(2) 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 resources to any Federal low-income energy assistance program.

SEC. 104. MARGINAL PROPERTY PRODUCTION INCENTIVES.

(a) MARGINAL PROPERTY DEFINED.—Until such time as the Secretary of the Interior issues rules under subsection (e) that prescribe a different definition, for purposes of this section, the term "marginal property" means an onshore unit, communitization agreement, or lease not within a unit or communitization agreement that produces on average the combined equivalent of less than 15 barrels of oil per well per day or 90 million British thermal units of gas per well per day calculated based on the average over the three most recent production months, including only those wells that produce more than half the days in the three most recent production months.

(b) CONDITIONS FOR REDUCTION OF ROYALTY RATE.—Until such time as the Secretary of the Interior promulgates rules under subsection (e) that prescribe different thresholds or standards, the Secretary shall reduce the royalty rate on—

(1) oil production from marginal properties as prescribed in subsection (c) when the spot price of West Texas Intermediate crude oil at Cushing,

Oklahoma, is, on average, less than $15 per barrel for 90 consecutive trading days; and

(2) gas production from marginal properties as prescribed in subsection (c) when the spot price of natural gas delivered at Henry Hub, Louisiana, is, on average, less than $2.00 per million British thermal units for 90 consecutive trading days.

(c) REDUCED ROYALTY RATE.—

(1) When a marginal property meets the conditions specified in subsection (b), the royalty rate shall be the lesser of—

(A) 5 percent; or

(B) the applicable rate under any other statutory or regulatory royalty relief provision that applies to the affected production.

(2) The reduced royalty rate under this subsection shall be effective on the first day of the production month following the date on which the applicable price standard prescribed in subsection (b) is met.

(d) TERMINATION OF REDUCED ROYALTY RATE.—A royalty rate prescribed in subsection (d)(1)(A) shall terminate—

(1) on oil production from a marginal property, on the first day of the production month following the date on which—

(A) the spot price of West Texas Intermediate crude oil at Cushing, Oklahoma, on average, exceeds $15 per barrel for 90 consecutive trading days, or

(B) the property no longer qualifies as a marginal property under subsection (a); and

(2) on gas production from a marginal property, on the first day of the production month following the date on which—

(A) the spot price of natural gas delivered at Henry Hub, Louisiana, on average, exceeds $2.00 per million British thermal units for 90 consecutive trading days, or

(B) the property no longer qualifies as a marginal property under

subsection (a).

(e) RULES PRESCRIBING DIFFERENT RELIEF.—

(1) The Secretary of the Interior, after consultation with the Secretary of Energy, may by rule prescribe different parameters, standards, and requirements for, and a different degree or extent of, royalty relief for marginal properties in lieu of those prescribed in subsections (a) through (d).

(2) The Secretary of the Interior, after consultation with the Secretary of Energy, and within 1 year after the date of enactment of this Act, shall, by rule,—

(A) prescribe standards and requirements for, and the extent of royalty relief for, marginal properties for oil and gas leases on the outer Continental Shelf; and

(B) define what constitutes a marginal property on the outer Continental Shelf for purposes of this section.

(3) In promulgating rules under this subsection, the Secretary of the Interior may consider—

(A) oil and gas prices and market trends;

(B) production costs;

(C) abandonment costs;

(D) Federal and State tax provisions and their effects on production economics;

(E) other royalty relief programs; and

(F) other relevant matters.

(f) SAVINGS PROVISION.—Nothing in this section shall prevent a lessee from receiving royalty relief or a royalty reduction pursuant to any other law or regulation that provides more relief than the amounts provided by this section.

SEC. 105. COMPREHENSIVE INVENTORY OF OCS OIL AND NATURAL GAS RESOURCES.

(a) IN GENERAL.—The Secretary of the Interior shall conduct an inventory and analysis of oil and natural gas resources beneath all of the waters of the United States Outer Continental Shelf ("OCS"). The inventory and analysis shall—

(1) use available data on oil and gas resources in areas offshore of Mexico and Canada that will provide information on trends of oil and gas accumulation in areas of the OCS;

(2) use any available technology, except drilling, but including 3-D seismic technology to obtain accurate resources estimates;

(3) analyze how resource estimates in OCS areas have changed over time in regards to gathering geological and geophysical data, initial exploration, or full field development, including areas such as the deepwater and subsalt areas in the Gulf of Mexico;

(4) estimate the effect that understated oil and gas resource inventories have on domestic energy investments; and

(5) identify and explain how legislative, regulatory, and administrative programs or processes restrict or impede the development of identified resources and the extent that they affect domestic supply, such as moratoria, lease terms and conditions, operational stipulations and requirements, approval delays by the federal government and coastal states, and local zoning restrictions for onshore processing facilities and pipeline landings.

(b) REPORTS.—The Secretary of Interior shall submit a report to the Congress on the inventory of estimates and the analysis of restrictions or impediments, together with any recommendations, within six months of the date of enactment of the section. The report shall be publically available and updated at least every five years.

SEC. 106. ROYALTY RELIEF FOR DEEP WATER PRODUCTION.

(a) IN GENERAL.—For all tracts located in water depths of greater than 400 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 (43 U.S.C. 1331 et seq.) occurring within 5 years after the date of the enactment of this Act shall use the bidding system authorized in section 8(a)(1)(H) of the Outer Continental Shelf Lands Act (43 U.S.C. 1337(a)(1)(H)), except that the suspension of royalties shall be set at a volume of not

less than—

(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; and

(3) 12 million barrels of oil equivalent for each lease in water depths greater than 1,600 meters.

SEC. 107. ALASKA OFFSHORE ROYALTY SUSPENSION.

Section 8(a)(3)(B) of the Outer Continental Shelf Lands Act (43 U.S.C. 1337), is amended with the following: add "and in the Planning Areas offshore Alaska" after "West longitude" and before "the Secretary".

SEC. 108. ORPHANED, ABANDONED OR IDLED WELLS ON FEDERAL LANDS.

(a) IN GENERAL.—The Secretary of the Interior, in cooperation with the Secretary of Agriculture, shall establish a program within 1 year after the date of enactment of this Act to remediate, reclaim, and close orphaned, abandoned, or idled oil and gas wells located on lands administered by the land management agencies within the Department of the Interior and Agriculture. The program shall—

(1) include a means of ranking orphaned, abandoned, or idled wells sites for priority in remediation, reclamation and closure, based on public health and safety, potential environmental harm, and other land use priorities;

(2) provide for identification and recovery of the costs of remediation, reclamation and closure from persons or other entities currently providing a bond or other financial assurance required under State or Federal law for an oil or gas well that is orphaned, abandoned or idled; and

(3) provide for recovery from the persons or entities identified under paragraph (2), or their sureties or guarantors, of the costs of remediation, reclamation, and closure of such wells.

(b) COOPERATION AND CONSULTATIONS.—In carrying out this program, the Secretary of the Interior shall work cooperatively with the Secretary of Agriculture and the States within which the Federal lands are located and consult with the Secretary of

Energy and the Interstate Oil and Gas Compact Commission.

(c) PLAN.—Within 1 year after the date of enactment of the section, the Secretary of the Interior, in cooperation with the Secretary of Agriculture, shall prepare a plan for carrying out the program established under subsection (a) and transmit copies of the plan to the Congress.

(d) TECHNICAL ASSISTANCE PROGRAM FOR NON-FEDERAL LANDS.—

(1) The Secretary of Energy shall establish a program to provide technical assistance to the various oil and gas producing States to facilitate State efforts over a 10-year period to ensure a practical and economical remedy for environmental problems caused by orphaned or abandoned oil and gas exploration or production well sites on State or private lands.

(2) The Secretary shall work with the States, through the Interstate Oil and Gas Compact Commission, to assist the States in quantifying and mitigating environmental risks of onshore orphaned abandoned oil or gas wells on State and private lands.

(3) The program shall include—

(A) mechanisms to facilitate identification, if possible, of the persons or other entities currently providing a bond or other form of financial assurance required under State or Federal law for an oil or gas well that is orphaned or abandoned;

(B) criteria for ranking orphaned or abandoned well sites based on factors such as public health and safety, potential environmental harm, and other land use priorities; and

(C) information and training programs on best practices for remediation of different types of sites.

(e) DEFINITION.—For purposes of this section, a well is idled if it has been non-operational for 7 years and there is no anticipated beneficial use of the well.

(f) AUTHORIZATION.—To carry out this section there is authorized to be appropriated to the Secretary of the Interior $25,000,000 for each of the fiscal years 2004 through 2008. Of the amounts authorized, $5,000,000 is authorized for activities

under subsection (d).

SEC. 109. INCENTIVES FOR NATURAL GAS PRODUCTION FROM DEEP WELLS IN THE SHALLOW WATERS OF THE GULF OF MEXICO.

(a) ROYALTY INCENTIVE REGULATIONS.—Not later than 90 days after enactment, the Secretary of the Interior shall promulgate final regulations providing royalty incentives for natural gas produced from deep wells, as defined by the Secretary, on oil and gas leases issued under the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.) and issued prior to January 1, 2001, in shallow waters of the Gulf of Mexico, wholly west of 87 degrees, 30 minutes West longitude that are less than 200 meters deep.

(b) ROYALTY INCENTIVE REGULATIONS FOR ULTRA DEEP GAS WELLS.—

(1) No later than 90 days after the date of enactment of this Act, in addition to any other regulations that may provide royalty incentives for natural gas produced from deep wells on oil and gas leases issued pursuant to the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.), the Secretary of the Interior shall promulgate new regulations granting royalty relief suspension volumes of not less than 35 billion cubic feet with respect to the production of natural gas from 'ultra deep wells' on leases issued prior to January 1, 2001, in shallow waters less than 200 meters deep located in the Gulf of Mexico wholly west of 87 degrees, 30 minutes West longitude. For purposes of this subsection, the term 'ultra deep wells' means wells drilled with a perforated interval, the top of which is at least 20,000 feet true vertical depth below the datum at mean sea level.

(2) The Secretary shall not grant the royalty incentives outlined in this subsection if the average annual NYMEX natural gas price exceeds for one full calendar year the threshold price of $5 per million Btu, adjusted from the year 2000 for inflation.

(3) This subsection shall have no force or effect after the end of the 5-year period beginning on the date of the enactment of this Act.

SEC. 110. ALTERNATE ENERGY-RELATED USES ON THE OUTER CONTINENTAL SHELF.

(a) AMENDMENT TO OUTER CONTINENTAL SHELF LANDS ACT.—Section 8 of the Outer Continental Shelf Lands Act (43 U.S.C. 1337) is amended by adding at the end the following new subsection:

"(p) EASEMENTS OR RIGHTS-OF-WAY FOR ENERGY AND RELATED PURPOSES.—

"(1) The Secretary may grant an easement or right-of-way on the outer Continental Shelf for activities not otherwise authorized in this Act, the Deepwater Port Act of 1974 (33 U.S.C. 1501 et seq.), or the Ocean Thermal Energy Conversion Act of 1980 (42 U.S.C. 9101 et seq.), or other applicable law when such activities—

"(A) support exploration, development, or production of oil or natural gas, except that such easements or rights-of-way shall not be granted in areas where oil and gas preleasing, leasing and related activities are prohibited by a Congressional moratorium or a withdrawal pursuant to section 12 of this Act;

"(B) support transportation of oil or natural gas;

"(C) produce or support production, transportation, or transmission of energy from sources other than oil and gas; or

"(D) use facilities currently or previously used for activities authorized under this Act.

"(2) The Secretary shall promulgate regulations to ensure that activities authorized under this subsection are conducted in a manner that provides for safety, protection of the environment, conservation of the natural resources of the outer Continental Shelf, appropriate coordination with other Federal agencies, and a fair return to the Federal government for any easement or right-of-way granted under this subsection. Such regulations shall establish procedures for—

(A) public notice and comment on proposals to be permitted pursuant to this subsection;

(B) consultation and review by State and local governments that may be impacted by activities to be permitted pursuant to this

subsection;

(C) consideration of the coastal zone management program being developed or administered by an affected coastal State pursuant to section 305 or section 306 of the Coastal Zone Management Act of 1972 (16 U.S.C. 1454, 1455); and

(D) consultation with the Secretary of Defense and other appropriate agencies prior to the issuance of an easement or right-of-way under this subsection concerning issues related to national security and navigational obstruction.

(3) The Secretary shall require the holder of an easement or right-of-way granted under this subsection to furnish a surety bond or other form of security, as prescribed by the Secretary, and to comply with such other requirements as the Secretary may deem necessary to protect the interests of the United States.

"(4) This subsection shall not apply to any area within the exterior boundaries of any unit of the National Park System, National Wildlife Refuge System, or National Marine Sanctuary System, or any National Monument.

"(5) Nothing in this subsection shall be construed to amend or repeal, expressly by implication, the applicability of any other law, including but not limited to, the Coastal Zone Management Act (16 U.S.C. 1455 et seq.) or the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).".

(b) CONFORMING AMENDMENT.—The text of the heading for section 8 of the Outer Continental Shelf Lands Act is amended to read as follows: "LEASES, EASEMENTS, AND RIGHTS-OF-WAY ON THE OUTER CONTINENTAL SHELF.".

SEC. 111. COASTAL IMPACT ASSISTANCE.

The Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.) is amended by adding at the end:

"SEC. 32 COASTAL IMPACT ASSISTANCE FAIRNESS PROGRAM.

"(a) DEFINITIONS.—When used in this section:

"(1) The term 'coastal political subdivision' means a county, parish, or any equivalent subdivision of a Producing Coastal State in all or part of which

subdivision lies within the coastal zone (as defined in section 304(1) of the Coastal Zone Management Act (16 U.S.C. 1453(1))) and within a distance of 200 miles from the geographic center of any leased tract.

"(2) The term 'coastal population' means the population of all political subdivisions, as determined by the most recent official data of the Census Bureau, contained in whole or in part within the designated coastal boundary of a State as defined in a State's coastal zone management program under the Coastal Zone Management Act (16 U.S.C. 1451 et seq.).

"(3) The term 'Coastal State' has the same meaning as provided by subsection 304(4) of the Coastal Zone Management Act (16 U.S.C. 1453(4)).

"(4) The term 'coastline' has the same meaning as the term 'coast line' as defined in subsection 2(c) of the Submerged Lands Act (43 U.S.C. 1301(c)).

"(5) The term 'distance' means the minimum great circle distance, measured in statute miles.

"(6) The term 'leased tract' means a tract maintained under section 6 or leased under section 8 for the purpose of drilling for, developing, and producing oil and natural gas resources.

"(7) The term 'Producing Coastal State' means a Coastal State with a coastal seaward boundary within 200 miles from the geographic center of a leased tract other than a leased tract within any area of the Outer Continental Shelf where a moratorium on new leasing was in effect as of January 1, 2002 unless the lease was issued prior to the establishment of the moratorium and was in production on January 1, 2002.

"(8) The term 'qualified Outer Continental Shelf revenues' means all amounts received by the United States from each leased tract or portion of a leased tract lying seaward of the zone defined and governed by section 8(g) of this Act, or lying within such zone but to which section 8(g) does not apply, the geographic center of which lies within a distance of 200 miles from any part of the coastline of any Producing Coastal State, including bonus bids, rents, royalties (including payments for royalties taken in kind and sold), net profit

share payments, and related late payment interest. Such term shall only apply to leases issued after January 1, 2003 and revenues from existing leases that occurs after January 1, 2003. Such term does not include any revenues from a leased tract or portion of a leased tract that is included within any area of the Outer Continental Shelf where a moratorium on new leasing was in effect as of January 1, 2002, unless the lease was issued prior to the establishment of the moratorium and was in production on January 1, 2002.

"(9) The term 'Secretary' means the Secretary of Interior."

"(b) AUTHORIZATION.—For fiscal years 2004 through 2009, an amount equal to not more than 12.5 percent of qualified Outer Continental Shelf revenues is authorized to be appropriated for the purposes of this section.

"(c) IMPACT ASSISTANCE PAYMENTS TO STATES AND POLITICAL SUBDIVISIONS.—The Secretary shall make payments from the amounts available under this section to Producing Coastal States with an approved Coastal Impact Assistance Plan, and to coastal political subdivisions as follows:

"(1) Of the amounts appropriated, the allocation for each Producing Coastal State shall be calculated based on the ratio of qualified Outer Continental Shelf revenues generated off the coastline of the Producing Coastal State to the qualified Outer Continental Shelf revenues generated off the coastlines of all Producing Coastal States for each fiscal year. Where there is more than one Producing Coastal State within 200 miles of a leased tract, the amount of each Producing Coastal State's allocation for such leased tract shall be inversely proportional to the distance between the nearest point on the coastline of such State and the geographic center of each leased tract or portion of the leased tract (to the nearest whole mile) that is within 200 miles of that coastline, as determined by the Secretary.

"(2) Thirty-five percent of each Producing Coastal State's allocable share as determined under paragraph (1) shall be paid directly to the coastal political subdivisions by the Secretary based on the following formula:

"(A) Twenty-five percent shall be allocated based on the ratio of

such coastal political subdivision's coastal population to the coastal population of all coastal political subdivisions in the Producing Coastal State.

"(B) Twenty-five percent shall be allocated based on the ratio of such coastal political subdivision's coastline miles to the coastline miles of a coastal political subdivision in the Producing Coastal State except that for those coastal political subdivisions in the State of Louisiana without a coastline, the coastline for purposes of this element of the formula shall be the average length of the coastline of the remaining coastal subdivisions in the state.

"(C) Fifty percent shall be allocated based on the relative distance of such coastal political subdivision from any leased tract used to calculate the Producing Coastal State's allocation using ratios that are inversely proportional to the distance between the point in the coastal political subdivision closest to the geographic center of each leased tract or portion, as determined by the Secretary, except that in the State of Alaska, the funds for this element of the formula shall be divided equally among the two closest coastal political subdivisions. For purposes of the calculations under this subparagraph, a leased tract or portion of a leased tract shall be excluded if the leased tract or portion is located in a geographic area where a moratorium on new leasing was in effect on January 1, 2002, unless the lease was issued prior to the establishment of the moratorium and was in production on January 1, 2002.

"(3) Any amount allocated to a Producing Coastal State or coastal political subdivision but not disbursed because of a failure to have an approved Coastal Impact Assistance Plan under this section shall be allocated equally by the Secretary among all other Producing Coastal States in a manner consistent with this subsection except that the Secretary shall hold in escrow such amount until the final resolution of any appeal regarding the disapproval of a plan

submitted under this section. The Secretary may waive the provisions of this paragraph and hold a Producing Coastal State's allocable share in escrow if the Secretary determines that such State is making a good faith effort to develop and submit, or update, a Coastal Impact Assistance Plan.

"(4) For purposes of this subsection, calculations of payments for fiscal years 2004 through 2006 shall be made using qualified Outer Continental Shelf revenues received in fiscal year 2003, and calculations of payments for fiscal years 2007 through 2009 shall be made using qualified Outer Continental Shelf revenues received in fiscal year 2006.

"(d) COASTAL IMPACT ASSISTANCE PLAN.—

"(1) The Governor of each Producing Coastal State shall prepare, and submit to the Secretary, a Coastal Impact Assistance Plan. The Governor shall solicit local input and shall provide for public participation in the development of the plan. The plan shall be submitted to the Secretary by July 1, 2004. Amounts received by Producing Coastal States and coastal political subdivisions may be used only for the purposes specified in the Producing Coastal State's Coastal Impact Assistance Plan.

"(2) The Secretary shall approve a plan under paragraph (1) prior to disbursement of amounts under this section. The Secretary shall approve the plan if the Secretary determines that the plan is consistent with the uses set forth in subsection (f) of this section and if the plan contains—

"(A) the name of the State agency that will have the authority to represent and act for the State in dealing with the Secretary for purposes of this section;

"(B) a program for the implementation of the plan which describes how the amounts provided under this section will be used;

"(C) a contact for each political subdivision and description of how coastal political subdivisions will use amounts provided under this section, including a certification by the Governor that such uses are consistent with the requirements of this section;

"(D) certification by the Governor that ample opportunity has been accorded for public participation in the development and revision of the plan; and

"(E) measures for taking into account other relevant Federal resources and programs.

"(3) The Secretary shall approve or disapprove each plan or amendment within 90 days of its submission.

"(4) Any amendment to the plan shall be prepared in accordance with the requirements of this subsection and shall be submitted to the Secretary for approval or disapproval.

"(e) AUTHORIZED USES.—Producing Coastal States and coastal political subdivisions shall use amounts provided under this section, including any such amounts deposited in a State or coastal political subdivision administered trust fund dedicated to uses consistent with this subsection, in compliance with Federal and State law and only for one or more of the following purposes—

"(1) projects and activities for the conservation, protection or restoration of coastal areas including wetlands;

"(2) mitigating damage to fish, wildlife or natural resources;

"(3) planning assistance and administrative costs of complying with the provisions of this section;

"(4) implementation of Federally approved marine, coastal, or comprehensive conservation management plans; and

"(5) mitigating impacts of Outer Continental Shelf activities through funding onshore infrastructure and public service needs.

(f) COMPLIANCE WITH AUTHORIZED USES.—If the Secretary determines that any expenditure made by a Producing Coastal State or coastal political subdivision is not consistent with the uses authorized in subsection (e) of this section, the Secretary shall not disburse any further amounts under this section to that Producing Coastal State or coastal political subdivision until the amounts used for the inconsistent expenditure have been repaid or obligated for authorized uses.

SEC. 112. NATIONAL ENERGY RESOURCE DATABASE.

(a) SHORT TITLE.—This section may be cited as the "National Energy Data Preservation Program Act of 2003".

(b) PROGRAM.—The Secretary of the Interior (in this section, referred to as "Secretary") shall carry out a National Energy Data Preservation Program in accordance with this section—

(1) to archive geologic, geophysical, and engineering data and samples related to energy resources including oil, gas, coal, and geothermal resources;

(2) to provide a national catalog of such archival material; and

(3) to provide technical assistance related to the archival material.

(c) ENERGY DATA ARCHIVE SYSTEM.—

(1) The Secretary shall establish, as a component of the Program, an energy data archive system, which shall provide for the storage, preservation, and archiving of subsurface, and in limited cases surface, geological, geophysical and engineering data and samples. The Secretary, in consultation with the Association of American State Geologists and interested members of the public, shall develop guidelines relating to the energy data archive system, including the types of data and samples to be preserved.

(2) The system shall be comprised of State agencies and agencies within the Department of the Interior that maintain geological and geophysical data and samples regarding energy resources and that are designated by the Secretary in accordance with this subsection. The Program shall provide for the storage of data and samples through data repositories operated by such agencies.

(3) The Secretary may not designate a State agency as a component of the energy data archive system unless it is the agency that acts as the geological survey in the State.

(4) The energy data archive system shall provide for the archiving of relevant subsurface data and samples obtained during energy exploration and production operations on Federal lands—

(A) in the most appropriate repository designated under

paragraph (2), with preference being given to archiving data in the State in which the data was collected; and

(B) consistent with all applicable law and requirements relating to confidentiality and proprietary data.

(5)(A) Subject to the availability of appropriations, the Secretary shall provide financial assistance to a State agency that is designated under paragraph (2) for providing facilities to archive energy material.

(B) The Secretary, in consultation with the Association of American State Geologists and interested members of the public, shall establish procedures for providing assistance under this paragraph. The procedures shall be designed to ensure that such assistance primarily supports the expansion of data and material archives and the collection and preservation of new data and samples.

(d) NATIONAL CATALOG.—

(1) As soon as practicable after the date of the enactment of this section, the Secretary shall develop and maintain, as a component of the Program, a national catalog that identifies—

(A) energy data and samples available in the energy data archive system established under subsection (c);

(B) the repository for particular material in such system; and

(C) the means of accessing the material.

(2) The Secretary shall make the national catalog accessible to the public on the site of the Survey on the World Wide Web, consistent with all applicable requirements related to confidentiality and proprietary data.

(3) The Secretary may carry out the requirements of this subsection by contract or agreement with appropriate persons.

(e) TECHNICAL ASSISTANCE.—

(1) Subject to the availability of appropriations, as a component of the Program, the Secretary shall provide financial assistance to any State agency designated under subsection (c)(2) to provide technical assistance to enhance

understanding, interpretation, and use of materials archived in the energy data archive system established under subsection (c).

(2) The Secretary, in consultation with the Association of American State Geologists and interested members of the public, shall develop a process, which shall involve the participation of representatives of relevant Federal and State agencies, for the approval of financial assistance to State agencies under this subsection.

(f) COSTS.—

(1) The Federal share of the cost of an activity carried out with assistance under subsections (c) or (e) shall be no more than 50 percent of the total cost of that activity.

(2) The Secretary—

(A) may accept private contributions of property and services for technical assistance and archive activities conducted under this section; and

(B) may apply the value of such contributions to the non-Federal share of the costs of such technical assistance and archive activities.

(g) REPORTS.—

(1) Within year after the date of the enactment of this Act, the Secretary shall submit an initial report to the Congress setting forth a plan for the implementation of the Program.

(2) Not later than 90 days after the end of the first fiscal year beginning after the submission of the report under paragraph (1) and after the end of each fiscal year thereafter, the Secretary shall submit a report to the Congress describing the status of the Program and evaluating progress achieved during the preceding fiscal year in developing and carrying out the Program.

(3) The Secretary shall consult with the Association of American State Geologists and interested members of the public in preparing the reports required by this subsection.

(h) DEFINITIONS.—As used in this section, the term:

(1) "Association of American State Geologists" means the organization of the chief executives of the State geological surveys.

(2) "Secretary" means the Secretary of the Interior acting through the Director of the United States Geological Survey.

(3) "Program" means the National Energy Data Preservation Program carried out under this section.

(4) "Survey" means the United States Geological Survey.

(i) MAINTENANCE OF STATE EFFORT.—It is the intent of the Congress that the States not use this section as an opportunity to reduce State resources applied to the activities that are the subject of the Program.

(j) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary $30,000,000 for each of fiscal years 2003 through 2007 for carrying out this section.

SEC. 113. OIL AND GAS LEASE ACREAGE LIMITATION.

Section 27(d)(1) of the Mineral Leasing Act (30 U.S.C. 184(d)(1)) is amended by inserting after "acreage held in special tar sands area" the following: "as well as acreage under any lease any portion of which has been committed to a federally approved unit or cooperative plan or communitization agreement, or for which royalty, including compensatory royalty or royalty-in-kind, was paid in the preceding calendar year,".

SEC. 114. ASSESSMENT OF DEPENDENCE OF STATE OF HAWAII ON OIL.

(a) ASSESSMENT.—The Secretary of Energy shall assess the economic implication of the dependence of the State of Hawaii on oil as the principal source of energy for the State, including—

(1) the short- and long-term prospects for crude oil supply disruption and price volatility and potential impacts on the economy of Hawaii;

(2) the economic relationship between oil-fired generation of electricity from residual fuel and refined petroleum products consumed for ground, marine, and air transportation;

(3) the technical and economic feasibility of increasing the contribution

of renewable energy resources for generation of electricity, on an island-by-island basis, including—

(A) siting and facility configuration;

(B) environmental, operational, and safety considerations;

(C) the availability of technology;

(D) effects on the utility system including reliability;

(E) infrastructure and transport requirements;

(F) community support; and

(G) other factors affection the economic impact of such an increase and any effect on the economic relationship described in paragraph (2);

(4) the technical and economic feasibility of using liquefied natural gas to displace residual fuel oil for electric generation, including neighbor island opportunities, and the effect of such displacement on the economic relationship described in paragraph (2) including—

(A) the availability of supply;

(B) siting and facility configuration for onshore and offshore liquefied natural gas receiving terminals;

(C) the factors described in subparagraphs (B) through (F) of paragraph (3); and

(D) other economic factors;

(5) the technical and economic feasibility of using renewable energy sources (including hydrogen) for ground, marine, and air transportation energy applications to displace the use of refined petroleum products, on an island-by-island basis, and the economic impact of such displacement on the relationship described in (2); and

(6) an island-by-island approach to—

(A) the development of hydrogen from renewable resources; and

(B) the application of hydrogen to the energy needs of Hawaii

(b) CONTRACTING AUTHORITY.—The Secretary of Energy may carry out the

assessment under subsection (a) directly or, in whole or in part, through one or more contracts with qualified public or private entities.

(c) REPORT.—Not later than 300 days after the date of enactment of this Act, the Secretary of Energy shall prepare, in consultation with agencies of the State of Hawaii and other stakeholders, as appropriate, and submit to Congress, as report detailing the findings, conclusions, and recommendations resulting from the assessment.

(d) APPROPRIATION.—The are authorized to be appropriated such sums as are necessary to carry out this section.

Subtitle B—Access to Federal Lands

SEC. 121. OFFICE OF FEDERAL ENERGY PERMIT COORDINATION.

(a) ESTABLISHMENT.— The President shall establish the Office of Federal Energy Permit Coordination (in this section, referred to as "Office") within the Executive Office of the President in the same manner and mission as the White House Energy Projects Task Force established by Executive Order 13212.

(b) STAFFING.—The Office shall be staffed by functional experts from relevant federal agencies and departments on a nonreimbursable basis to carry out the mission of this office.

(c) REPORTING.—The Office shall provide an annual report to Congress, detailing the activities put in place to coordinate and expedite Federal decisions on energy projects. The report shall list accomplishments in improving the federal decision making process and shall include any additional recommendations or systemic changes needed to establish a more effective and efficient federal permitting process.

SEC. 122. PILOT PROJECT TO IMPROVE FEDERAL PERMIT COORDINATION.

(a) CREATION OF PILOT PROJECT.—The Secretary of the Interior (in this section, referred to as "Secretary") shall establish a Federal Permit Streamlining Pilot Project. The Secretary shall enter into a Memorandum of Understanding with the Secretary of Agriculture, Administrator of the Environmental Protection Agency, and the Chief of the Corps of Engineers within 90 days after enactment of this Act. The Secretary may

also request that the Governors of Wyoming, Montana, Colorado, and New Mexico be signatories to the Memorandum of Understanding.

(b) DESIGNATION OF QUALIFIED STAFF.—Once the Pilot Project has been established by the Secretary, all Federal signatory parties shall assign an employee on a nonreimbursable basis to each of the field offices identified in section (c), who has expertise in the regulatory issues pertaining to their office, including, as applicable, particular expertise in Endangered Species Act section 7 consultations and the preparation of Biological Opinions, Clean Water Act 404 permits, Clean Air Act regulatory matters, planning under the National Forest Management Act, and the preparation of analyses under the National Environmental Policy Act. Assigned staff shall report to the Bureau of Land Management (BLM) Field Managers in the offices to which they are assigned, and shall be responsible for all issues related to the jurisdiction of their home office or agency, and participate as part of the team of employees working on proposed energy projects, planning, and environmental analyses.

(c) FIELD OFFICES.—The following BLM Field Offices shall serve as the Federal Permit Streamlining Pilot Project offices:

(1) Rawlins, Wyoming;

(2) Buffalo, Wyoming;

(3) Miles City, Montana;

(4) Farmington, New Mexico;

(5) Carlsbad, New Mexico; and

(6) Glenwood Springs, Colorado.

(d) REPORTS.—The Secretary shall submit a report to the Congress 3 years following the date of enactment of this section, outlining the results of the Pilot Project to date and including a recommendation to the President as to whether the Pilot Project should be implemented nationwide.

(e) ADDITIONAL PERSONNEL.—The Secretary shall assign to each of the BLM Field Offices listed in subsection (c) such additional personnel as is necessary to ensure the effective implementation of—

(1) the Pilot Project; and

(2) other programs administered by such offices, including inspection and enforcement related to energy development on federal lands, pursuant to the multiple use mandate of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq).

(f) SAVINGS PROVISION.—Nothing in this section shall affect the operation of any federal or state law or any delegation of authority made by a Secretary or head of an Agency whose employees are participating in the program provided for by this section.

(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as may be necessary to implement this section.

SEC. 123. FEDERAL ONSHORE LEASING PROGRAMS FOR OIL AND GAS.

(a) TIMELY ACTION ON LEASES AND PERMITS.—To ensure timely action on oil and gas leases and applications for permits to drill on lands otherwise available for leasing, the Secretary of the Interior shall—

(1) ensure expeditious compliance with the requirements of section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C));

(2) improve consultation and coordination with the States; and

(3) improve the collection, storage, and retrieval of information related to such leasing activities.

(b) IMPROVED ENFORCEMENT.—The Secretary shall improve inspection and enforcement of oil and gas activities, including enforcement of terms and conditions in permits to drill.

(c) AUTHORIZATION OF APPROPRIATIONS.—For each of the fiscal years 2004 through 2007, in addition to amounts otherwise authorized to be appropriated for the purpose of carrying out section 17 of the Mineral Leasing Act (30 U.S.C. 226), there are authorized to be appropriated to the Secretary of the Interior—

(1) $40,000,000 for the purpose of carrying out paragraphs (1) through (3) of subsection (a); and

(2) $20,000,000 for the purpose of carrying out subsection (b).

SEC. 124. ESTIMATES OF OIL AND GAS RESOURCES UNDERLYING ONSHORE FEDERAL LANDS.

Section 604 of the Energy Act of 2000 (42 U.S.C. 6217) is amended by striking "(a) IN GENERAL" and all thereafter and inserting—

"(a) IN GENERAL.—The Secretary of the Interior, in consultation with the Secretaries of Agriculture and Energy, shall conduct an inventory of all onshore Federal lands and take measures necessary to update and revise this inventory. The inventory shall identify for all federal lands—

"(1) the United States Geological Survey estimates of the oil and gas resources underlying these lands;

"(2) the extent and nature of any restrictions or impediments to the exploration, production and transportation of such resources, including—

"(A) existing land withdrawals and the underlying purpose for each withdrawal;

"(B) restrictions or impediments affecting timeliness of granting leases;

"(C) post-lease restrictions or impediments such as conditions of approval, applications for permits to drill, applicable environmental permits;

"(D) permits or restrictions associated with transporting the resources; and

"(E) identification of the authority for each restriction or impediment together with the impact on additional processing or review time and potential remedies; and

"(3) the estimates of oil and gas resources not available for exploration and production by virtue of the restrictions identified above.

"(b) REPORTS.— The Secretary shall provide a progress report to the Congress by October 1, 2006 and shall complete the inventory by October 1, 2010.

"(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be

appropriated such sums as may be necessary to implement this section.

SEC. 125. SPLIT-ESTATE FEDERAL OIL & GAS LEASING AND DEVELOPMENT PRACTICES.

(a) REVIEW.—In consultation with affected private surface owners, oil and gas industry and other interested parties, the Secretary of the Interior shall undertake a review of the current policies and practices with respect to management of federal subsurface oil and gas development activities and their effects on the privately owned surface. This review shall include —

(1) a comparison of the rights and responsibilities under existing mineral and land law for the owner of a federal mineral lease, the private surface owners and the Department;

(2) a comparison of the surface owner consent provisions in section 714 of the Surface Mining Control and Reclamation Act (30 U.S.C. 1304) concerning surface mining of federal coal deposits and the surface owner consent provisions for oil and gas development, including coalbed methane production; and

(3) recommendations for administrative or legislative action necessary to facilitate reasonable access for federal oil and gas activities while addressing surface owner concerns and minimizing impacts to private surface.

(b) REPORT.—The Secretary of the Interior shall report the results of such review to the Congress no later than 180 days after enactment of this section.

SEC. 126. COORDINATION OF FEDERAL AGENCIES TO ESTABLISH PRIORITY ENERGY TRANSMISSION RIGHTS-OF-WAY.

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

(1) The term "utility corridor" means any linear strip of land across Federal lands of approved width, but limited by technological, environmental, and topographical factors for use by a utility facility.

(2) The term "Federal authorization" means any authorization required under Federal law in order to site a utility facility, including but not limited to such permits, special use authorizations, certifications, opinions, or other approvals as may be required, issued by a Federal agency.

(3) The term "Federal lands" means all lands owned by the United States, except

(A) lands in the National Park System;

(B) lands held in trust for an Indian or Indian tribe; and

(C) lands on the Outer Continental Shelf.

(4) The term "Secretary" means the Secretary of Energy.

(5) The term "utility facility" means any privately, publicly, or cooperatively owned line, facility, or system (A) for the transportation of oil and natural gas, synthetic liquid or gaseous fuels, any refined product produced therefrom, or for transportation of products in support of production, or for storage and terminal facilities in connection therewith; or (B) for the generation, transmission and distribution of electric energy.

(b) UTILITY CORRIDORS.—

(1) No later than 24 months after the date of enactment of this section, the Secretary of the Interior, with respect to public lands, and the Secretary of Agriculture, with respect to National Forest System lands, in consultation with the Secretary, shall—

(A) designate utility corridors pursuant to section 503 of the Federal Land Policy and Management Act (43 U.S.C. 1763) in the eleven contiguous Western States, as identified in section 103(o) of such Act (43 U.S.C. 1702(o)); and

(B) incorporate the utility corridors designated under paragraph (A) into the relevant departmental and agency land use and resource management plans or their equivalent.

(2) The Secretary shall coordinate with the affected Federal agencies to jointly identify potential utility corridors on Federal lands in the other States and jointly develop a schedule for the designation, environmental review and incorporation of such utility corridors into relevant departmental and agency land use and resource management plans or their equivalent.

(c) FEDERAL PERMIT COORDINATION.—The Secretary, in consultation with the

Secretary of the Interior, the Secretary of Agriculture, and the Secretary of Defense, shall develop a memorandum of understanding ("MOU") for the purpose of coordinating all applicable Federal authorizations and environmental reviews related to a proposed or existing utility facility. To the maximum extent practicable under applicable law, the Secretary shall coordinate the process developed in the MOU with any Indian tribes, multi-State entities, and State agencies that are responsible for conducting any separate permitting and environmental reviews of the affected utility facility to ensure timely review and permit decisions. The MOU shall provide for—

(1) the coordination among affected Federal agencies to ensure that the necessary Federal authorizations are conducted concurrently with applicable State siting processes and are considered within a specific time frame to be identified in the MOU;

(2) an agreement among the affected Federal agencies to prepare a single environmental review document to be used as the basis for all Federal authorization decisions; and

(3) a process to expedite applications to construct or modify utility facilities within utility corridors.

Subtitle C—Alaska Natural Gas Pipeline

SEC. 131. SHORT TITLE.

This subtitle may be cited as the "Alaska Natural Gas Pipeline Act".

SEC. 132. DEFINITIONS.

In this subtitle, the following definitions apply:

(1) The term "Alaska natural gas" means natural gas derived from the area of the State of Alaska lying north of 64 degrees North latitude.

(2) The term "Alaska natural gas transportation project" means any natural gas pipeline system that carries Alaska natural gas to the border between Alaska and Canada (including related facilities subject to the jurisdiction of the Commission) that is authorized under either—

(A) the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719 et seq.); or

(B) section 133.

(3) The term "Alaska natural gas transportation system" means the Alaska natural gas transportation project authorized under the Alaska Natural Gas Transportation Act of 1976 and designated and described in section 2 of the President's decision.

(4) The term "Commission" means the Federal Energy Regulatory Commission.

(5) The term "President's decision" means the decision and report to Congress on the Alaska natural gas transportation system issued by the President on September 22, 1977, pursuant to section 7 of the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719(e) and approved by Public Law 95–158 (91 Stat.1268).

SEC. 133. ISSUANCE OF CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY.

(a) AUTHORITY OF THE COMMISSION.—Notwithstanding the provisions of the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719 et seq.), the Commission may, pursuant to section 7(c) of the Natural Gas Act (15 U.S.C. 717f(c)), consider and act on an application for the issuance of a certificate of public convenience and necessity authorizing the construction and operation of an Alaska natural gas transportation project other than the Alaska natural gas transportation system.

(b) ISSUANCE OF CERTIFICATE.—

(1) The Commission shall issue a certificate of public convenience and necessity authorizing the construction and operation of an Alaska natural gas transportation project under this section if the applicant has satisfied the requirements of section 7(e) of the Natural Gas Act (15 U.S.C. 717f(e)).

(2) In considering an application under this section, the Commission shall presume that—

(A) a public need exists to construct and operate the proposed Alaska natural gas transportation project; and

(B) sufficient downstream capacity will exist to transport the

Alaska natural gas moving through such project to markets in the contiguous United States.

(c) EXPEDITED APPROVAL PROCESS.—The Commission shall issue a final order granting or denying any application for a certificate of public convenience and necessity under section 7(c) of the Natural Gas Act (15 U.S.C. 717f(c)) and this section not more than 60 days after the issuance of the final environmental impact statement for that project pursuant to section 134.

(d) 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.

(e) OPEN SEASON.—Except where an expansion is ordered pursuant to section 135, initial or expansion capacity on any Alaska natural gas transportation project shall be allocated in accordance with procedures to be established by the Commission in regulations governing the conduct of open seasons for such project. Such procedures shall include the criteria for and timing of any open seasons; promote competition in the exploration, development, and production of Alaska natural gas; and, for any open season for capacity beyond the initial capacity, provide the opportunity for the transportation of natural gas other than from the Prudhoe Bay and Point Thompson units. The Commission shall issue such regulations not later than 120 days after the date of enactment of this Act.

(f) PROJECTS IN THE CONTIGUOUS UNITED STATES.—Applications for additional or expanded pipeline facilities that may be required to transport Alaska natural gas from Canada to markets in the contiguous United States may be made pursuant to the Natural Gas Act. To the extent such pipeline facilities include the expansion of any facility constructed pursuant to the Alaska Natural Gas Transportation Act of 1976, the

provisions of that Act shall continue to apply.

(g) STUDY OF IN-STATE NEEDS.—The holder of the certificate of public convenience and necessity issued, modified, or amended by the Commission for an Alaska natural gas transportation project shall demonstrate that it has conducted a study of Alaska in-State needs, including tie-in points along the Alaska natural gas transportation project for in-State access.

(h) ALASKA ROYALTY GAS.—The Commission, upon the request of the State of Alaska and after a hearing, may provide for reasonable access to the Alaska natural gas transportation project for the State of Alaska or its designee for the transportation of the State's royalty gas for local consumption needs within the State; except that the rates of existing shippers of subscribed capacity on such project shall not be increased as a result of such access.

(i) REGULATIONS.—The Commission may issue regulations to carry out the provisions of this section.

SEC. 134. ENVIRONMENTAL REVIEWS.

(a) COMPLIANCE WITH NEPA.—The issuance of a certificate of public convenience and necessity authorizing the construction and operation of any Alaska natural gas transportation project under section 133 shall be treated as a major Federal action significantly affecting the quality of the human environment within the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(c)).

(b) DESIGNATION OF LEAD AGENCY.—The Commission shall be the lead agency for purposes of complying with the National Environmental Policy Act of 1969, and

shall be responsible for preparing the statement required by section 102(2)(c) of that Act (42 U.S.C. 4332(2)(c)) with respect to an Alaska natural gas transportation project under section 133. The Commission shall prepare a single environmental statement under this section, which shall consolidate the environmental reviews of all Federal agencies considering any aspect of the project.

(c) OTHER AGENCIES.—All Federal agencies considering aspects of the

construction and operation of an Alaska natural gas transportation project under section 133 shall cooperate with the Commission, and shall comply with deadlines established by the Commission in the preparation of the statement under this section. The statement prepared under this section shall be used by all such agencies to satisfy their responsibilities under section 102(2)(c) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(c)) with respect to such project.

(d) EXPEDITED PROCESS.—The Commission shall issue a draft statement under this section not later than 12 months after the Commission determines the application to be complete and shall issue the final statement not later than 6 months after the Commission issues the draft statement, unless the Commission for good cause finds that additional time is needed.

SEC. 135. PIPELINE EXPANSION.

(a) AUTHORITY.—With respect to any Alaska natural gas transportation project, upon the request of one or more persons and after giving notice and an opportunity for a hearing, the Commission may order the expansion of such project if it determines that such expansion is required by the present and future public convenience and necessity.

(b) REQUIREMENTS.—Before ordering an expansion, the Commission shall—

(1) approve or establish rates for the expansion service that are designed to ensure the recovery, on an incremental or rolled-in basis, of the cost associated with the expansion (including a reasonable rate of return on investment);

(2) ensure that the rates as established do not require existing shippers on the Alaska natural gas transportation project to subsidize expansion shippers;

(3) find that the proposed shipper will comply with, and the proposed expansion and the expansion of service will be undertaken and implemented based on, terms and conditions consistent with the then-effective tariff of the Alaska natural gas transportation project;

(4) find that the proposed facilities will not adversely affect the financial or economic viability of the Alaska natural gas transportation project;

(5) find that the proposed facilities will not adversely affect the overall

operations of the Alaska natural gas transportation project;

(6) find that the proposed facilities will not diminish the contract rights of existing shippers to previously subscribed certificated capacity;

(7) ensure that all necessary environmental reviews have been completed; and

(8) find that adequate downstream facilities exist or are expected to exist to deliver incremental Alaska natural gas to market.

(c) REQUIREMENT FOR A FIRM TRANSPORTATION AGREEMENT.—Any order of the Commission issued pursuant to this section shall be null and void unless the person or persons requesting the order executes a firm transportation agreement with the Alaska natural gas transportation project within a reasonable period of time as specified in such order.

(d) LIMITATION.—Nothing in this section shall be construed to expand or otherwise affect any authorities of the Commission with respect to any natural gas pipeline located outside the State of Alaska.

(e) REGULATIONS.—The Commission may issue regulations to carry out the provisions of this section.

SEC. 136. FEDERAL COORDINATOR.

(a) ESTABLISHMENT.—There is established, as an independent office in the executive branch, the Office of the Federal Coordinator for Alaska Natural Gas Transportation Projects.

(b) FEDERAL COORDINATOR.—The Office shall be headed by a Federal Coordinator for Alaska Natural Gas Transportation Projects, who shall—

(1) be appointed by the President, by and with the advice and consent of the Senate;

(2) for a term equal to the period required to design, permit and construction the project plus one year; and

(3) be compensated at the rate prescribed for level III of the Executive Schedule (5 U.S.C. 5314).

(c) DUTIES.—The Federal Coordinator shall be responsible for—

(1) coordinating the expeditious discharge of all activities by Federal agencies with respect to an Alaska natural gas transportation project; and

(2) ensuring the compliance of Federal agencies with the provisions of this subtitle.

(d) REVIEWS AND ACTIONS OF OTHER FEDERAL AGENCIES.—

(1) All reviews conducted and actions taken by any Federal officer or agency relating to an Alaska natural gas transportation project authorized under this section shall be expedited, in a manner consistent with completion of the necessary reviews and approvals by the deadlines set forth in this subtitle.

(2) No Federal officer or agency shall have the authority to include terms and conditions that are permitted, but not required, by law on any certificate, right-of-way, permit, lease, or other authorization issued to an Alaska natural gas transportation project if the Federal Coordinator determines that the terms and conditions would prevent or impair in any significant respect the expeditious construction and operation, or an expansion, of the project.

(3) Unless required by law, no Federal officer or agency shall add to, amend, or abrogate any certificate, right-of-way, permit, lease, or other authorization issued to an Alaska natural gas transportation project if the Federal Coordinator determines that such action would prevent or impair in any significant respect the expeditious construction and operation of, or an expansion of, the project.

(4) The Federal Coordinator's authority shall not include the ability to override—

(A) the implementation or enforcement of regulations issued by the Commission pursuant to Section 133(e); or

(B) an order by the Commission to expand the project pursuant to Section 135.

(5) Nothing in this section shall give the Federal Coordinator the authority to impose additional terms, conditions or requirements beyond those imposed by the Commission or any agency with respect to construction and

operation, or an expansion of, the project.

(e) STATE COORDINATION.—The Federal Coordinator shall enter into a Joint Surveillance and Monitoring Agreement, approved by the President and the Governor of Alaska, with the State of Alaska similar to that in effect during construction of the Trans-Alaska Oil Pipeline to monitor the construction of the Alaska natural gas transportation project. The Federal Government shall have primary surveillance and monitoring responsibility where the Alaska natural gas transportation project crosses Federal lands and private lands, and the State government shall have primary surveillance and monitoring responsibility where the Alaska natural gas transportation project crosses State lands.

(f) TRANSFER OF FEDERAL INSPECTOR FUNCTIONS AND AUTHORITY.—Upon appointment of the Federal Coordinator by the President, all of the functions and authority of the Office of Federal Inspector of Construction for the Alaska Natural Gas Transportation System vested in the Secretary of Energy pursuant to section 3012(b) of Public Law 102–486 (15 U.S.C. 719e(b)), including all functions and authority described and enumerated in the Reorganization Plan No. 1 of 1979 (44 Fed. Reg. 33,663), Executive Order No. 12142 of June 21, 1979 (44 Fed. Reg. 36,927), and section 5 of the President's decision, shall be transferred to the Federal Coordinator.

SEC. 137. JUDICIAL REVIEW.

(a) EXCLUSIVE JURISDICTION.—Except for review by the Supreme Court of the United States on writ of certiorari, the United States Court of Appeals for the District of Columbia Circuit shall have original and exclusive jurisdiction to determine—

(1) the validity of any final order or action (including a failure to act) of any Federal agency or officer under this subtitle;

(2) the constitutionality of any provision of this subtitle, or any decision made or action taken under this subtitle; or

(3) the adequacy of any environmental impact statement prepared under the National Environmental Policy Act of 1969 with respect to any action under this subtitle.

(b) DEADLINE FOR FILING CLAIM.—Claims arising under this subtitle may be

brought not later than 60 days after the date of the decision or action giving rise to the claim.

(c) EXPEDITED CONSIDERATION.—The United States Court of Appeals for the District of Columbia Circuit shall set any action brought under subsection (a) for expedited consideration, taking into account the national interest of enhancing national energy security by providing access to the significant gas reserves in Alaska needed to meet the anticipated demand for natural gas.

(d) AMENDMENT TO ANGTA.—Section 10(c) of the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719h) is amended by inserting after paragraph (1) the following:

"(2) The United States Court of Appeals for the District of Columbia Circuit shall set any action brought under this section for expedited consideration, taking into account the national interest described in section 2.".

SEC. 138. STATE JURISDICTION OVER IN-STATE DELIVERY OF NATURAL GAS.

(a) LOCAL DISTRIBUTION.—Any facility receiving natural gas from the Alaska natural gas transportation project for delivery to consumers within the State of Alaska shall be deemed to be a local distribution facility within the meaning of section 1(b) of the Natural Gas Act (15 U.S.C. 717(b)), and therefore not subject to the jurisdiction of the Commission.

(b) ADDITIONAL PIPELINES.—Nothing in this subtitle, except as provided in section 133(d), shall preclude or affect a future gas pipeline that may be constructed to deliver natural gas to Fairbanks, Anchorage, Matanuska-Susitna Valley, or the Kenai peninsula or Valdez or any other site in the State of Alaska for consumption within or distribution outside the State of Alaska.

(c) RATE COORDINATION.—Pursuant to the Natural Gas Act, the Commission shall establish rates for the transportation of natural gas on the Alaska natural gas transportation project. In exercising such authority, the Commission, pursuant to section 17(b) of the Natural Gas Act (15 U.S.C. 717p(b)), shall confer with the State of Alaska regarding rates (including rate settlements) applicable to natural gas transported on and delivered from the Alaska natural gas transportation project for use within the

State of Alaska.

SEC. 139. STUDY OF ALTERNATIVE MEANS OF CONSTRUCTION.

(a) REQUIREMENT OF STUDY.—If no application for the issuance of a certificate or amended certificate of public convenience and necessity authorizing the construction and operation of an Alaska natural gas transportation project has been filed with the Commission not later than 18 months after the date of enactment of this Act, the Secretary of Energy shall conduct a study of alternative approaches to the construction and operation of the project.

(b) SCOPE OF STUDY.—The study shall consider the feasibility of establishing a Government corporation to construct an Alaska natural gas transportation project, and alternative means of providing Federal financing and ownership (including alternative combinations of Government and private corporate ownership) of the project.

(c) CONSULTATION.—In conducting the study, the Secretary of Energy shall consult with the Secretary of the Treasury and the Secretary of the Army (acting through the Commanding General of the Corps of Engineers).

(d) REPORT.—If the Secretary of Energy is required to conduct a study under subsection (a), the Secretary shall submit a report containing the results of the study, the Secretary's recommendations, and any proposals for legislation to implement the Secretary's recommendations to Congress.

SEC. 140. CLARIFICATION OF ANGTA STATUS AND AUTHORITIES.

(a) SAVINGS CLAUSE.—Nothing in this subtitle affects any decision, certificate, permit, right-of-way, lease, or other authorization issued under section 9 of the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719(g)) or any Presidential findings or waivers issued in accordance with that Act.

(b) CLARIFICATION OF AUTHORITY TO AMEND TERMS AND CONDITIONS TO MEET CURRENT PROJECT REQUIREMENTS.—Any Federal officer or agency responsible for granting or issuing any certificate, permit, right-of-way, lease, or other authorization under section 9 of the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719(g)) may add to, amend, or abrogate any term or condition included in such certificate, permit, right-of-way, lease, or other authorization to meet current project

requirements (including the physical design, facilities, and tariff specifications), so long as such action does not compel a change in the basic nature and general route of the Alaska natural gas transportation system as designated and described in section 2 of the President's decision, or would otherwise prevent or impair in any significant respect the expeditious construction and initial operation of such transportation system.

(c) UPDATED ENVIRONMENTAL REVIEWS.—The Secretary of Energy shall require the sponsor of the Alaska natural gas transportation system to submit such updated environmental data, reports, permits, and impact analyses as the Secretary determines are necessary to develop detailed terms, conditions, and compliance plans required by section 5 of the President's decision.

SEC. 141. SENSE OF CONGRESS.

It is the sense of Congress that an Alaska natural gas transportation project will provide significant economic benefits to the United States and Canada. In order to maximize those benefits, Congress urges the sponsors of the pipeline project to make every effort to use steel that is manufactured or produced in North America and to negotiate a project labor agreement to expedite construction of the pipeline.

SEC. 142. PARTICIPATION OF SMALL BUSINESS CONCERNS.

(a) SENSE OF CONGRESS.—It is the sense of Congress that an Alaska natural gas transportation project will provide significant economic benefits to the United States and Canada. In order to maximize those benefits, Congress urges the sponsors of the pipeline project to maximize the participation of small business concerns in contracts and subcontracts awarded in carrying out the project.

(b) STUDY.—

(1) The Comptroller General shall conduct a study on the extent to which small business concerns participate in the construction of oil and gas pipelines in the United States.

(2) Not later that 1 year after the date of enactment of this Act, the Comptroller General shall transmit to Congress a report containing the results of the study.

(3) The Comptroller General shall update the study at least once every 5

years and transmit to Congress a report containing the results of the update.

(4) After the date of completion of the construction of an Alaska natural gas transportation project, this subsection shall no longer apply.

(c) SMALL BUSINESS CONCERN DEFINED.—In this section, the term "small business concern" has the meaning given such term in section 3(a) of the Small Business Act (15 U.S.C. 632(a)).

SEC. 143. ALASKA PIPELINE CONSTRUCTION TRAINING PROGRAM.

(a) ESTABLISHMENT OF PROGRAM.—The Secretary of Labor (in this section referred to as the "Secretary") may make grants to the Alaska Department of Labor and Workforce Development to—

(1) develop a plan to train, through the workforce investment system established in the State of Alaska under the Workforce Investment Act of 1998 (112 Stat. 936 et seq.), adult and dislocated workers, including Alaska Natives, in urban and rural Alaska in the skills required to construct and operate an Alaska gas pipeline system; and

(2) implement the plan developed pursuant to paragraph (1).

(b) REQUIREMENTS FOR PLANNING GRANTS.—The Secretary may make a grant under subsection (a)(1) only if—

(1) the Governor of Alaska certifies in writing to the Secretary that there is a reasonable expectation that construction of an Alaska gas pipeline will commence within 3 years after the date of such certification; and

(2) the Secretary of the Interior concurs in writing to the Secretary with the certification made under paragraph (1).

(c) REQUIREMENTS FOR IMPLEMENTATION GRANTS.—The Secretary may make a grant under subsection (a)(2) only if—

(1) the Secretary has approved a plan developed pursuant to subsection (a)(1);

(2) the Governor of Alaska requests the grant funds and certifies in writing to the Secretary that there is a reasonable expectation that the construction of an Alaska gas pipeline system will commence within 2 years

after the date of such certification; and

(3) the Secretary of the Interior concurs in writing to the Secretary with the certification made under paragraph (2) after considering—

(A) the status of necessary State and Federal permits;

(B) the availability of financing for the pipeline project; and

(C) other relevant factors and circumstances.

(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary such sums as may be necessary, but not to exceed $20,000,000, to carry out this section.

SEC. 144. LOAN GUARANTEES.

(a) AUTHORITY.—

(1) The Secretary may enter agreements with 1 or more holders of a certificate of public convenience and necessity issued under section 133(b) of this Act or section 9 of the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719g) to issue Federal guarantee instruments with respect to loans and other debt obligations for a qualified infrastructure project.

(2) Subject to the requirements of this section, the Secretary may also enter into agreements with 1 or more owners of the Canadian portion of a qualified infrastructure project to issue Federal guarantee instruments with respect to loans and other debt obligations for a qualified infrastructure project as though such owner were a holder described in paragraph (1).

(3) The authority of the Secretary to issue Federal guarantee instruments under this section for a qualified infrastructure project shall expire on the date that is 2 years after the date on which the final certificate of public convenience and necessity (including any Canadian certificates of public convenience and necessity) is issued for the project. A final certificate shall be considered to have been issued when all certificates of public convenience and necessity have been issued that are required for the initial transportation of commercially economic quantities of natural gas from Alaska to the continental United States.

(b) CONDITIONS.—

(1) The Secretary may issue a Federal guarantee instrument for a qualified infrastructure project only after a certificate of public convenience and necessity under section 133(b) of this Act or an amended certificate under section 9 of the Alaska Natural Gas Transportation Act of 1976 (15 U.S.C. 719g) has been issued for the project.

(2) The Secretary may issue a Federal guarantee instrument under this section for a qualified infrastructure project only if the loan or other debt obligation guaranteed by the instrument has been issued by an eligible lender.

(3) The Secretary shall not require as a condition of issuing a Federal guarantee instrument under this section any contractual commitment or other form of credit support of the sponsors (other than equity contribution commitments and completion guarantees), or any throughput or other guarantee from prospective shippers greater than such guarantees as shall be required by the project owners.

(c) LIMITATIONS ON AMOUNTS.—

(1) The amount of loans and other debt obligations guaranteed under this section for a qualified infrastructure project shall not exceed 80 percent of the total capital costs of the project, including interest during construction.

(2) The principal amount of loans and other debt obligations guaranteed under this section shall not exceed, in the aggregate, $18,000,000,000, which amount shall be indexed for United States dollar inflation from the date of enactment of this Act, as measured by the Consumer Price Index.

(d) LOAN TERMS AND FEES.—

(1) The Secretary may issue Federal guarantee instruments under this section that take into account repayment profiles and grace periods justified by project cash flows and project-specific considerations. The term of any loan guaranteed under this section shall not exceed 30 years.

(2) An eligible lender may assess and collect from the borrower such other fees and costs associated with the application and origination of the loan or other debt obligation as are reasonable and customary for a project finance

transaction in the oil and gas sector.

(e) REGULATIONS.—The Secretary may issue regulations to carry out this section.

(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as may be necessary to cover the cost of loan guarantees, as defined by section 502(5) of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a(5)). Such sums shall remain available until expended.

(g) DEFINITIONS.—In this section, the following definitions apply:

(1) The term "Consumer Price Index" means the Consumer Price Index for all-urban consumers, United States city average, as published by the Bureau of Labor Statistics, or if such index shall cease to be published, any successor index or reasonable substitute thereof.

(2) The term "eligible lender" means any non-Federal qualified institutional buyer (as defined by section 230.144A(a) of title 17, Code of Federal Regulations (or any successor regulation), known as Rule 144A(a) of the Securities and Exchange Commission and issued under the Securities Act of 1933), including—

(A) a qualified retirement plan (as defined in section 4974(c) of the Internal Revenue Code of 1986 (26 U.S.C. 4974(c)) that is a qualified institutional buyer; and

(B) a governmental plan (as defined in section 414(d) of the Internal Revenue Code of 1986 (26 U.S.C. 414(d)) that is a qualified institutional buyer.

(3) The term "Federal guarantee instrument" means any guarantee or other pledge by the Secretary to pledge the full faith and credit of the United States to pay all of the principal and interest on any loan or other debt obligation entered into by a holder of a certificate of public convenience and necessity.

(4) The term "qualified infrastructure project" means an Alaskan natural gas transportation project consisting of the design, engineering, finance,

construction, and completion of pipelines and related transportation and production systems (including gas treatment plants), and appurtenances thereto, that are used to transport natural gas from the Alaska North Slope to the continental United States.

(5) The term "Secretary" means the Secretary of Energy.

SEC. 145. SENSE OF CONGRESS ON NATURAL GAS DEMAND.

It is the sense of Congress that:

(1) North American demand for natural gas will increase dramatically over the course of the next several decades.

(2) Both the Alaska Natural Gas Pipeline and the McKenzie Delta Natural Gas project in Canada will be necessary to help meet the increased demand for natural gas in North America.

(3) Federal and state officials should work together with officials in Canada to ensure both projects can move forward in a mutually beneficial fashion.

(4) Federal and state officials should acknowledge that the smaller scope, fewer permitting requirements and lower cost of the McKenzie Delta project means it will most likely be completed before the Alaska Natural Gas Pipeline.

(5) Lower 48 and Canadian natural gas production alone will not be able to meet all domestic demand in the coming decades.

(6) As a result, natural gas delivered from Alaska's North Slope will not displace or reduce the commercial viability of Canadian natural gas produced from the McKenzie Delta nor production from the Lower 48.

TITLE II—COAL

Subtitle A—Clean Coal Power Initiative

SEC. 201. AUTHORIZATION OF APPROPRIATIONS.

CLEAN COAL POWER INITIATIVE.— There is authorized to be appropriated to the Secretary of Energy (in this subtitle, referred to as "Secretary") to carry out the

activities authorized by this subtitle $200,000,000 for each of the fiscal years 2003 through 2011, to remain available until expended.

SEC. 202. PROJECT CRITERIA.

(a) IN GENERAL.—The Secretary shall not provide funding under this subtitle 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 GASIFICATION.—In allocating the funds made available under section 201, the Secretary shall ensure that at least 80 percent of the funds are used for coal-based gasification technologies or coal-based projects that include gasification combined cycle, gasification fuel cells, gasification co-production, or hybrid gasification/combustion. 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 to—

(1) remove 99 percent of sulfur dioxide;

(2) emit no more than .05 lbs of NOx per million BTU;

(3) achieve substantial reductions in mercury emissions; and

(4) achieve a thermal efficiency of —

(A) 60 percent for coal of more than 9,000 Btu;

(B) 59 percent for coal of 7,000 to 9,000 Btu; and

(C) 57 percent for coal of less than 7,000 Btu.

(c) TECHNICAL CRITERIA FOR OTHER PROJECTS.— For projects not described in subsection (b), 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 to—

(1) remove 97 percent of sulfur dioxide;

(2) emit no more than .08 lbs of NO_x per million BTU;

(3) achieve substantial reductions in mercury emissions; and

(4) achieve a thermal efficiency of—

(A) 45 percent for coal of more than 9,000 Btu;

(B) 44 percent for coal of 7,000 to 9,000 Btu; and

(C) 42 percent for coal of less than 7,000 Btu.

(d) EXISTING UNITS.—In the case of projects at existing units, in lieu of the thermal efficiency requirements set forth in paragraphs (b)(4) and (c)(4), the projects shall be designed to achieve an overall thermal design efficiency improvement compared to the efficiency of the unit as operated, of not less than—

(A) 7 percent for coal of more than 9,000 Btu;

(B) 6 percent for coal of 7,000 to 9,000 Btu; or

(C) 4 percent for coal of less than 7,000 Btu.

(e) PERMITTED USES.—In allocating funds made available in this section, the Secretary may allocate funds to projects that include, as part of the project, the separation and capture of carbon dioxide.

(f) CONSULTATION.—Before setting the technical milestones under subsections (b) and (c), the Secretary shall consult with the Administrator of the Environmental Protection Agency and interested entities, including coal producers, industries using coal, organizations to promote coal or advanced coal technologies, environmental organizations, and organizations representing workers.

(g) FINANCIAL CRITERIA.—The Secretary shall not provide a funding award under this title 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.

(h) FINANCIAL ASSISTANCE.—The Secretary shall provide financial assistance to projects that meet the requirements of this section and are likely to—

(1) achieve overall cost reductions in the utilization of coal to generate useful forms of energy;

(2) improve the competitiveness of coal among various forms of energy; and

(3) demonstrate methods and equipment that are applicable to 25 percent of the electricity generating facilities that use coal as the primary feedstock as of the date of the enactment of this Act.

(i) FEDERAL SHARE.—The Federal share of the cost of a coal or related technology project funded by the Secretary shall not exceed 50 percent.

(j) APPLICABILITY.—No technology, or level of emission reduction, shall be treated as adequately demonstrated for purposes of section 111 of the Clean Air Act, achievable for purposes of section 169 of that Act, or achievable in practice for purposes of section 171 of that Act solely by reason of the use of such technology, or the achievement of such emission reduction, by one or more facilities receiving assistance under this title.

SEC. 203. REPORTS.

(a) TEN-YEAR PLAN.—By September 30, 2004, the Secretary shall transmit to Congress a report, with respect to section 202(a), a 10-year plan containing—

(1) a detailed assessment of whether the aggregate funding levels provided under section 201 are 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 miles stones for each coal and related technology that will be pursued; and

(4) 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.

(b) TECHNICAL MILESTONES.—Not later than 1 year after the date of the enactment of this Act, and once every 2 years thereafter through 2011, the Secretary, in consultation with other appropriate Federal agencies, shall transmit to the Congress, a report describing—

(1) the technical milestones set forth in section 212 and how those milestones ensure progress toward meeting the requirements of subsections (b)and (c)of section 212; and

(2) the status of projects funded under this title.

SEC. 204. CLEAN COAL CENTERS OF EXCELLENCE.

As part of the program authorized in section 211, the Secretary shall award competitive, merit-based grants to universities for the establishment of Centers of Excellence for Energy Systems of the Future. The Secretary shall provide grants to universities that can show the greatest potential for advancing new clean coal technologies.

Subtitle B—Federal Coal Leases

SEC. 211. REPEAL OF THE 160-ACRE LIMITATION FOR COAL LEASES.

Section 3 of the Mineral Leasing Act (30 U.S.C. 203) is amended by striking all the text in the first sentence after "upon" and inserting the following:

"a finding by the Secretary that it (1) would be in the interest of the United States, (2) would not displace a competitive interest in the lands, and (3) would not include lands or deposits that can be developed as part of another potential or existing operation, secure modifications of the original coal lease by including additional coal lands or coal deposits contiguous or cornering to those embraced in such lease, but in no event shall the total area added by such modifications to an existing coal lease exceed 320 acres, or add acreage larger than that in the original lease.".

SEC. 212. 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 forty years if the Secretary determines that the longer period will ensure the maximum economic recovery of a coal deposit, or the longer period is in the interest of the orderly, efficient, or economic development of a coal resource.".

SEC. 213. PAYMENT OF ADVANCE ROYALTIES UNDER COAL LEASES.

Section 7(b) of the Mineral Leasing Act of 1920 (30 U.S.C. 207(b)) is amended by striking all after "Secretary)." through to "a lease." and inserting:

"The aggregate number of years during the period of any lease for which advance royalties may be accepted in lieu of the condition of continued operation shall not exceed twenty. The amount of any production royalty paid for any year shall be reduced (but not below 0) 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.".

SEC. 214. 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,".

SEC. 215. APPLICATION OF AMENDMENTS.

The amendments made by this Act apply with respect to any coal lease issued on or after the date of enactment of this Act, and, with respect to any coal lease issued before the date of enactment of this Act, upon the date of readjustment of the lease as provided for by section 7(a) of the Mineral Leasing Act, or upon request by the lessee, prior to such date.

Subtitle C—Powder River Basin Shared Mineral Estates

SEC. 221. RESOLUTION OF FEDERAL RESOURCE DEVELOPMENT CONFLICTS IN THE POWDER RIVER BASIN.

The Secretary of the Interior shall—

(1) undertake a review of existing authorities to resolve conflicts

between the development of Federal coal and the development of Federal and non-Federal coalbed methane in the Powder River Basin in Wyoming and Montana; and

(2) not later than 6 months after the of enactment of this Act, report to the Congress on alternatives to resolve these conflicts and identification of a preferred alternative with specific legislative language, if any, required to implement the preferred alternative.

TITLE III—INDIAN ENERGY

SEC. 301. SHORT TITLE.

This title may be cited as the "Indian Tribal Energy Development and Self-Determination Act of 2003".

SEC. 302. OFFICE OF INDIAN ENERGY POLICY AND PROGRAMS.

(a) IN GENERAL.—Title II of the Department of Energy Organization Act (42 U.S.C. 7131 et seq.) is amended by adding at the end the following:

"OFFICE OF INDIAN ENERGY POLICY AND PROGRAMS.

"SEC. 217.(a) ESTABLISHMENT.—There is established within the Department an Office of Indian Energy Policy and Programs (referred to in this section as the 'Office'). The Office shall be headed by a Director, who shall be appointed by the Secretary and compensated at a rate equal to that of level IV of the Executive Schedule under section 5315 of title 5, United States Code.

"(b) DUTIES OF DIRECTOR.—The Director shall in accordance with Federal policies promoting Indian self-determination and the purposes of this Act, provide, direct, foster, coordinate, and implement energy planning, education, management, conservation, and delivery programs of the Department that—

"(1) promote Indian tribal energy development, efficiency, and use;

"(2) reduce or stabilize energy costs;

"(3) enhance and strengthen Indian tribal energy and economic infrastructure relating to natural resource development and electrification; and

"(4) electrify Indian tribal land and the homes of tribal members.

"COMPREHENSIVE INDIAN ENERGY ACTIVITIES.

"SEC. 218. (a) INDIAN ENERGY EDUCATION PLANNING AND MANAGEMENT ASSISTANCE.—

"(1) The Director shall establish programs within the Office of Indian Energy Policy and Programs to assist Indian tribes in meeting energy education, research and development, planning, and management needs.

"(2) In carrying out this section, the Director may provide grants, on a competitive basis, to an Indian tribe or tribal consortium for use in carrying out—

"(A) energy, energy efficiency, and energy conservation programs;

"(B) studies and other activities supporting tribal acquisition of energy supplies, services, and facilities;

"(C) planning, construction, development, operation, maintenance, and improvement of tribal electrical generation, transmission, and distribution facilities located on Indian land; and

"(D) development, construction, and interconnection of electric power transmission facilities located on Indian land with other electric transmission facilities.

"(3)(A) The Director may develop, in consultation with Indian tribes, a formula for providing grants under this section.

"(B) In providing a grant under this subsection, the Director shall give priority to an application received from an Indian tribe with inadequate electric service (as determined by the Director).

"(4) The Secretary may promulgate such regulations as the Secretary determines are necessary to carry out this subsection.

"(5) There is authorized to be appropriated to carry out this section $20,000,000 for each of fiscal years 2004 through 2011.

"(b) LOAN GUARANTEE PROGRAM.—

"(1) Subject to paragraph (3), the Secretary may provide loan guarantees (as defined in section 502 of the Federal Credit Reform Act of 1990 (2 U.S.C.

661a)) for not more than 90 percent of the unpaid principal and interest due on any loan made to any Indian tribe for energy development.

"(2) A loan guaranteed under this subsection shall be made by—

"(A) a financial institution subject to examination by the Secretary; or

"(B) an Indian tribe, from funds of the Indian tribe.

"(3) The aggregate outstanding amount guaranteed by the Secretary at any time under this subsection shall not exceed $2,000,000,000.

"(4) The Secretary may promulgate such regulations as the Secretary determines are necessary to carry out this subsection.

"(5) There are authorized to be appropriated such sums as are necessary to carry out this subsection, to remain available until expended.

"(6) Not later than 1 year from the date of enactment of this section, the Secretary shall report to the Congress on the financing requirements of Indian tribes for energy development on Indian land.

"(c) INDIAN ENERGY PREFERENCE.—

"(1) In purchasing electricity or any other energy product or byproduct, a Federal agency or department may give preference to an energy and resource production enterprise, partnership, consortium, corporation, or other type of business organization the majority of the interest in which is owned and controlled by 1 or more Indian tribes.

"(2) In carrying out this subsection, a Federal agency or department shall not—

"(A) pay more than the prevailing market price for an energy product or byproduct; and

"(B) obtain less than prevailing market terms and conditions.".

(b) CONFORMING AMENDMENTS.—

(1) The table of contents of the Department of Energy Organization Act (42 U.S.C. prec. 7101) is amended—

(A) in the item relating to section 209, by striking "Section" and

inserting "Sec."; and

(B) by striking the items relating to sections 213 through 216 and inserting the following:

"Sec. 213. Establishment of policy for National Nuclear Security Administration.

"Sec. 214. Establishment of security, counterintelligence, and intelligence policies.

"Sec. 215. Office of Counterintelligence.

"Sec. 216. Office of Intelligence.

"Sec. 217. Office of Indian Energy Policy and Programs.

"Sec. 218. Comprehensive Indian Energy Activities.".

(2) Section 5315 of title 5, United States Code, is amended by inserting "Director, Office of Indian Energy Policy and Programs, Department of Energy." after "Inspector General, Department of Energy.".

SEC. 303. INDIAN ENERGY.

Title XXVI of the Energy Policy Act of 1992 (25 U.S.C. 3501 et seq.) is amended to read as follows:

"TITLE XXVI—INDIAN ENERGY

"SEC. 2601. DEFINITIONS.

"For purposes of this title:

"(1) The term 'Director' means the Director of the Office of Indian Energy Policy and Programs.

"(2) The term 'Indian land' means—

"(A) any land located within the boundaries of an Indian reservation, pueblo, or rancheria;

"(B) any land not located within the boundaries of an Indian reservation, pueblo, or rancheria, the title to which is held—

"(i) in trust by the United States for the benefit of an Indian tribe;

"(ii) by an Indian tribe, subject to restriction by the United States against alienation; or

"(iii) by a dependent Indian community; and

"(C) land conveyed to a Native Corporation under the Alaska

Native Claims Settlement Act (43 U.S.C. 1601 et seq.).

"(3) The term 'Indian reservation' includes—

"(A) an Indian reservation in existence in any State or States as of the date of enactment of this paragraph;

"(B) a public domain Indian allotment;

"(C) a former reservation in the State of Oklahoma;

"(D) a parcel of land owned by a Native Corporation under the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.); and

"(E) a dependent Indian community located within the borders of the United States, regardless of whether the community is located—

"(i) on original or acquired territory of the community; or

"(ii) within or outside the boundaries of any particular State.

"(4) The term 'Indian tribe' has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).

"(5) The term 'Native Corporation' has the meaning given the term in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602).

"(6) The term 'organization' means a partnership, joint venture, limited liability company, or other unincorporated association or entity that is established to develop Indian energy resources.

"(7) The term 'Program' means the Indian energy resource development program established under section 2602(a).

"(8) The term 'Secretary' means the Secretary of the Interior.

"(9) The term 'tribal consortium' means an organization that consists of 2 or more entities, at least 1 of which is an Indian tribe.

"(10) The term 'tribal land' means any land or interests in land owned by any Indian tribe, band, nation, pueblo, community, rancheria, colony or other group, title to which is held in trust by the United States or which is subject to a restriction against alienation imposed by the United States.

"(11) The term 'vertical integration of energy resources' means any project or activity that promotes the location and operation of a facility (including any pipeline, gathering system, transportation system or facility, or electric transmission facility), on or near Indian land to process, refine, generate electricity from, or otherwise develop energy resources on, Indian land.

"SEC. 2602. INDIAN TRIBAL ENERGY RESOURCE DEVELOPMENT.

"(a) IN GENERAL.—To assist Indian tribes in the development of energy resources and further the goal of Indian self-determination, the Secretary shall establish and implement an Indian energy resource development program to assist Indian tribes and tribal consortia in achieving the purposes of this title.

"(b) GRANTS AND LOANS.—In carrying out the Program, the Secretary shall—

"(1) provide development grants to Indian tribes and tribal consortia for use in developing or obtaining the managerial and technical capacity needed to develop energy resources on Indian land;

"(2) provide grants to Indian tribes and tribal consortia for use in carrying out projects to promote the vertical integration of energy resources, and to process, use, or develop those energy resources, on Indian land; and

"(3) provide low-interest loans to Indian tribes and tribal consortia for use in the promotion of energy resource development and vertical integration or energy resources on Indian land.

"(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section such sums as are necessary for each of fiscal years 2004 through 2014.

"SEC. 2603. INDIAN TRIBAL ENERGY RESOURCE REGULATION.

"(a) GRANTS.—The Secretary may provide to Indian tribes and tribal consortia, on an annual basis, grants for use in developing, administering, implementing, and enforcing tribal laws (including regulations) governing the development and management of energy resources on Indian land.

"(b) USE OF FUNDS.—Funds from a grant provided under this section may be used by an Indian tribe or tribal consortium for—

"(1) the development of a tribal energy resource inventory or tribal energy resource on Indian land;

"(2) the development of a feasibility study or other report necessary to the development of energy resources on Indian land;

"(3) the development and enforcement of tribal laws and the development of technical infrastructure to protect the environment under applicable law; or

"(4) the training of employees that—

"(A) are engaged in the development of energy resources on Indian land; or

"(B) are responsible for protecting the environment.

"(c) OTHER ASSISTANCE.—To the maximum extent practicable, the Secretary and the Secretary of Energy shall make available to Indian tribes and tribal consortia scientific and technical data for use in the development and management of energy resources on Indian land.

"SEC. 2604. LEASES, BUSINESS AGREEMENTS, AND RIGHTS-OF-WAY INVOLVING ENERGY DEVELOPMENT OR TRANSMISSION.

"(a) LEASES AND AGREEMENTS.—Subject to the provisions of this section—

"(1) an Indian tribe may, at its discretion, enter into a lease or business agreement for the purpose of energy development, including a lease or business agreement for—

"(A) exploration for, extraction of, processing of, or other development of energy resources on tribal land; and

"(B) construction or operation of an electric generation, transmission, or distribution facility located on tribal land; or a facility to process or refine energy resources developed on tribal land; and

"(2) a lease or business agreement described in paragraph (1) shall not require the approval of the Secretary under section 2103 of the Revised Statutes (25 U.S.C. 81) or any other provision of law, if—

"(A) the lease or business agreement is executed in accordance

with a tribal energy resource agreement approved by the Secretary under subsection (e);

"(B) the term of the lease or business agreement does not exceed—

"(i) 30 years; or

"(ii) in the case of a lease for the production of oil and gas resources, 10 years and as long thereafter as oil or gas is produced in paying quantities; and

"(C) the Indian tribe has entered into a tribal energy resource agreement with the Secretary, as described in subsection (e), relating to the development of energy resources on tribal land (including an annual trust asset evaluation of the activities of the Indian tribe conducted in accordance with the agreement).

"(b) RIGHTS-OF-WAY FOR PIPELINES OR ELECTRIC TRANSMISSION OR DISTRIBUTION LINES.—An Indian tribe may grant a right-of-way over tribal land for a pipeline or an electric transmission or distribution line without specific approval by the Secretary if—

"(1) the right-of-way is executed in accordance with a tribal energy resource agreement approved by the Secretary under subsection (e);

"(2) the term of the right-of-way does not exceed 30 years;

"(3) the pipeline or electric transmission or distribution line serves—

"(A) an electric generation, transmission, or distribution facility located on tribal land; or

"(B) a facility located on tribal land that processes or refines energy resources developed on tribal land; and

"(4) the Indian tribe has entered into a tribal energy resource agreement with the Secretary, as described in subsection (e), relating to the development of energy resources on tribal land (including an annual trust asset evaluation of the activities of the Indian tribe conducted in accordance with the agreement.

"(c) RENEWALS.—A lease or business agreement entered into or a right-of-way

granted by an Indian tribe under this section may be renewed at the discretion of the Indian tribe in accordance with this section.

"(d) VALIDITY.—No lease, business agreement, or right-of-way under this section shall be valid unless the lease, business agreement, or right-of-way is authorized in accordance with tribal energy resource agreements approved by the Secretary under subsection (e).

"(e) TRIBAL ENERGY RESOURCE AGREEMENTS.—

"(1) On promulgation of regulations under paragraph (9), an Indian tribe may submit to the Secretary for approval a tribal energy resource agreement governing leases, business agreements, and rights-of-way under this section.

"(2)(A) Not later than 180 days after the date on which the Secretary receives a tribal energy resource agreement submitted by an Indian tribe under paragraph (1) (or such later date as may be agreed to by the Secretary and the Indian tribe), the Secretary shall approve or disapprove the tribal energy resource agreement.

"(B) The Secretary shall approve a tribal energy resource agreement submitted under paragraph (1) if—

"(i) the Secretary determines that the Indian tribe has demonstrated that the Indian tribe has sufficient capacity to regulate the development of energy resources of the Indian tribe; and

"(ii) the tribal energy resource agreement includes provisions that, with respect to a lease, business agreement, or right-of-way under this section—

"(I) ensure the acquisition of necessary information from the applicant for the lease, business agreement, or right-of-way;

"(II) address the term of the lease or business agreement or the term of conveyance of the right-of-way;

"(III) address amendments and renewals;

"(IV) address consideration for the lease, business agreement, or right-of-way;

"(V) address technical or other relevant requirements;

"(VI) establish requirements for environmental review in accordance with subparagraph (C);

"(VII) ensure compliance with all applicable environmental laws;

"(VIII) identify final approval authority;

"(IX) provide for public notification of final approvals;

"(X) establish a process for consultation with any affected States concerning potential off-reservation impacts associated with the lease, business agreement, or right-of-way; and

"(XI) describe the remedies for breach of the lease, agreement, or right-of-way.

"(C) Tribal energy resource agreements submitted under paragraph (1) shall establish, and include provisions to ensure compliance with, an environmental review process that, with respect to a lease, business agreement, or right-of-way under this section, provides for—

"(i) the identification and evaluation of all significant environmental impacts (as compared with a no-action alternative), including effects on cultural resources;

"(ii) the identification of proposed mitigation;

"(iii) a process for ensuring that the public is informed of and has an opportunity to comment on any proposed lease, business agreement, or right-of-way before tribal approval of the lease, business agreement, or right-of-way (or any amendment to or renewal of the lease, business agreement, or right-of-way); and

"(iv) sufficient administrative support and technical capability to carry out the environmental review process.

"(D) A tribal energy resource agreement negotiated between the Secretary and an Indian tribe in accordance with this subsection shall include—

"(i) provisions requiring the Secretary to conduct an annual trust asset evaluation to monitor the performance of the activities of the Indian tribe associated with the development of energy resources on tribal land by the Indian tribe; and

"(ii) in the case of a finding by the Secretary of imminent jeopardy to a physical trust asset, provisions authorizing the Secretary to reassume responsibility for activities associated with the development of energy resources on tribal land.

"(3) The Secretary shall provide notice and opportunity for public comment on tribal energy resource agreements submitted under paragraph (1).

"(4) If the Secretary disapproves a tribal energy resource agreement submitted by an Indian tribe under paragraph (1), the Secretary shall—

"(A) notify the Indian tribe in writing of the basis for the disapproval;

"(B) identify what changes or other actions are required to address the concerns of the Secretary; and

"(C) provide the Indian tribe with an opportunity to revise and resubmit the tribal energy resource agreement.

"(5) If an Indian tribe executes a lease or business agreement or grants a right-of-way in accordance with a tribal energy resource agreement approved under this subsection, the Indian tribe shall, in accordance with the process and requirements set forth in the Secretary's regulations adopted pursuant to subsection (e)(9), provide to the Secretary—

"(A) a copy of the lease, business agreement, or right-of-way document (including all amendments to and renewals of the document); and

"(B) in the case of a tribal energy resource agreement or a lease, business agreement, or right-of-way that permits payment to be made directly to the Indian tribe, documentation of those payments sufficient to enable the Secretary to discharge the trust responsibility of the United

States as appropriate under applicable law.

"(6) The Secretary shall continue to have a trust obligation to ensure that the rights of an Indian tribe are protected in the event of a violation of the terms of any lease, business agreement or right-of-way by any other party to the lease, business agreement, or right-of-way.

"(7)(A) The United States shall not be liable for any loss or injury sustained by any party (including an Indian tribe or any member of an Indian tribe) to a lease, business agreement, or right-of-way executed in accordance with tribal energy resource agreements approved under this subsection.

"(B) On approval of a tribal energy resource agreement of an Indian tribe under paragraph (1), the Indian tribe shall be stopped from asserting a claim against the United States on the ground that Secretary should not have approved the Tribal energy resource agreement.

"(8)(A) In this paragraph, the term 'interested party' means any person or entity the interests of which have sustained or will sustain a significant adverse impact as a result of the failure of an Indian tribe to comply with a tribal energy resource agreement of the Indian tribe approved by the Secretary under paragraph (2).

"(B) After exhaustion of tribal remedies, and in accordance with the process and requirements set forth in regulations adopted by the Secretary pursuant to subsection (e)(9), an interested party may submit to the Secretary a petition to review compliance of an Indian tribe with a tribal energy resource agreement of the Indian tribe approved under this subsection.

"(C) If the Secretary determines that an Indian tribe is not in compliance with a tribal energy resource agreement approved under this subsection, the Secretary shall take such action as is necessary to compel compliance, including—

"(i) suspending a lease, business agreement, or right-of-way under this section until an Indian tribe is in compliance with the approved tribal energy resource agreement; and

"(ii) rescinding approval of the tribal energy resource agreement and reassuming the responsibility for approval of any future leases, business agreements, or rights-of-way associated with an energy pipeline or distribution line described in subsections (a) and (b).

"(D) If the Secretary seeks to compel compliance of an Indian tribe with an approved tribal energy resource agreement under subparagraph (C)(ii), the Secretary shall—

"(i) make a written determination that describes the manner in which the tribal energy resource agreement has been violated;

"(ii) provide the Indian tribe with a written notice of the violation together with the written determination; and

"(iii) before taking any action described in subparagraph (C)(ii) or seeking any other remedy, provide the Indian tribe with a hearing and a reasonable opportunity to attain compliance with the tribal energy resource agreement.

"(E)(i) An Indian tribe described in subparagraph (D) shall retain all rights to appeal as provided in regulations promulgated by the Secretary.

"(ii) The decision of the Secretary with respect to an appeal described in clause (i), after any agency appeal provided for by regulation, shall constitute a final agency action.

"(9) Not later than 180 days after the date of enactment of the Indian Tribal Energy Development and Self-Determination Act of 2003, the Secretary shall promulgate regulations that implement the provisions of this subsection, including—

"(A) criteria to be used in determining the capacity of an Indian tribe described in paragraph (2)(B)(i), including the experience of the Indian tribe in managing natural resources and financial and administrative resources available for use by the Indian tribe in implementing the approved tribal energy resource agreement of the Indian tribe; and

"(B) a process and requirements in accordance with which an Indian tribe may—

"(i) voluntarily rescind an approved tribal energy resource agreement approved by the Secretary under this subsection; and

"(ii) return to the Secretary the responsibility to approve any future leases, business agreements, and rights-of-way described in this subsection.

"(f) NO EFFECT ON OTHER LAW.—Nothing in this section affects the application of—

"(1) any Federal environmental law;

"(2) the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201 et seq.); or

"(3) except as otherwise provided in this title, the Indian Mineral Development Act of 1982 (25 U.S.C. 2101 et seq.).

"SEC. 2605. FEDERAL POWER MARKETING ADMINISTRATIONS.

"(a) DEFINITIONS.—In this section:

"(1) The term 'Administrator' means the Administrator of the Bonneville Power Administration and the Administrator of the Western Area Power Administration.

"(2) The term 'power marketing administration' means—

"(A) the Bonneville Power Administration;

"(B) the Western Area Power Administration; and

"(C) any other power administration the power allocation of which is used by or for the benefit of an Indian tribe located in the service area of the administration.

"(b) ENCOURAGEMENT OF INDIAN TRIBAL ENERGY DEVELOPMENT.—Each Administrator shall encourage Indian tribal energy development by taking such actions as are appropriate, including administration of programs of the Bonneville Power Administration and the Western Area Power Administration, in accordance with this

section.

"(c) ACTION BY THE ADMINISTRATOR.—In carrying out this section, and in accordance with existing law—

"(1) each Administrator shall consider the unique relationship that exists between the United States and Indian tribes.

"(2) power allocations from the Western Area Power Administration to Indian tribes may be used to meet firming and reserve needs of Indian-owned energy projects on Indian land;

"(3) the Administrator of the Western Area Power Administration may purchase power from Indian tribes to meet the firming and reserve requirements of the Western Area Power Administration; and

"(4) each Administrator shall not pay more than the prevailing market price for an energy product nor obtain less than prevailing market terms and conditions.

"(d) ASSISTANCE FOR TRANSMISSION SYSTEM USE.—

"(1) An Administrator may provide technical assistance to Indian tribes seeking to use the high-voltage transmission system for delivery of electric power.

"(2) The costs of technical assistance provided under paragraph (1) shall be funded by the Secretary of Energy using nonreimbursable funds appropriated for that purpose, or by the applicable Indian tribes.

"(e) POWER ALLOCATION STUDY.—Not later than 2 years after the date of enactment of the Indian Tribal Energy Development and Self-Determination Act of 2003, the Secretary of Energy shall submit to the Congress a report that—

"(1) describes the use by Indian tribes of Federal power allocations of the Western Area Power Administration (or power sold by the Southwestern Power Administration) and the Bonneville Power Administration to or for the benefit of Indian tribes in service areas of those administrations; and

"(2) identifies—

"(A) the quantity of power allocated to Indian tribes by the

Western Area Power Administration;

"(B) the quantity of power sold to Indian tribes by other power marketing administrations; and

"(C) barriers that impede tribal access to and use of Federal power, including an assessment of opportunities to remove those barriers and improve the ability of power marketing administrations to facilitate the use of Federal power by Indian tribes.

"(f) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $750,000, which shall remain available until expended and shall not be reimbursable.

"SEC. 2606. INDIAN MINERAL DEVELOPMENT REVIEW.

"(a) IN GENERAL.—The Secretary shall conduct a review of all activities being conducted under the Indian Mineral Development Act of 1982 (25 U.S.C. 2101 et seq.) as of that date.

"(b) REPORT.—Not later than 1 year after the date of enactment of the Indian Tribal Energy Development and Self-Determination Act of 2003, the Secretary shall submit to the Congress a report that includes—

"(1) the results of the review;

"(2) recommendations to ensure that Indian tribes have the opportunity to develop Indian energy resources; and

"(3) an analysis of the barriers to the development of energy resources on Indian land (including legal, fiscal, market, and other barriers), along with recommendations for the removal of those barriers.

"SEC. 2607. WIND AND HYDROPOWER FEASIBILITY STUDY.

"(a) STUDY.—The Secretary, in coordination with the Secretary of the Army and the Secretary of the Interior, shall conduct a study of the cost and feasibility of developing a demonstration project that would use wind energy generated by Indian tribes and hydropower generated by the Army Corps of Engineers on the Missouri River to supply firming power to the Western Area Power Administration.

"(b) SCOPE OF STUDY.—The study shall—

"(1) determine the feasibility of the blending of wind energy and hydropower generated from the Missouri River dams operated by the Army Corps of Engineers;

"(2) review historical purchase requirements and projected purchase requirements for firming and the patterns of availability and use of firming energy;

"(3) assess the wind energy resource potential on tribal land and projected cost savings through a blend of wind and hydropower over a 30-year period;

"(4) determine seasonal capacity needs and associated transmission upgrades for integration of tribal wind generation; and

"(5) include an independent tribal engineer as a study team member.

"(c) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretary and Secretary of the Army shall submit to Congress a report that describes the results of the study, including—

"(1) an analysis of the potential energy cost or benefits to the customers of the Western Area Power Administration through the blend of wind and hydropower;

"(2) an evaluation of whether a combined wind and hydropower system can reduce reservoir fluctuation, enhance efficient and reliable energy production, and provide Missouri River management flexibility;

"(3) recommendations for a demonstration project that could be carried out by the Western Area Power Administration in partnership with an Indian tribal government or tribal consortium to demonstrate the feasibility and potential of using wind energy produced on Indian land to supply firming energy to the Western Area Power Administration or any other Federal power marketing agency; and

"(4) an identification of—

"(A) the economic and environmental costs or benefits to be realized through such a Federal-tribal partnership; and

"(B) the manner in which such a partnership could contribute to the energy security of the United States.

"(d) FUNDING.—

"(1) There is authorized to be appropriated to carry out this section $500,000, to remain available until expended.

"(2) Costs incurred by the Secretary in carrying out this section shall be nonreimbursable.".

SEC. 304. FOUR CORNERS TRANSMISSION LINE PROJECT.

The Dine Power Authority, an enterprise of the Navajo Nation, shall be eligible to receive grants and other assistance as authorized by section 302 of this title and section 2602 of the Energy Policy Act of 1992, as amended by this title, for activities associated with the development of a transmission line from the Four Corners Area to southern Nevada, including related power generation opportunities.

SEC. 305. ENERGY EFFICIENCY IN FEDERALLY ASSISTED HOUSING.

(a) IN GENERAL.—The Secretary of Housing and Urban Development shall promote energy conservation in housing that is located on Indian land and assisted with Federal resources through—

(1) the use of energy-efficient technologies and innovations (including the procurement of energy-efficient refrigerators and other appliances);

(2) the promotion of shared savings contracts; and

(3) the use and implementation of such other similar technologies and innovations as the Secretary of Housing and Urban Development considers to be appropriate.

(b) AMENDMENT.—Section 202(2) of the Native American Housing and Self-Determination Act of 1996 (25 U.S.C. 4132(2)) is amended by inserting 'improvement to achieve greater energy efficiency,' after 'planning,'.

SEC. 306. CONSULTATION WITH INDIAN TRIBES.

In carrying out this Act and the amendments made by this Act, the Secretary of Energy and the Secretary shall, as appropriate and to the maximum extent practicable, involve and consult with Indian tribes in a manner that is consistent with the Federal

trust and the government-to-government relationships between Indian tribes and the United States.

TITLE IV— NUCLEAR MATTERS

Subtitle A–Price-Anderson Act Amendments

SEC. 401. SHORT TITLE.

This subtitle may be cited as the "Price-Anderson Amendments Act of 2003".

SEC. 402. EXTENSION OF INDEMNIFICATION AUTHORITY.

(a) INDEMNIFICATION OF NUCLEAR REGULATORY COMMISSION LICENSEES.—Section 170c. of the Atomic Energy Act of 1954 (42 U.S.C. 2210(c)) is amended—

(1) in the subsection heading, by striking "LICENSES" and inserting "LICENSEES";

(2) by striking "licenses issued between August 30, 1954, and December 31, 2003" and inserting "licenses issued after August 30, 1954"; and

(3) by striking "With respect to any production or utilization facility for which a construction permit is issued between August 30, 1954, and December 31, 2003, the requirements of this subsection shall apply to any license issued for such facility subsequent to December 31, 2003."

(b) INDEMNIFICATION OF DEPARTMENT OF ENERGY CONTRACTORS.—Section 170d.(1)(A) of the Atomic Energy Act of 1954 (42 U.S.C. 2210(d)(1)(A)) is amended by striking ", until December 31, 2004,".

(c) INDEMNIFICATION OF NONPROFIT EDUCATIONAL INSTITUTIONS.—Section 170k.of the Atomic Energy Act of 1954 (42 U.S.C. 2210(k)) is amended—

(1) by striking "licenses issued between August 30,1954, and August 1, 2002" and replacing it with "licenses issued after August 30, 1954"; and

(2) by striking "With respect to any production or utilization facility for which a construction permit is issued between August 30, 1954, and August 1, 2002, the requirements of this subsection shall apply to any license issued for such facility subsequent to August 1, 2002."

SEC. 403. MAXIMUM ASSESSMENT.

Section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) is amended—

(1) in the second proviso of the third sentence of subsection b.(l)—

(A) by striking "$63,000,000" and inserting "$94,000,000"; and

(B) by striking "$10,000,000 in any 1 year" and inserting "$15,000,000 in any 1 year (subject to adjustment for inflation under subsection t.)"; and

(2) in subsection t.(1)—

(A) by inserting "total and annual" after "amount of the maximum";

(B) by striking "the date of the enactment of the Price-Anderson Amendments Act of 1988" and inserting "July 1, 2003"; and

(C) by striking "such date of enactment" and inserting "July 1, 2003".

SEC. 404. DEPARTMENT OF ENERGY LIABILITY LIMIT.

(a) INDEMNIFICATION OF DEPARTMENT OF ENERGY CONTRACTORS.—Section 170d. of the Atomic Energy Act of 1954 (42 U.S.C. 2210(d)) is amended by striking paragraph (2) and inserting the following:

"(2) In an agreement of indemnification entered into under paragraph (1), the Secretary—

"(A) may require the contractor to provide and maintain financial protection of such a type and in such amounts as the Secretary shall determine to be appropriate to cover public liability arising out of or in connection with the contractual activity; and

"(B) shall indemnify the persons indemnified against such liability above the amount of the financial protection required, in the amount of $10,000,000,000 (subject to adjustment for inflation under subsection t.), in the aggregate, for all persons indemnified in connection with the contract and for each nuclear incident, including such legal costs of the contractor as are approved by the Secretary.".

(b) CONTRACT AMENDMENTS.—Section 170d. of the Atomic Energy Act of 1954 (42 U.S.C. 2210(d)) is further amended by striking paragraph (3) and inserting the following—

"(3) All agreements of indemnification under which the Department of Energy (or its predecessor agencies) may be required to indemnify any person under this section shall be deemed to be amended, on the date of enactment of the Price-Anderson Amendments Act of 2003, to reflect the amount of indemnity for public liability and any applicable financial protection required of the contractor under this subsection.".

(c) LIABILITY LIMIT.—Section 170e.(1)(B) of the Atomic Energy Act of 1954 (42 U.S.C. 2210(e)(1)(B)) is amended by:

(1) striking "the maximum amount of financial protection required under subsection b. or"; and

(2) striking "paragraph (3) of subsection d., whichever amount is more" and inserting "paragraph (2) of subsection d.".

SEC. 405. INCIDENTS OUTSIDE THE UNITED STATES.

(a) AMOUNT OF INDEMNIFICATION.—Section 170d.(5) of the Atomic Energy Act of 1954 (42 U.S.C. 2210(d)(5)) is amended by striking "$100,000,000" and inserting "$500,000,000".

(b) LIABILITY LIMIT.—Section 170e.(4) of the Atomic Energy Act of 1954 (42 U.S.C. 2210(e)(4)) is amended by striking "$100,000,000" and inserting "$500,000,000".

SEC. 406. REPORTS.

Section 170p. of the Atomic Energy Act of 1954 (42 U.S.C. 2210(p)) is amended by striking "August 1, 1998" and inserting "August 1, 2013".

SEC. 407. INFLATION ADJUSTMENT.

Section 170t. of the Atomic Energy Act of 1954 (42 U.S.C. 2210(t)) is amended—

(1) by redesignating paragraph (2) as paragraph (3); and

(2) by adding after paragraph (1) the following:

"(2) The Secretary shall adjust the amount of indemnification provided under an agreement of indemnification under subsection d. not less than once during each 5-year period following July 1, 2003, in accordance with the aggregate percentage change in the Consumer Price Index since—

"(A) that date, in the case of the first adjustment under this paragraph; or

"(B) the previous adjustment under this paragraph.".

SEC. 408. TREATMENT OF MODULAR REACTORS.

Section 170 b. of the Atomic Energy Act of 1954 (42 U.S.C. 2210(b)) is amended by adding at the end the following:

"(5)(A) For purposes of this section only, the Commission shall consider a combination of facilities described in subparagraph (B) to be a single facility having a rated capacity of 100,000 electrical kilowatts or more.

"(B) A combination of facilities referred to in subparagraph (A) is 2 or more facilities located at a single site, each of which has a rated capacity of 100,000 electrical kilowatts or more but not more than 300,000 electrical kilowatts, with a combined rated capacity of not more than 1,300,000 electrical kilowatts.".

SEC. 409. APPLICABILITY.

The amendments made by sections 403, 404, and 405 do not apply to a nuclear incident that occurs before the date of the enactment of this Act.

SEC. 410. CIVIL PENALTIES.

(a) REPEAL OF AUTOMATIC REMISSION.—Section 234Ab.(2) of the Atomic Energy Act of 1954 (42 U.S.C. 2282a(b)(2)) is amended by striking the last sentence.

(b) LIMITATION FOR NOT-FOR-PROFIT INSTITUTIONS.—Subsection d. of section 234A of the Atomic Energy Act of 1954 (42 U.S.C. 2282a(d)) is amended to read as follows:

"d.(1) Notwithstanding subsection a., in the case of any not-for-profit contractor, subcontractor, or supplier, the total amount of civil penalties paid under subsection a. may not exceed the total amount of fees paid within any one-year period (as determined by the Secretary) under the contract under which the violation occurs.

"(2) For purposes of this section, the term "not-for-profit" means that no part of

the net earnings of the contractor, subcontractor, or supplier inures to the benefit of any natural person or for-profit artificial person.".

(c) EFFECTIVE DATE.—The amendments made by this section shall not apply to any violation of the Atomic Energy Act of 1954 occurring under a contract entered into before the date of enactment of this section.

Subtitle B—Deployment of New Nuclear Plants

SEC. 421. SHORT TITLE.

This subtitle may be cited as the "Nuclear Energy Finance Act of 2003."

SEC. 422. DEFINITIONS.

For purposes of this subtitle:

(1) The term "advanced reactor design" means a nuclear reactor that enhances safety, efficiency, proliferation resistance, or waste reduction compared to commercial nuclear reactors in use in the United States on the date of enactment of this Act.

(2) The term "eligible project costs" means all costs incurred by a project developer that are reasonably related to the development and construction of a project under this subtitle, including costs resulting from regulatory or licensing delays.

(3) The term "financial assistance" means a loan guarantee, purchase agreement, or any combination of the foregoing.

(4) The term "loan guarantee" means any guarantee or other pledge by the Secretary to pay all or part of the principal and interest on a loan or other debt obligation issued by a project developer and funded by a lender.

(5) The term "project" means any commercial nuclear power facility for the production of electricity that uses one or more advanced reactor designs.

(6) The term "project developer" means an individual, corporation, partnership, joint venture, trust, or other entity that is primarily liable for payment of a project's eligible costs.

(7) The term "purchase agreement" means a contract to purchase the electric energy produced by a project under this subtitle.

(8) The term "Secretary" means the Secretary of Energy.

SEC. 423. RESPONSIBILITIES OF THE SECRETARY.

(a) FINANCIAL ASSISTANCE.— Subject to the requirements of the Federal Credit Reform Act of 1990 (2 U.S.C. 661 et seq.), the Secretary may, subject to appropriations, make available to project developers for eligible project costs such financial assistance as the Secretary determines is necessary to supplement private-sector financing for projects if he determines that such projects are needed to contribute to energy security, fuel or technology diversity, or clean air attainment goals. The Secretary shall prescribe such terms and conditions for financial assistance as the Secretary deems necessary or appropriate to protect the financial interests of the United States.

(b) REQUIREMENTS.—Approval criteria for financial assistance shall include—

(1) the creditworthiness of the project;

(2) the extent to which financial assistance would encourage public-private partnerships and attract private-sector investment;

(3) the likelihood that financial assistance would hasten commencement of the project; and,

(4) any other criteria the Secretary deems necessary or appropriate.

(c) CONFIDENTIALITY.—The Secretary shall protect the confidentiality of any information that is certified by a project developer to be commercially sensitive.

(d) FULL FAITH AND CREDIT.—All financial assistance provided by the Secretary under this subtitle shall be general obligations of the United States backed by its full faith and credit.

SEC. 424. LIMITATIONS

(a) FINANCIAL ASSISTANCE.—The total financial assistance per project provided by this subtitle shall not exceed fifty percent of eligible project costs.

(b) GENERATION.—The total electrical generation capacity of all projects provided by this subtitle shall not exceed 8,400 megawatts.

SEC. 425. REGULATIONS

Not later than 12 months from the date of enactment of this Act, the Secretary shall issue regulations to implement this subtitle.

Subtitle C—Advanced Reactor Hydrogen

Co-Generation Project

SEC. 431. PROJECT ESTABLISHMENT.

The Secretary is directed to establish an Advanced Reactor Hydrogen Co-Generation Project.

SEC. 432. PROJECT DEFINITION.

The project shall conduct the research, development, design, construction, and operation of a hydrogen production co-generation testbed that, relative to the current commercial reactors, enhances safety features, reduces waste production, enhances thermal efficiencies, increases proliferation resistance, and has the potential for improved economics and physical security in reactor siting. This testbed shall be constructed so as to enable research and development on advanced reactors of the type selected and on alternative approaches for reactor-based production of hydrogen.

SEC. 433. PROJECT MANAGEMENT.

(a) MANAGEMENT.— The project shall be managed within the Department by the Office of Nuclear Energy Science and Technology.

(b) LEAD LABORATORY.—The lead laboratory for the program, providing the site for the reactor construction, shall be the Idaho National Engineering and Environmental Laboratory ("INEEL").

(c) STEERING COMMITTEE.—The Secretary shall establish a national steering committee with membership from the national laboratories, universities, and industry to provide advice to the Secretary and the Director of the Office of Nuclear Energy, Science and Technology on technical and program management aspects of the project.

(d) COLLABORATION.—Project activities shall be conducted at INEEL, other national laboratories, universities, domestic industry, and international partners.

SEC. 434. PROJECT REQUIREMENTS.

(a) RESEARCH AND DEVELOPMENT.—The project shall include planning, research and development, design, and construction of an advanced, next-generation, nuclear energy system suitable for enabling further research and development on advanced reactor technologies and alternative approaches for reactor-based generation of hydrogen.

(1) The project shall utilize, where appropriate, extensive reactor test capabilities resident at INEEL.

(2) The project shall be designed to explore technical, environmental, and economic feasibility of alternative approaches for reactor-based hydrogen production.

(3) The industrial lead for the project must be a United States-based company.

(b) INTERNATIONAL COLLABORATION.—The Secretary shall seek international cooperation, participation, and financial contribution in this program.

(1) The project may contract for assistance from specialists or facilities from member countries of the Generation IV International Forum, the Russian Federation, or other international partners where such specialists or facilities provide access to cost-effective and relevant skills or test capabilities.

(2) International activities shall be coordinated with the Generation IV International Forum.

(3) The Secretary may combine this project with the Generation IV Nuclear Energy Systems Program.

(c) DEMONSTRATION.—The overall project, which may involve demonstration of selected project objectives in a partner nation, must demonstrate both electricity and hydrogen production and may provide flexibility, where technically and economically feasible in the design and construction, to enable tests of alternative reactor core and cooling configurations.

(d) PARTNERSHIPS.—The Secretary shall establish cost-shared partnerships with domestic industry or international participants for the research, development, design, construction and operation of the demonstration facility, and preference in determining the final project structure shall be given to an overall project which retains United States leadership while maximizing cost sharing opportunities and minimizing federal funding responsibilities.

(e) TARGET DATE.—The Secretary shall select technologies and develop the project to provide initial testing of either hydrogen production or electricity generation

by 2010 or provide a report to Congress why this date is not feasible.

(f) WAIVER OF CONSTRUCTION TIMELINES.—The Secretary is authorized to conduct the Advanced Reactor Hydrogen Co-Generation Project without the constraints of DOE Order 413.3 as deemed necessary to meet the specified operational date.

(g) COMPETITION.—The Secretary may fund up to two teams for up to one year to develop detailed proposals for competitive evaluation and selection of a single proposal and concept for further progress. The Secretary shall define the format of the competitive evaluation of proposals.

(h) USE OF FACILITIES.—Research facilities in industry, national laboratories, or universities either within the United States or with cooperating international partners may be used to develop the enabling technologies for the demonstration facility. Utilization of domestic university-based testbeds shall be encouraged to provide educational opportunities for student development.

(i) ROLE OF NUCLEAR REGULATORY COMMISSION.—The Secretary shall seek active participation of the Nuclear Regulatory Commission throughout the project to develop risk-based criteria for any future commercial development of a similar reactor architecture.

(j) REPORT.—A comprehensive project plan shall be developed no later than April 30, 2004. The project plan shall be updated annually with each annual budget submission.

SEC. 435. AUTHORIZATION OF APPROPRIATIONS.

(a) RESEARCH, DEVELOPMENT AND DESIGN PROGRAMS.— The following sums are authorized to be appropriated to the Secretary for all activities under this subtitle except for reactor construction:

(1) For fiscal year 2004, $35,000,000;

(2) For each of fiscal years 2005-2008, $150,000,000; and

(3) For fiscal years beyond 2008, such funds as are needed are authorized to be appropriated.

(b) REACTOR CONSTRUCTION.—The following sum is authorized to be appropriated to the Secretary for all project-related construction activities, to be

available until expended, $500,000,000.

Subtitle D—Miscellaneous Matters

SEC. 441. URANIUM SALES AND TRANSFERS.

Section 3112 of the USEC Privatization Act (42 U.S.C. 2297h-10) is amended by striking subsections (d) and (e) and inserting the following:

"(d)(1)(A) The aggregate annual deliveries of uranium in any form (including natural uranium concentrates, natural uranium hexafluoride, enriched uranium, and depleted uranium) sold or transferred for commercial nuclear power end uses by the United States Government shall not exceed 3,000,000 pounds U_3O_8 equivalent per year through calendar year 2009. Such aggregate annual deliveries shall not exceed 5,000,000 pounds U_3O_8 equivalent per year in calendar years 2010 and 2011. Such aggregate annual deliveries shall not exceed 7,000,000 pounds U_3O_8 equivalent in calendar year 2012. Such aggregate annual deliveries shall not exceed 10,000,000 pounds U_3O_8 equivalent per year in calendar year 2013 and each year thereafter. Any sales or transfers by the United States Government to commercial end users shall be limited to long-term contracts of no less than 3 years duration.

"(B) The recovery and extraction of the uranium component from contaminated uranium bearing materials from United States Government sites by commercial entities shall be the preferred method of making uranium available under this subsection. The uranium component contained in such contaminated materials shall be counted against the annual maximum deliveries set forth in this section, provided that uranium is sold to end users.

"(C) Sales or transfers of uranium by the United States Government for the following purposes are exempt from the provisions of this paragraph—

"(i) sales or transfers provided for under existing law for use by the Tennessee Valley Authority in relation to the Department of Energy's high-enriched uranium or tritium programs;

"(ii) sales or transfers to the Department of Energy research reactor sales program;

"(iii) the transfer of up to 3,293 metric tons of uranium to the United

States Enrichment Corporation to replace uranium that the Secretary transferred, prior to privatization of the United States Enrichment Corporation in July 1998, to the Corporation on or about June 30, 1993, April 20, 1998, and May 18, 1998, and that does not meet commercial specifications;

"(iv) the sale or transfer of any uranium for emergency purposes in the event of a disruption in supply to end users in the United States;

"(v) the sale or transfer of any uranium in fulfillment of the United States Government's obligations to provide security of supply with respect to implementation of the Russian HEU Agreement; and

"(vi) the sale or transfer of any enriched uranium for use in an advanced commercial nuclear power plant in the United States with nonstandard fuel requirements.

"(D) The Secretary may transfer or sell enriched uranium to any person for national security purposes, as determined by the Secretary.

"(2) Except as provided in subsections (b) and (c), and in paragraph (1)(B), clauses (i) through (iii) of paragraph (1)(C), and paragraph (1)(D) of this subsection, no sale or transfer of uranium in any form shall be made by the United States Government unless—

"(A) the President determines that the material is not necessary for national security needs;

"(B) the price paid to the Secretary, if the transaction is a sale, will not be less than the fair market value of the material, as determined at the time that such material is contracted for sale;

"(C) prior to any sale or transfer, the Secretary solicits the written views of the Department of State and the National Security Council with regard to whether such sale or transfer would have any adverse effect on national security interests of the United States, including interests related to the implementation of the Russian HEU Agreement; and

"(D) neither the Department of State nor the National Security Council objects to such sale or transfer.

The Secretary shall endeavor to determine whether a sale or transfer is permitted under this paragraph within 30 days. The Secretary's determinations pursuant to this paragraph shall be made available to interested members of the public prior to authorizing any such sale or transfer.

"(3) Within 1 year after the date of enactment of this subsection and annually thereafter the Secretary shall undertake an assessment for the purpose of reviewing available excess Government uranium inventories, and determining, consistent with the procedures and limitations established in this subsection, the level of inventory to be sold or transferred to end users.

"(4) Within 5 years after the date of enactment of this subsection and biennially thereafter the Secretary shall report to the Congress on the implementation of this subsection. The report shall include a discussion of all sales or transfers made by the United States Government, the impact of such sales or transfers on the domestic uranium industry, the spot market uranium price, and the national security interests of the United States, and any steps taken to remediate any adverse impacts of such sales or transfers.

"(5) For purposes of this subsection, the term 'United States Government' does not include the Tennessee Valley Authority.".

SEC. 442. DECOMMISSIONING PILOT PROGRAM.

(a) PILOT PROGRAM.—The Secretary shall establish a decommissioning pilot program to decommission and decontaminate the sodium-cooled fast breeder experimental test-site reactor located in northwest Arkansas in accordance with the decommissioning activities contained in the August 31, 1998 Department of Energy report on the reactor.

(b) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $16,000,000.

TITLE V—RENEWABLE ENERGY

Subtitle A—General Provisions

SEC. 501. ASSESSMENT OF RENEWABLE ENERGY RESOURCES.

(a) RESOURCE ASSESSMENT.—Not later than 6 months after the date of enactment of this title, and each year thereafter, the Secretary of Energy shall review the available assessments of renewable energy resources within the United States, including solar, wind, biomass, ocean (tidal and thermal), geothermal, and hydroelectric energy resources, and undertake new assessments as necessary, taking into account changes in market conditions, available technologies, and other relevant factors.

(b) CONTENTS OF REPORTS.—Not later than 1 year after the date of enactment of this title, and each year thereafter, the Secretary shall publish a report based on the assessment under subsection (a). The report shall contain—

(1) a detailed inventory describing the available amount and characteristics of the renewable energy resources; and

(2) such other information as the Secretary 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, together with an identification of any barriers to providing adequate transmission for remote sources of renewable energy resources to current and emerging markets, recommendations for removing or addressing such barriers, and ways to provide access to the grid that do not unfairly disadvantage renewable or other energy producers.

(c) AUTHORIZATION OF APPROPRIATIONS.— For the purposes of this section, there are authorized to be appropriated to the Secretary of Energy $10,000,000 for each of fiscal years 2004 through 2008.

SEC. 502. RENEWABLE ENERGY PRODUCTION INCENTIVE.

(a) INCENTIVE PAYMENTS.— Section 1212(a) of the Energy Policy Act of 1992 (42 U.S.C. 13317(a)) is amended by striking "and which satisfies" and all that follows through "Secretary shall establish." and inserting ". If there are insufficient appropriations to make full payments for electric production from all qualified renewable energy facilities in any given year, the Secretary shall assign 60 percent of

appropriated funds for that year to facilities that use solar, wind, geothermal, or closed-loop (dedicated energy crops) biomass technologies to generate electricity, and assign the remaining 40 percent to other projects. The Secretary may, after transmitting to the Congress an explanation of the reasons therefor, alter the percentage requirements of the preceding sentence.".

(b) QUALIFIED RENEWABLE ENERGY FACILITY.— Section 1212(b) of the Energy Policy Act of 1992 (42 U.S.C. 13317(b)) is amended —

(1) by striking "a State or any political" and all that follows through "nonprofit electrical cooperative" and inserting "a not-for-profit electric cooperative, a public utility described in section 115 of the Internal Revenue Code of 1986, 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 of subdivision thereof,"; and

(2) by inserting "landfill gas," after "wind, biomass,".

(c) ELIGIBILITY WINDOW.— Section 1212(c) of the Energy Policy Act of 1992 (42 U.S.C. 13317(c)) is amended by striking "during the 10-fiscal year period beginning with the first full fiscal year occurring after the enactment of this section" and inserting "after October 1, 2003, and before October 1, 2013".

(d) AMOUNT OF PAYMENT.— Section 1212(e)(1) of the Energy Policy Act of 1992 (42 U.S.C. 13317(e)(1)) is amended by inserting "landfill gas," after "wind, biomass,".

(e) SUNSET.— Section 1212(f) of the Energy Policy Act of 1992 (42 U.S.C. 13317(f)) is amended by striking "the expiration of" and all that follows through "of this section" and inserting "September 30, 2023".

(f) AUTHORIZATION OF APPROPRIATIONS.— Section 1212(g) of the Energy Policy Act of 1992 (42 U.S.C. 13317(g)) is amended to read as follows:

"(g) AUTHORIZATION OF APPROPRIATIONS.—

"(1) IN GENERAL.— Subject to paragraph (2), there are authorized to be appropriated such sums as may be necessary to carry out this section for fiscal years 2003 through 2023.

"(2) AVAILABILITY OF FUNDS.— Funds made available under paragraph (1) shall remain available until expended.".

SEC. 503. RENEWABLE ENERGY ON FEDERAL LANDS.

(a) REPORT.—Within 24 months after the date of enactment of this Act, the Secretary of the Interior, in cooperation with the Secretary of Agriculture, shall develop and report to the Congress recommendations on opportunities to develop renewable energy on public lands under the jurisdiction of the Secretary of the Interior and National Forest System lands under the jurisdiction of the Secretary of Agriculture. The report shall include—

(1) 5-year plans developed by the Secretary of the Interior and the Secretary of Agriculture, respectively, for encouraging the development of renewable energy consistent with applicable law and management plans; and

(2) an analysis of—

(A) the use of rights-of-way, leases, or other methods to develop renewable energy on such lands;

(B) the anticipated benefits of grants, loans, tax credits, or other provisions to promote renewable energy development on such lands; and

(C) any issues that the Secretary of the Interior or the Secretary of Agriculture have encountered in managing renewable energy projects on such lands, or believe are likely to arise in relation to the development of renewable energy on such lands;

(3) a list, developed in consultation with the Secretary of Energy and the Secretary of Defense, of lands under the jurisdiction of the Department of Energy or Defense that would be suitable for development for renewable energy, and any recommended statutory and regulatory mechanisms for such development; and

(4) any recommendations pertaining to the issues addressed in the report.

(b) NATIONAL ACADEMY OF SCIENCES STUDY.—

(1) Not later than 90 days after the date of the enactment of this section,

the Secretary of the Interior shall contract with the National Academy of Sciences to—

(A) study the potential for the development of wind, solar, and ocean (tidal and thermal) energy on the Outer Continental Shelf;

(B) assess existing Federal authorities for the development of such resources; and

(C) recommend statutory and regulatory mechanisms for such development.

(2) The results of the study shall be transmitted to the Congress within 24 months after the date of the enactment of this section.

SEC. 504. FEDERAL PURCHASE REQUIREMENT.

(a) REQUIREMENT.— The President, acting through the Secretary of Energy, shall seek to ensure that, to the extent economically feasible and technically practicable, of the total amount of electric energy the Federal Government consumes during any fiscal year, the following amounts shall be renewable energy—

(1) not less than 3 percent in fiscal years 2005 through 2007,

(2) not less than 5 percent in fiscal years 2008 through 2010, and

(3) not less than 7.5 percent in fiscal year 2011 and each fiscal year thereafter.

(b) DEFINITION.— For purposes of this section —

(1) the term "biomass" means any solid, nonhazardous, cellulosic material that is derived from—

(A) any of the following forest-related resources: mill residues, precommercial thinnings, slash, and brush, or nonmerchantable material;

(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 wastes, including orchard tree crops, vineyard, grain, legumes, sugar, and other crop by-products or residues, and livestock waste nutrients; or

(D) a plant that is grown exclusively as a fuel for the production of electricity.

(2) the term "renewable energy" means electric energy generated from solar, wind, biomass, geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project.

(c) CALCULATION.— For purposes of determining compliance with the requirement of this section, the amount of renewable energy shall be doubled if —

(1) the renewable energy is produced and used on-site at a Federal facility;

(2) the renewable energy is produced on Federal lands and used at a Federal facility; or

(3) the renewable energy is produced on Indian land as defined in Title XXVI of the Energy Policy Act of 1992 (25 U.S.C. 3501 et. seq.) and used at a Federal facility.

(d) REPORT.— Not later than April 15, 2005, and every 2 years thereafter, the Secretary of Energy shall provide a report to the Congress on the progress of the Federal Government in meeting the goals established by this section.

SEC. 505. INSULAR AREA RENEWABLE AND ENERGY EFFICIENCY PLANS.

The Secretary of Energy shall update the energy surveys, estimates, and assessments for the insular areas of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau undertaken pursuant to section 604 of Public Law 96-597 (48 U.S.C. 1492) and revise the comprehensive energy plan for the insular areas to reduce reliance on energy imports and increase use of renewable energy resources and energy efficiency opportunities. The update and revision shall by undertaken in consultation with the

Secretary of the Interior and the chief executive officer of each insular area and shall be completed and submitted to Congress and to the chief executive officer of each insular area by December 31, 2005.

Subtitle B—Hydroelectric Licensing

SEC. 511. ALTERNATIVE CONDITIONS AND FISHWAYS.

(a) FEDERAL RESERVATIONS.—Section 4(e) of the Federal Power Act (16 U.S.C. 797(e)) is amended by inserting after "adequate protection and utilization of such reservation." at the end of the first proviso the following:

"The license applicant shall be entitled to a determination on the record, after opportunity for an agency trial-type hearing of any disputed issues of material fact, with respect to such conditions.".

(b) FISHWAYS.—Section 18 of the Federal Power Act (16 U.S.C. 811) is amended by inserting after "and such fishways as may be prescribed by the Secretary of Commerce." the following: "The license applicant shall be entitled to a determination on the record, after opportunity for an agency trial-type hearing of any disputed issues of material fact, with respect to such fishways.".

(c) ALTERNATIVE CONDITIONS AND PRESCRIPTIONS.—Part I of the Federal Power Act (16 U.S.C. 791a et seq.) is amended by adding the following new section at the end thereof:

"SEC. 33. ALTERNATIVE CONDITIONS AND PRESCRIPTIONS.

"(a) ALTERNATIVE CONDITIONS.—

"(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 (referred to in this subsection as 'the Secretary') deems a condition to such license to be necessary under the first proviso of section 4(e), the license applicant may propose an alternative condition.

"(2) Notwithstanding the first proviso of section 4(e), the Secretary 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 determines, based on substantial evidence provided by the license applicant or otherwise available to the Secretary, that such alternative condition—

"(A) provides for the adequate protection and utilization of the reservation; 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 initially deemed necessary by the Secretary.

"(3) The Secretary concerned shall submit into the public record of the Commission proceeding with any condition under section 4(e) or alternative condition it accepts under this section, a written statement explaining the basis for such condition, and reason for not accepting any alternative condition under this section. The written statement must demonstrate that the Secretary gave equal consideration to the effects of the condition adopted and alternatives not accepted on energy supply, distribution, cost, and use; flood control; navigation; water supply; and air quality (in addition to the preservation of other aspects of environmental quality); based on such information as may be available to the Secretary, including information voluntarily provided in a timely manner by the applicant and others. The Secretary shall also submit, together with the aforementioned written statement, all studies, data, and other factual information available to the Secretary and relevant to the Secretary's decision.

"(4) Nothing in this section shall prohibit other interested parties from proposing alternative conditions.

"(5) If the Secretary does not accept an applicant's alternative condition under this section, and the Commission finds that the Secretary's condition would be inconsistent with the purposes of this part, or other applicable law, the Commission may refer the dispute to the Commission's Dispute Resolution Service. The Dispute Resolution Service shall consult with the Secretary and

the Commission and issue a non-binding advisory within 90 days. The Secretary may accept the Dispute Resolution Service advisory unless the Secretary finds that the recommendation will not adequately protect the reservation. The Secretary shall submit the advisory and the Secretary's final written determination into the record of the Commission's proceeding.

"(b) ALTERNATIVE PRESCRIPTIONS.—

(1) Whenever the Secretary of the Interior or the Secretary of Commerce prescribes a fishway under section 18, the license applicant or licensee may propose an alternative to such prescription to construct, maintain, or operate a fishway. The alternative may include a fishway or an alternative to a fishway.

"(2) Notwithstanding section 18, 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 licensee or otherwise available to the Secretary, that such alternative—

"(A) will be no less protective of the fish resources 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 deemed necessary by the Secretary.

"(3) The Secretary concerned shall submit into the public record of the Commission proceeding with any prescription under section 18 or alternative prescription it accepts under this section, a written statement explaining the basis for such prescription, and reason for not accepting any alternative prescription under this section. The written statement must demonstrate that the Secretary gave equal consideration to the effects of the condition adopted and alternatives not accepted on energy supply, distribution, cost, and use; flood

control; navigation; water supply; and air quality (in addition to the preservation of other aspects of environmental quality); based on such information as may be available to the Secretary, including information voluntarily provided in a timely manner by the applicant and others. The Secretary shall also submit, together with the aforementioned written statement, all studies, data, and other factual information available to the Secretary and relevant to the Secretary's decision.

"(4) Nothing in this section shall prohibit other interested parties from proposing alternative prescriptions.

"(5) If the Secretary concerned does not accept an applicant's alternative prescription under this section, and the Commission finds that the Secretary's prescription would be inconsistent with the purposes of this part, or other applicable law, the Commission may refer the dispute to the Commission's Dispute Resolution Service. The Dispute Resolution Service shall consult with the Secretary and the Commission and issue a non-binding advisory within 90 days. The Secretary may accept the Dispute Resolution Service advisory unless the Secretary finds that the recommendation will not adequately protect the fish resources. The Secretary shall submit the advisory and the Secretary's final written determination into the record of the Commission's proceeding.".

Subtitle C—Geothermal Energy

SEC. 521. COMPETITIVE LEASE SALE REQUIREMENTS.

(a) IN GENERAL.— Section 4 of the Geothermal Steam Act of 1970 (30 U.S.C. 1003) is amended by striking the text and inserting the following:

"(a) NOMINATIONS.—The Secretary shall accept nominations at any time from companies and individuals of lands to be leased under this Act.

"(b) COMPETITIVE LEASE SALE REQUIRED.— The Secretary shall hold a competitive lease sale at least once every 2 years for lands in a State in which there are nominations pending under subsection (a) where such lands are otherwise available for leasing.

"(c) NONCOMPETITIVE LEASING.—The Secretary shall make available for a

period of 2 years for noncompetitive leasing any tract for which a competitive lease sale is held, but for which the Secretary does not receive any bids in the competitive lease sale.".

(b) PENDING LEASE APPLICATIONS.— It shall be a priority for the Secretary of the Interior and, with respect to National Forest lands, the Secretary of Agriculture, to ensure timely completion of administrative actions necessary to conduct competitive lease sales for lands with pending applications for geothermal leasing as of the date of enactment of this section where such lands are otherwise available for leasing.

SEC. 522. GEOTHERMAL LEASING AND PERMITTING ON FEDERAL LANDS.

(a) IN GENERAL.— Not later than 180 days after the date of the enactment of this section, the Secretary of the Interior and the Secretary of Agriculture shall enter into and submit to the Congress a memorandum of understanding in accordance with this section regarding leasing and permitting for geothermal development of public lands and National Forest System lands under their respective jurisdictions.

(b) LEASE AND PERMIT APPLICATIONS.—The memorandum of understanding shall—

(1) identify known geothermal resources areas on lands included in the National Forest System and, when necessary, require review of management plans to consider leasing under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) as a land use; and

(2) establish an administrative procedure for processing geothermal lease applications, including lines of authority, steps in application processing, and time limits for application processing.

(c) DATA RETRIEVAL SYSTEM .— The memorandum of understanding shall establish a joint data retrieval system that is capable of tracking lease and permit applications and providing to the applicant information as to their status within the Departments of the Interior and Agriculture, including an estimate of the time required for administrative action.

SEC. 523. LEASING AND PERMITTING ON FEDERAL LANDS WITHDRAWN FOR MILITARY PURPOSES.

Not later than 1 year after the date of the enactment of this Act, the Secretary of the Interior and the Secretary of Defense, in consultation with interested states, counties, representatives of the geothermal industry, and interested members of the public, shall submit to the Congress a joint report concerning leasing and permitting activities for geothermal energy on Federal lands withdrawn for military purposes. Such report shall—

(1) describe any differences, including differences in royalty structure and revenue sharing with states and counties, between—

(A) the implementation of the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) and other applicable Federal law by the Secretary of the Interior; and

(B) the administration of geothermal leasing under section 2689 of title 10, United States Code, by the Secretary of Defense;

(2) identify procedures for interagency coordination to ensure efficient processing and administration of leases or contracts for geothermal energy on federal lands withdrawn for military purposes, consistent with the defense purposes of such withdrawals; and

(3) provide recommendations for legislative or administrative actions that could facilitate program administration, including a common royalty structure.

SEC. 524. REINSTATEMENT OF LEASES TERMINATED FOR FAILURE TO PAY RENT.

Section 5(c) of the Geothermal Steam Act of 1970 (30 U.S.C. 1004(c)), is amended in the last sentence by inserting "or was inadvertent," after "reasonable diligence,".

SEC. 525. ROYALTY REDUCTION AND RELIEF.

(a) RULEMAKING.—Within one year after the date of enactment of this Act, the Secretary shall promulgate a final regulation providing a methodology for determining the amount or value of the steam for purposes of calculating the royalty due to be paid on such production pursuant to section 5 of the Geothermal Steam Act of 1970 (30 U.S.C. 1004). The final regulation shall provide for a simplified methodology for

calculating the royalty. In undertaking the rulemaking, the Secretary shall consider the use of a percent of revenue method and shall ensure that the final rule will result in the same level of royalty revenues as the regulation in effect on the date of enactment of this provision.

(b) LOW TEMPERATURE DIRECT USE .—Notwithstanding the provisions of section 5(a) of the Geothermal Steam Act of 1979 (30 U.S.C. 1004(a)), with respect to the direct use of low temperature geothermal resources for purposes other than the generation of electricity, the Secretary shall establish a schedule of fees and collect fees pursuant to such schedule in lieu of royalties based upon the total amount of geothermal resources used. The schedule of fees shall ensure that there is a fair return to the public for the use of the low temperature geothermal resource. With the consent of the lessee, the Secretary may modify the terms of a lease in existence on the date of enactment of this Act in order to reflect the provisions of this subsection.

Subtitle D —Biomass Energy

SEC. 531. DEFINITIONS.

For the purposes of this subtitle:

(1) The term "eligible operation" means a facility that is located within the boundaries of an eligible community and uses biomass from federal or Indian lands as a raw material to produce electric energy, sensible heat, transportation fuels, or substitutes for petroleum-based products.

(2) The term "biomass" means pre-commercial thinnings of trees and woody plants, or non-merchantable material, from preventative treatments to reduce hazardous fuels, or reduce or contain disease or insect infestations.

(3) The term "green ton" means 2,000 pounds of biomass that has not been mechanically or artificially dried.

(4) The term "Secretary" means —

(A) with respect to lands within the National Forest System, the Secretary of Agriculture; or

(B) with respect to Federal lands under the jurisdiction of the Secretary of the Interior and Indian lands, the Secretary of the Interior.

(5) The term "eligible community" means any Indian Reservation, or any county, town, township, municipality, or other similar unit of local government that has a population of not more than 50,000 individuals and is determined by the Secretary to be located in an area near federal of Indian lands which is at significant risk of catastrophic wildfire, disease, or insect infestation or which suffers from disease or insect infestation.

(6) The term "Indian tribe" has the meaning given the term in section 4(e) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b(e)).

(7) The term "person" includes —

(A) an individual;

(B) a community;

(C) an Indian tribe;

(D) a small business or a corporation that is incorporated in the United States; or

(E) a nonprofit organization.

SEC. 532. BIOMASS COMMERCIAL UTILIZATION GRANT PROGRAM.

(a) IN GENERAL.—The Secretary may make grants to any person that owns or operates an eligible operation to offset the costs incurred to purchase biomass for use by such eligible operation with priority given to operations using biomass from the highest risk areas.

(b) LIMITATION.—No grant provided under this subsection shall be paid at a rate that exceeds $20 per green ton of biomass delivered.

(c) RECORDS.— Each grant recipient shall keep such records as the Secretary may require to fully and correctly disclose the use of the grant funds and all transactions involved in the purchase of biomass. Upon notice by the Secretary, the grant recipient shall provide the Secretary reasonable access to examine the inventory and records of any eligible operation receiving grant funds.

(d) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there are authorized to be appropriated $12,500,000 each to the Secretary of the Interior

and the Secretary of Agriculture for each fiscal year from 2004 through 2008, to remain available until expended.

SEC. 533. IMPROVED BIOMASS UTILIZATION GRANT PROGRAM.

(a) IN GENERAL.—The Secretary may make grants to persons in eligible communities to offset the costs of developing or researching proposals to improve the use of biomass or add value to biomass utilization.

(b) SELECTION.—Grant recipients shall be selected based on the potential for the proposal to—

(1) develop affordable thermal or electric energy resources for the benefit of an eligible community;

(2) provide opportunities for the creation or expansion of small businesses within an eligible community;

(3) create new job opportunities within an eligible community, and

(4) reduce the hazardous fuels from the highest risk areas.

(c) LIMITATION.—No grant awarded under this subsection shall exceed $500,000.

(d) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there are authorized to be appropriated $12,500,000 each to the Secretary of the Interior and the Secretary of Agriculture for each fiscal year from 2004 through 2008, to remain available until expended.

SEC. 534. REPORT.

Not later than 3 years after the date of enactment of this subtitle, the Secretary of the Interior and the Secretary of Agriculture shall jointly submit to the Congress a report that describes the interim results of the programs authorized under this subtitle.

TITLE VI — ENERGY EFFICIENCY

Subtitle A – Federal Programs

SEC. 601. ENERGY MANAGEMENT REQUIREMENTS.

(a) ENERGY REDUCTION GOALS.—Section 543(a)(1) of the National Energy Conservation Policy Act (42 U.S.C. 8253(a)(1)) is amended by striking “its Federal

buildings so that" and all that follows through the end and inserting "the Federal buildings of the agency (including each industrial or laboratory facility) so that the energy consumption per gross square foot of the Federal buildings of the agency in fiscal years 2004 through 2013 is reduced, as compared with the energy consumption per gross square foot of the Federal buildings of the agency in fiscal year 2000, by the percentage specified in the following table:

"Fiscal Year	Percentage reduction
2004	2
2005	4
2006	6
2007	8
2008	10
2009	12
2010	14
2011	16
2012	18
2013	20.".

(b) EFFECTIVE DATE.— The energy reduction goals and baseline established in paragraph (1) of section 543(a) of the National Energy Conservation Policy Act, as amended by subsection (a) of this section, supersede all previous goals and baselines under such paragraph, and related reporting requirements.

(c) REVIEW OF ENERGY PERFORMANCE REQUIREMENTS.—Section 543(a) of the National Energy Conservation Policy Act (42 U.S.C. 8253(a)) is further amended by adding at the end the following:

"(3) Not later than December 31, 2011, the Secretary shall review the results of the implementation of the energy performance requirement established under paragraph (1) and submit to Congress recommendations concerning energy performance requirements for fiscal years 2014 through 2022.".

(d) EXCLUSIONS.—Section 543(c)(1) of the National Energy Conservation Policy Act (42 U.S.C. 8253(c)(1)) is amended by striking "An agency may exclude" and all that follows through the end and inserting—

"(A) An agency may exclude, from the energy performance requirement for a fiscal year established under subsection (a) and the energy management requirement established under subsection (b), any Federal building or collection of Federal buildings, if the head of the agency finds that—

"(i) compliance with those requirements would be impracticable;

"(ii) the agency has completed and submitted all federally required energy management reports;

"(iii) the agency has achieved compliance with the energy efficiency requirements of this Act, the Energy Policy Act of 1992, Executive Orders, and other Federal law; and

"(iv) the agency has implemented all practicable, life-cycle cost-effective projects with respect to the Federal building or collection of Federal buildings to be excluded.

"(B) A finding of impracticability under subparagraph (A)(i) shall be based on—

"(i) the energy intensiveness of activities carried out in the Federal building or collection of Federal buildings; or

"(ii) the fact that the Federal building or collection of Federal buildings is used in the performance of a national security function.".

(e) REVIEW BY SECRETARY.—Section 543(c)(2) of the National Energy Conservation Policy Act (42 U.S.C. 8253(c)(2)) is amended—

(1) by striking "impracticability standards" and inserting "standards for exclusion"; and

(2) by striking "a finding of impracticability" and inserting "the exclusion".

(f) CRITERIA.—Section 543(c) of the National Energy Conservation Policy Act (42 U.S.C. 8253(c)) is further amended by adding at the end the following:

"(3) Not later than 180 days after the date of enactment of this paragraph, the Secretary shall issue guidelines that establish criteria for exclusions under paragraph (1).".

(g) RETENTION OF ENERGY SAVINGS.—Section 546 of the National Energy Conservation Policy 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(b) of the National Energy Conservation Policy Act (42 U.S.C. 8258(b)) is amended—

(1) in the subsection heading, by inserting "THE PRESIDENT AND" before "CONGRESS"; and

(2) by inserting "President and" before "Congress".

(i) CONFORMING AMENDMENT.—Section 550(d) of the National Energy Conservation Policy Act (42 U.S.C. 8258b(d)) is amended in the second sentence by striking "the 20 percent reduction goal established under section 543(a) of the National Energy Conservation Policy Act (42 U.S.C. 8253(a))." and inserting "each of the energy reduction goals established under section 543(a).".

SEC. 602. ENERGY USE MEASUREMENT AND ACCOUNTABILITY.

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

"(e) METERING OF ENERGY USE.—

"(1) DEADLINE.—By October 1, 2010, in accordance with guidelines established by the Secretary under paragraph (2), all Federal buildings shall, for the purposes of efficient use of energy and reduction in the cost of electricity used in such buildings, be metered or submetered. Each agency shall use, to the maximum extent practicable, advanced meters or advanced metering devices that provide data at least daily and that measure at least hourly consumption of electricity in the Federal buildings of the agency. Such data shall be

incorporated into existing Federal energy tracking systems and made available to Federal facility energy managers.

"(2) GUIDELINES.—

"(A) IN GENERAL.—Not later than 180 days after the date of enactment of this subsection, the Secretary, in consultation with the Department of Defense, the General Services Administration, representatives from the metering industry, utility industry, energy services industry, energy efficiency industry, national laboratories, universities, and Federal facility energy managers, shall establish guidelines for agencies to carry out paragraph (1).

"(B) REQUIREMENTS FOR GUIDELINES.— The guidelines shall—

"(i) take into consideration—

"(I) the cost of metering and submetering and the reduced cost of operation and maintenance expected to result from metering and submetering;

"(II) the extent to which metering and submetering are expected to result in increased potential for energy management, increased potential for energy savings and energy efficiency improvement, and cost and energy savings due to utility contract aggregation; and

"(III) the measurement and verification protocols of the Department of Energy;

"(ii) include recommendations concerning the amount of funds and the number of trained personnel necessary to gather and use the metering information to track and reduce energy use;

"(iii) establish priorities for types and locations of buildings to be metered and submetered based on cost effectiveness and a schedule of one or more dates, not later than 1 year after the date of issuance of the guidelines, on which the requirements specified in paragraph (1) shall take effect; and

"(iv) establish exclusions from the requirements specified in paragraph (1) based on the de minimis quantity of energy use of a Federal building, industrial process, or structure.

"(3) PLAN.—No later than 6 months after the date guidelines are established under paragraph (2), in a report submitted by the agency under section 548(a), each agency shall submit to the Secretary a plan describing how the agency will implement the requirements of paragraph (1), including—

"(A) how the agency will designate personnel primarily responsible for achieving the requirements; and

"(B) demonstration by the agency, complete with documentation, of any finding that advanced meters or advanced metering devices, as defined in paragraph (1), are not practicable.".

SEC. 603. FEDERAL BUILDING PERFORMANCE STANDARDS.

Section 305(a) of the Energy Conservation and Production Act (42 U.S.C. 6834(a)) is amended—

(a) in paragraph (2)(A), by striking "CABO Model Energy Code, 1992" and inserting "the 2000 International Energy Conservation Code"; and

(b) by adding at the end the following:

"(3) REVISED FEDERAL BUILDING ENERGY EFFICIENCY PERFORMANCE STANDARDS.—

"(A) IN GENERAL.—Not later than 1 year after the date of enactment of this paragraph, the Secretary of Energy shall establish, by rule, revised Federal building energy efficiency performance standards that require that, if cost-effective, for new Federal buildings—

"(i) such buildings be designed so as to achieve energy consumption levels at least 30 percent below those of the most recent version of the International Energy Conservation Code, as appropriate; and

"(ii) sustainable design principles are applied to the siting, design, and construction of all new and replacement buildings.

"(B) ADDITIONAL REVISIONS.—Not later than 1 year after the date of approval of amendments to ASHRAE Standard 90.1 or the 2000 International Energy Conservation Code, the Secretary of Energy shall determine, based on the cost-effectiveness of the requirements under the amendments, whether the revised standards established under this paragraph should be updated to reflect the amendments.

"(C) STATEMENT ON COMPLIANCE OF NEW BUILDINGS.—In the budget request of the Federal agency for each fiscal year and each report submitted by the Federal agency under section 548(a) of the National Energy Conservation Policy Act (42 U.S.C. 8258(a)), the head of each Federal agency shall include—

"(i) a list of all new Federal buildings owned, operated, or controlled by the Federal agency; and

"(ii) a statement concerning whether the Federal buildings meet or exceed the revised standards established under this paragraph.".

SEC. 604. ENERGY SAVINGS PERFORMANCE CONTRACTS.

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

(b) 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 life-cycle 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.".

(c) 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) The term 'energy savings' means—

"(A) 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 co-generation or heat recovery, excluding any co-generation 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;

or

"(B) 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.".

(d) 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, and, where appropriate, operation, 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. Such contracts shall, with respect to an agency facility that is a public building as such term is defined in section 13(1) of the Public Buildings Act of 1959 (40 U.S.C. 612(1)), be in compliance with the prospectus requirements and procedures of section 7 of the Public Buildings Act of 1959 (40 U.S.C. 606).".

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

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

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

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

(f) PILOT PROGRAM FOR NON-BUILDING APPLICATIONS.—

(1) The Secretary of Defense, and the heads of other interested Federal agencies, are authorized to enter into up to 10 energy savings performance contracts under Title VIII of the National Energy Conservation Policy Act (42 U.S.C. 8287 et seq.) for the purpose of achieving energy or water savings, secondary savings, and benefits incidental to those purposes, in non-building applications, provided that the aggregate payments to be made by the Federal government under such contracts shall not exceed $100,000,000.

(2) The Secretary of Energy, in consultation with the Secretary of Defense and the heads of other interested Federal agencies, shall select projects that demonstrate the applicability and benefits of energy savings performance contracting to a range of non-building applications.

(3) For the purposes of this subsection:

(A) The term "non-building application" means —

(i) any class of vehicles, devices, or equipment that is transportable under its own power by land, sea, or air that consumes energy from any fuel source for the purpose of such transportability, or to maintain a controlled environment within such vehicle, device, or equipment; or

(ii) any Federally owned equipment used to generate electricity or transport water.

(B) The term "secondary savings", means additional energy or cost savings that are a direct consequence of the energy or water savings that result from the financing and implementation of the energy savings performance contract, including, but not limited to, energy or cost savings that result from a reduction in the need for fuel delivery and logistical support, or the increased efficiency in the production of electricity.

(4) Not later than 3 years after the date of enactment of this section, the Secretary of Energy shall report to the Congress on the progress and results of the projects funded pursuant to this section. Such report shall include a description of projects undertaken; the energy, water and cost savings, secondary savings and other benefits that resulted from such projects; and recommendations on whether the pilot program should be extended, expanded, or authorized permanently as a part of the program authorized under Title VIII of the National Energy Conservation Policy act (42 U.S.C. 8287 et seq.).

(5) Section 546(c)(3) of the National Energy Conservation Policy Act (42 U.S.C. 8256) is amended by striking the word "facilities", and inserting the

words “facilities, equipment and vehicles”, in lieu thereof.

(g) REVIEW.—Within 180 days after the date of the enactment of this section, 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, including the identification of additional qualified contractors, 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. 605. PROCUREMENT OF ENERGY EFFICIENT PRODUCTS.

Part 3 of title V of the National Energy Conservation Policy Act is amended by adding at the end the following:

“**SEC. 552. FEDERAL PROCUREMENT OF ENERGY EFFICIENT PRODUCTS.**

“(a) DEFINITIONS.—In this section:

“(1) The term ‘Energy Star product’ means a product that is rated for energy efficiency under an Energy Star program.

“(2) The term ‘Energy Star program’ means the program established by section 324A of the Energy Policy and Conservation Act.

“(3) The term ‘executive agency’ has the meaning given the term in section 4 of the Office of Federal Procurement Policy Act (41 U.S.C. 403).

“(4) The term ‘FEMP designated product’ means a product that is designated under the Federal Energy Management Program of the Department of Energy as being among the highest 25 percent of equivalent products for energy efficiency.

“(b) PROCUREMENT OF ENERGY EFFICIENT PRODUCTS.—

"(1) REQUIREMENT.—To meet the requirements of an executive agency for an energy consuming product, the head of the executive agency shall, except as provided in paragraph (2), procure an Energy Star product or a FEMP designated product.

"(2) EXCEPTIONS.—The head of an executive agency is not required to procure an Energy Star product or FEMP designated product under paragraph (1) if the head of the executive agency finds in writing that—

"(A) an Energy Star product or FEMP designated product is not cost-effective over the life of the product taking energy cost savings into account; or

"(B) no Energy Star product or FEMP designated product is reasonably available that meets the functional requirements of the executive agency.

"(3) PROCUREMENT PLANNING.—The head of an executive agency shall incorporate into the specifications for all procurements involving energy consuming products and systems, including guide specifications, project specifications, and construction, renovation, and services contracts that include provision of energy consuming products and systems, and into the factors for the evaluation of offers received for the procurement, criteria for energy efficiency that are consistent with the criteria used for rating Energy Star products and for rating FEMP designated products.

"(c) LISTING OF ENERGY EFFICIENT PRODUCTS IN FEDERAL CATALOGS.—Energy Star products and FEMP designated products shall be clearly identified and prominently displayed in any inventory or listing of products by the General Services Administration or the Defense Logistics Agency. The General Services Administration or the Defense Logistics Agency shall supply only Energy Star products or FEMP designated products for all product categories covered by the Energy Star program or the Federal Energy Management Program, except in cases where the agency ordering a product specifies in writing that no Energy Star product or FEMP designated product is available to meet the buyer's functional requirements, or that no

Energy Star product or FEMP designated product is cost-effective for the intended application over the life of the product, taking energy cost savings into account.

"(d) DESIGNATION OF ELECTRIC MOTORS.—In the case of electric motors of 1 to 500 horsepower, agencies shall select only premium efficient motors that meet a standard designated by the Secretary. The Secretary shall designate such a standard within 120 days after the date of the enactment of this section, after considering the recommendations of associated electric motor manufacturers and energy efficiency groups.

"(e) REGULATIONS.—Not later than 180 days after the date of the enactment of this section, the Secretary shall issue guidelines to carry out this section.".

(b) CONFORMING AMENDMENT.—The table of contents in section 1(b) of the National Energy Conservation Policy Act (42 U.S.C. 8201 note) is amended by inserting after the item relating to the end of the items relating to part 3 of title V the following:

"Sec. 552. Federal procurement of energy efficient products.".

SEC. 606. CONGRESSIONAL BUILDING EFFICIENCY.

(a) IN GENERAL.—Part 3 of title V of the National Energy Conservation Policy Act is further amended by adding at the end:

"SEC. 553. CONGRESSIONAL BUILDING EFFICIENCY.

"(a) IN GENERAL.—The Architect of the Capitol—

"(1) shall develop, update, and implement a cost-effective energy conservation and management plan (referred to in this section as the 'plan') for all facilities administered by the Congress (referred to in this section as 'congressional buildings') to meet the energy performance requirements for Federal buildings established under section 543(a)(1); and

"(2) shall submit the plan to Congress, not later than 180 days after the date of enactment of this section.

"(b) PLAN REQUIREMENTS.—The plan shall include—

"(1) a description of the life-cycle cost analysis used to determine the cost-effectiveness of proposed energy efficiency projects;

"(2) a schedule of energy surveys to ensure complete surveys of all congressional buildings every 5 years to determine the cost and payback period of energy and water conservation measures;

"(3) a strategy for installation of life-cycle cost-effective energy and water conservation measures;

"(4) the results of a study of the costs and benefits of installation of submetering in congressional buildings; and

"(5) information packages and 'how-to' guides for each Member and employing authority of Congress that detail simple, cost-effective methods to save energy and taxpayer dollars in the workplace.

"(c) ANNUAL REPORT.—The Architect shall submit to Congress annually a report on congressional energy management and conservation programs required under this section that describes in detail—

"(1) energy expenditures and savings estimates for each facility;

"(2) energy management and conservation projects; and

"(3) future priorities to ensure compliance with this section.".

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents in section 1(b) of the National Energy Conservation Policy Act is amended by adding at the end of the items relating to part 3 of title V the following new item:

"Sec. 553. Energy and water savings measures in congressional buildings.".

(c) REPEAL.—Section 310 of the Legislative Branch Appropriations Act, 1999 (40 U.S.C. 166i), is repealed.

(d) 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.

(e) AUTHORIZATION.—There are authorized to be appropriated to the Architect of the Capitol to carry out subsection (d), not more than $2,000,000 for fiscal year

2004.

SEC. 607. INCREASED USE OF RECOVERED MINERAL COMPONENT IN FEDERALLY FUNDED PROJECTS INVOLVING PROCUREMENT OF CEMENT OR CONCRETE.

(a) AMENDMENT.—Subtitle F of the Solid Waste Disposal Act (42 U.S.C. 6961 et seq.) is amended by adding at the end the following new section:

"SEC. 6005. INCREASED USE OF RECOVERED MINERAL COMPONENT IN FEDERALLY FUNDED PROJECTS INVOLVING PROCUREMENT OF CEMENT OR CONCRETE.

"(a) DEFINITIONS.—In this section:

"(1) AGENCY HEAD.—The term 'agency head' means—

"(A) the Secretary of Transportation; and

"(B) the head of each other Federal agency that on a regular basis procures, or provides Federal funds to pay or assist in paying the cost of procuring, material for cement or concrete projects.

"(2) CEMENT OR CONCRETE PROJECT.—The term 'cement or concrete project' means a project for the construction or maintenance of a highway or other transportation facility or a Federal, State, or local government building or other public facility that—

"(A) involves the procurement of cement or concrete; and

"(B) is carried out in whole or in part using Federal funds.

"(3) RECOVERED MINERAL COMPONENT.—The term 'recovered mineral component' means—

"(A) ground granulated blast furnace slag;

"(B) coal combustion fly ash; and

"(C) any other waste material or byproduct recovered or diverted from solid waste that the Administrator, in consultation with an agency head, determines should be treated as recovered mineral component under this section for use in cement or concrete projects paid for, in whole or in part, by the agency head.

"(b) IMPLEMENTATION OF REQUIREMENTS.—

"(1) IN GENERAL.—Not later than 1 year after the date of enactment of this section, the Administrator and each agency head shall take such actions as

are necessary to implement fully all procurement requirements and incentives in effect as of the date of enactment of this section (including guidelines under section 6002) that provide for the use of cement and concrete incorporating recovered mineral component in cement or concrete projects.

"(2) PRIORITY.—In carrying out paragraph (1) an agency head shall give priority to achieving greater use of recovered mineral component in cement or concrete projects for which recovered mineral components historically have not been used or have been used only minimally.

"(3) CONFORMANCE.—The Administrator and each agency head shall carry out this subsection in accordance with section 6002.

"(c) FULL IMPLEMENTATION STUDY.—

"(1) IN GENERAL.—The Administrator, in cooperation with the Secretary of Transportation and the Secretary of Energy, shall conduct a study to determine the extent to which current procurement requirements, when fully implemented in accordance with subsection (b), may realize energy savings and environmental benefits attainable with substitution of recovered mineral component in cement used in cement or concrete projects.

"(2) MATTERS TO BE ADDRESSED.—The study shall—

"(A) quantify the extent to which recovered mineral components are being substituted for Portland cement, particularly as a result of current procurement requirements, and the energy savings and environmental benefits associated with that substitution;

"(B) identify all barriers in procurement requirements to fuller realization of energy savings and environmental benefits, including barriers resulting from exceptions from current law; and

"(C) (i) identify potential mechanisms to achieve greater substitution of recovered mineral component in types of cement or concrete projects for which recovered mineral components historically have not been used or have been used only minimally;

"(ii) evaluate the feasibility of establishing guidelines or standards for optimized substitution rates of recovered mineral component in those cement or concrete projects; and

"(iii) identify any potential environmental or economic effects that may result from greater substitution of recovered mineral component in those cement or concrete projects.

"(3) REPORT.—Not later than 30 months after the date of enactment of this section, the Administrator shall submit to the Committee on Appropriations and Committee on Environment and Public Works of the Senate and the Committee on Appropriations, Committee on Energy and Commerce, and Committee on Transportation and Infrastructure of the House of Representatives a report on the study.

"(d) ADDITIONAL PROCUREMENT REQUIREMENTS.— Unless the study conducted under subsection (c) identifies any effects or other problems described in subsection (c)(2)(C)(iii) that warrant further review or delay, the Administrator and each agency head shall, within 1 year of the release of the report in accordance with subsection (c)(3), take additional actions authorized under this section to establish procurement requirements and incentives that provide for the use of cement and concrete with increased substitution of recovered mineral component in the construction and maintenance of cement or concrete projects, so as to—

"(1) realize more fully the energy savings and environmental benefits associated with increased substitution; and

"(2) eliminate barriers identified under subsection (c).

"(e) EFFECT OF SECTION.—Nothing in this section affects the requirements of section 6002 (including the guidelines and specifications for implementing those requirements).".

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents of the Solid Waste Disposal Act is amended by adding after the item relating to section 6004 the following new item:

"Sec. 6005. Increased use of recovered mineral component in federally funded projects

involving procurement of cement or concrete.".

SEC. 608. UTILITY ENERGY SERVICE CONTRACTS.

Section 546(c)(1) of the National Energy Conservation Policy Act (42 U.S.C. 8256(c)) is amended to read as follows:

"(1) Agencies are authorized and encouraged to participate in programs, including utility energy services contracts, conducted by gas, water and electric utilities and generally available to customers of such utilities, for the purposes of increased energy efficiency, water conservation or the management of electricity demand.".

SEC. 609. STUDY OF ENERGY EFFICIENCY STANDARDS.

The Secretary of Energy shall contract with the National Academy of Sciences for a study, to be completed within one year of enactment of this section, to examine whether the goals of energy efficiency standards are best served by measurement of energy consumed, and efficiency improvements, at the actual site of energy consumption, or through the full fuel cycle, beginning at the source of energy production. The Secretary shall submit the report of the Academy to the Congress.

Subtitle B—State and Local Programs

SEC. 611. LOW INCOME COMMUNITY ENERGY EFFICIENCY PILOT PROGRAM.

(a) GRANTS.—The Secretary of Energy is authorized to make grants to units of local government, private, non-profit community development organizations, and Indian
tribe economic development entities to improve energy efficiency, identify and develop alternative, renewable and distributed energy supplies, and increase energy conservation in low income rural and urban communities.

(b) PURPOSE OF GRANTS.—The Secretary may make grants on a competitive basis for—

(1) investments that develop alternative, renewable and distributed energy supplies;

(2) energy efficiency projects and energy conservation programs;

(3) studies and other activities that improve energy efficiency in low

income rural and urban communities;

(4) planning and development assistance for increasing the energy efficiency of buildings and facilities; and

(5) technical and financial assistance to local government and private entities on developing new renewable and distributed sources of power or combined heat and power generation.

(c) DEFINITION.—For purposes of this section, the term "Indian tribe" means any Indian tribe, band, nation, or other organized group or community, including any Alaskan Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.), which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

(d) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section there are authorized to be appropriated to the Secretary of Energy $20,000,000 for fiscal year 2004 and each fiscal year thereafter through fiscal year 2006.

SEC. 612. ENERGY EFFICIENT PUBLIC BUILDINGS.

(a) GRANTS.—The Secretary of Energy may make grants to the State agency responsible for developing State energy conservation plans under section 362 of the Energy Policy and Conservation Act (42 U.S.C. 6322), or, if no such agency exists, a State agency designated by the Governor of the State, to assist units of local government in the State in improving the energy efficiency of public buildings and facilities—

(1) through construction of new energy efficient public buildings that use at least 30 percent less energy than a comparable public building constructed in compliance with standards prescribed in chapter 8 of the 2000 International Energy Conservation Code, or a similar State code intended to achieve substantially equivalent efficiency levels; or

(2) through renovation of existing public buildings to achieve reductions in energy use of at least 30 percent as compared to the baseline energy use in such buildings prior to renovation, assuming a 3-year, weather-normalized

average for calculating such baseline.

(b) ADMINISTRATION.—State energy offices receiving grants under this section shall—

(1) maintain such records and evidence of compliance as the Secretary may require; and

(2) develop and distribute information and materials and conduct programs to provide technical services and assistance to encourage planning, financing, and design of energy efficient public buildings by units of local government.

(c) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there are authorized to be appropriated to the Secretary of Energy such sums as may be necessary for each of fiscal years 2003 through 2012. Not more than 30 percent of appropriated funds shall be used for administration.

SEC. 613. ENERGY EFFICIENT APPLIANCE REBATE PROGRAMS.

(a) DEFINITIONS.—In this section:

(1) The term "eligible State" means a State that meets the requirements of subsection (b).

(2) The term "Energy Star program" means the program established by section 324A of the Energy Policy and Conservation Act.

(3) The term "residential Energy Star product" means a product for a residence that is rated for energy efficiency under the Energy Star program.

(4) The term "State energy office" means the State agency responsible for developing State energy conservation plans under section 362 of the Energy Policy and Conservation Act (42 U.S.C. 6322).

(5) The term "State program" means a State energy efficient appliance rebate program described in subsection (b)(1).

(b) ELIGIBLE STATES.—A State shall be eligible to receive an allocation under subsection (c) if the State—

(1) establishes (or has established) a State energy efficient appliance rebate program to provide rebates to residential consumers for the purchase of

residential Energy Star products to replace used appliances of the same type;

(2) submits an application for the allocation at such time, in such form, and containing such information as the Secretary may require; and

(3) provides assurances satisfactory to the Secretary that the State will use the allocation to supplement, but not supplant, funds made available to carry out the State program.

(c) AMOUNT OF ALLOCATIONS.—

(1) Subject to paragraph (2), for each fiscal year, the Secretary shall allocate to the State energy office of each eligible State to carry out subsection (d) an amount equal to the product obtained by multiplying the amount made available under subsection (f) for the fiscal year by the ratio that the population of the State in the most recent calendar year for which data are available bears to the total population of all eligible States in that calendar year.

(2) For each fiscal year, the amounts allocated under this subsection shall be adjusted proportionately so that no eligible State is allocated a sum that is less than an amount determined by the Secretary.

(d) USE OF ALLOCATED FUNDS.—The allocation to a State energy office under subsection (c) may be used to pay up to 50 percent of the cost of establishing and carrying out a State program.

(e) ISSUANCE OF REBATES.—Rebates may be provided to residential consumers that meet the requirements of the State program. The amount of a rebate shall be determined by the State energy office, taking into consideration—

(1) the amount of the allocation to the State energy office under subsection (c);

(2) the amount of any Federal or State tax incentive available for the purchase of the residential Energy Star product; and

(3) the difference between the cost of the residential Energy Star product and the cost of an appliance that is not a residential Energy Star product, but is of the same type as, and is the nearest capacity, performance, and other relevant characteristics (as determined by the State energy office) to the residential

Energy Star product.

(f) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section $50,000,000 for each of the fiscal years 2004 through 2008.

Subtitle C—Consumer Products

SEC. 621. ENERGY CONSERVATION STANDARDS FOR ADDITIONAL PRODUCTS.

(a) DEFINITIONS.—Section 321 of the Energy Policy and Conservation Act (42 U.S.C. 6291) is amended—

(1) in subparagraph (30)(S), by striking the period and adding at the end the following:

"but does not include any lamps specifically designed to be used for special purpose applications, and also does not include any lamp not described in subparagraph (D) that is excluded by the Secretary, by rule."; and

(2) by adding at the end the following:

"(32) The term 'battery charger' means a device that charges batteries for consumer products.

"(33) The term 'commercial refrigerator, freezer and refrigerator-freezer' means a refrigerator, freezer or refrigerator-freezer that—

"(A) is not a consumer product regulated under this Act; and

"(B) incorporates most components involved in the vapor-compression cycle and the refrigerated compartment in a single package.

"(34) The term 'external power supply' means an external power supply circuit that is used to convert household electric current into either DC current or lower-voltage AC current to operate a consumer product.

"(35) The term 'illuminated exit sign' means a sign that—

"(A) is designed to be permanently fixed in place to identify an exit; and

"(B) consists of an electrically powered integral light source that illuminates the legend 'EXIT' and any directional indicators and

provides contrast between the legend, any directional indicators, and the background.

"(36)(A) Except as provided in subparagraph (B), the term 'low-voltage dry-type transformer' means a transformer that—

"(i) has an input voltage of 600 volts or less;

"(ii) is air-cooled;

"(iii) does not use oil as a coolant; and

"(iv) is rated for operation at a frequency of 60 Hertz.

"(B) The term 'low-voltage dry-type transformer' does not include—

"(i) transformers with multiple voltage taps, with the highest voltage tap equaling at least 20 percent more than the lowest voltage tap;

"(ii) transformers, such as those commonly known as drive transformers, rectifier transformers, auto-transformers, Uninterruptible Power System transformers, impedance transformers, harmonic transformers, regulating transformers, sealed and nonventilating transformers, machine tool transformers, welding transformers, grounding transformers, or testing transformers, that are designed to be used in a special purpose application and are unlikely to be used in general purpose applications; or

"(iii) any transformer not listed in clause (ii) that is excluded by the Secretary by rule because the transformer is designed for a special application and the application of standards to the transformer would not result in significant energy savings.

"(37)(A) Except as provided in subsection (B), the term 'distribution transformer' means a transformer that —

"(i) has an input voltage of 34.5 kilovolts or less;

"(ii) has an output voltage of 600 volts or less; and

"(iii) is rated for operation at a frequency of 60 Hertz.

"(B) The term 'distribution transformer' does not include —

"(i) transformers with multiple voltage taps, with the highest

voltage tap equaling at least 15 percent more than the lowest voltage tap;

"(ii) transformers, such as those commonly known as drive transformers, rectifier transformers, autotransformers, Uninterruptible Power System transformers, impedance transformers, harmonic transformers, regulating transformers, sealed and nonventilating transformers, machine tool transformers, welding transformers, grounding transformers, or testing transformers, that are designed to be used in a special purpose application, and are unlikely to be used in general purpose applications; or

"(iii) any transformer not listed in clause (ii) that is excluded by the Secretary by rule because the transformer is designed for a special application, is unlikely to be used in general purpose applications, and the application of standards to the transformer would not result in significant energy savings.

"(38) The term 'standby mode' means the lowest amount of electric power used by a household appliance when not performing its active functions, as defined on an individual product basis by the Secretary.

"(39) The term 'torchiere' means a portable electric lamp with a reflector bowl that directs light upward so as to give indirect illumination.

"(40) The term 'transformer' means a device consisting of two or more coils of insulated wire that transfers alternating current by electromagnetic induction from one coil to another to change the original voltage or current value.

"(41) The term 'unit heater' means a self-contained fan-type heater designed to be installed within the heated space, except that such term does not include a warm air furnace.

"(42) The term 'traffic signal module' means a standard 8-inch (200mm) or 12-inch (300mm) traffic signal indication, consisting of a light source, a lens, and all other parts necessary for operation, that communicates movement messages to drivers through red, amber, and green colors."

(b) TEST PROCEDURES.—Section 323 of the Energy Policy and Conservation Act (42 U.S.C. 6293) is amended—

(1) in subsection (b), by adding at the end the following:

"(9) Test procedures for illuminated exit signs shall be based on the test method used under Version 2.0 of the Energy Star program of the Environmental Protection Agency for illuminated exit signs.

"(10) Test procedures for low voltage dry-type distribution transformers shall be based on the 'Standard Test Method for Measuring the Energy Consumption of Distribution Transformers' prescribed by the National Electrical Manufacturers Association (NEMA TP 2–1998). The Secretary may review and revise this test procedure.

"(11) Test procedures for traffic signal modules shall be based on the test method used under the Energy Star program of the Environmental Protection Agency for traffic signal modules, as in effect on the date of enactment of this paragraph.

"(12) Test procedures for medium base compact fluorescent lamps shall be based on the test methods used under the August 9, 2001 version of the Energy Star program of the Environmental Protection Agency and Department of Energy for compact fluorescent lamps. Covered products shall meet all test requirements for regulated parameters in section 325(bb). However, covered products may be marketed prior to completion of lamp life and lumen maintenance at 40% of rated life testing provided manufacturers document engineering predictions and analysis that support expected attainment of lumen maintenance at 40% rated life and lamp life time."; and

(2) by adding at the end the following:

"(f) ADDITIONAL CONSUMER AND COMMERCIAL PRODUCTS.—The Secretary shall within 24 months after the date of enactment of this subsection prescribe testing requirements for suspended ceiling fans, refrigerated bottled or canned beverage vending

machines, and commercial refrigerators, freezers and refrigerator-freezers. Such testing requirements shall be based on existing test procedures used in industry to the extent practical and reasonable. In the case of 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.".

(c) NEW STANDARDS.—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.—

"(1) INITIAL RULEMAKING.—

"(A) The Secretary shall, within 18 months after the date of enactment of this subsection, prescribe by notice and comment, definitions of standby mode and test procedures for the standby mode power use of battery chargers and external power supplies. In establishing these test procedures, the Secretary shall consider, among other factors, existing test procedures used for measuring energy consumption in standby mode and assess the current and projected future market for battery chargers and external power supplies. This assessment shall include estimates of the significance of potential energy savings from technical improvements to these products and suggested product classes for standards. Prior to the end of this time period, the Secretary shall hold a scoping workshop to discuss and receive comments on plans for developing energy conservation standards for standby mode energy use for these products.

"(B) The Secretary shall, within 3 years after the date of enactment of this subsection, issue a final rule that determines whether energy conservation standards shall be promulgated for battery chargers and external power supplies or classes thereof. For each product class, any such standards shall be set at the lowest level of standby energy use that—

"(i) meets the criteria of subsections (o), (p), (q), (r), (s) and (t); and

"(ii) will result in significant overall annual energy savings, considering both standby mode and other operating modes.

"(2) DESIGNATION OF ADDITIONAL COVERED PRODUCTS.—

"(A) Not later than 180 days after the date of enactment of this subsection, the Secretary shall publish for public comment and public hearing a notice to determine whether any non-covered products should be designated as covered products for the purpose of instituting a rulemaking under this section to determine whether an energy conservation standard restricting standby mode energy consumption, should be promulgated; except that any restriction on standby mode energy consumption shall be limited to major sources of such consumption.

"(B) In making the determinations pursuant to subparagraph (A) of whether to designate new covered products and institute rulemakings, the Secretary shall, among other relevant factors and in addition to the criteria in section 322(b), consider—

"(i) standby mode power consumption compared to overall product energy consumption; and

"(ii) the priority and energy savings potential of standards which may be promulgated under this subsection compared to other required rulemakings under this section and the available resources of the Department to conduct such rulemakings.

"(C) Not later than 1 year after the date of enactment of this subsection, the Secretary shall issue a determination of any new covered products for which he intends to institute rulemakings on standby mode pursuant to this section and he shall state the dates by which he intends to initiate those rulemakings.

"(3) REVIEW OF STANDBY ENERGY USE IN COVERED PRODUCTS.—In determining pursuant to section 323 whether test procedures and energy conservation standards pursuant to this section should be revised, the Secretary shall consider for covered products which are major sources of standby mode energy consumption whether to incorporate standby mode into such test procedures and energy conservation standards, taking into account, among other relevant factors, the criteria for non-covered products in subparagraph (B) of paragraph (2) of this subsection.

"(4) RULEMAKING.—

"(A) Any rulemaking instituted under this subsection or for covered products under this section which restricts standby mode power consumption shall be subject to the criteria and procedures for issuing energy conservation standards set forth in this section and the criteria set forth in subparagraph (B) of paragraph (2) of this subsection.

"(B) No standard can be proposed for new covered products or covered products in a standby mode unless the Secretary has promulgated applicable test procedures for each product pursuant to section 323.

"(C) The provisions of section 327 shall apply to new covered products which are subject to the rulemakings for standby mode after a final rule has been issued.

"(5) EFFECTIVE DATE.—Any standard promulgated under this subsection shall be applicable to products manufactured or imported 3 years after the date of promulgation.

"(6) VOLUNTARY PROGRAMS.—The Secretary and the Administrator shall collaborate and develop programs, including programs pursuant to section 324A (relating to Energy Star Programs) and other voluntary industry agreements or codes of conduct, which are designed to reduce standby mode energy use.

"(v) SUSPENDED CEILING FANS, VENDING MACHINES, AND COMMERCIAL

REFRIGERATORS, FREEZERS AND REFRIGERATOR-FREEZERS.—The Secretary shall within 36 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 suspended ceiling fans, refrigerated bottled or canned beverage vending machines, and commercial refrigerators, freezers and refrigerator-freezers. In establishing standards under this subsection, the Secretary shall use the criteria and procedures contained in subsections (l) and (m). Any standard prescribed under this subsection shall apply to products manufactured 3 years after the date of publication of a final rule establishing such standard.

"(w) ILLUMINATED EXIT SIGNS.—Illuminated exit signs manufactured on or after January 1, 2005 shall meet the Version 2.0 Energy Star Program performance requirements for illuminated exit signs prescribed by the Environmental Protection Agency.

"(x) TORCHIERES.—Torchieres manufactured on or after January 1, 2005 —

"(1) shall consume not more than 190 watts of power; and

"(2) shall not be capable of operating with lamps that total more than 190 watts.

"(y) DISTRIBUTION TRANSFORMERS.—The efficiency of low voltage dry-type transformers manufactured on or after January 1, 2005 shall be the Class I Efficiency Levels for distribution transformers specified in Table 4–2 of the 'Guide for Determining Energy Efficiency for Distribution Transformers' published by the National Electrical Manufacturers Association (NEMA TP–1–2002).

"(z) TRAFFIC SIGNAL MODULES.—Traffic signal modules manufactured on or after January 1, 2006 shall meet the performance requirements used under the Energy Star program of the Environmental Protection Agency for traffic signals, as in effect on the date of enactment of this paragraph, and shall be installed with compatible, electrically-connected signal control interface devices and conflict monitoring systems.

"(aa) UNIT HEATERS.— Unit heaters manufactured on or after the date that is three years after the date of enactment of the Energy Policy Act of 2003 shall be equipped with an intermittent ignition device and shall have either power venting or an

automatic flue damper.

"(bb) MEDIUM BASE COMPACT FLUORESCENT LAMPS.— Bare lamp and covered lamp (no reflector) medium base compact fluorescent lamps manufactured on or after January 1, 2005 shall meet the following requirements prescribed by the August 9, 2001 version of the Energy Star Program Requirements for CFLs, Energy Star Eligibility Criteria, Energy-Efficiency Specification issued by the Environmental Protection Agency and Department of Energy: minimum initial efficacy; lumen maintenance at 1000 hours; lumen maintenance at 40% of rated life; rapid cycle stress test; and lamp life. The Secretary may, by rule, establish requirements for color quality (CRI); power factor; operating frequency; and maximum allowable start time based on the requirements prescribed by the August 9, 2001 version of the Energy Star Program Requirements for CFLs. The Secretary may, by rule, revise these requirements or establish other requirements considering energy savings, cost effectiveness, and consumer satisfaction.

"(cc) EFFECTIVE DATE.— The provisions of section 327 shall apply —

"(1) to products for which standards are to be set pursuant to subsection (v) of this section on the date on which a final rule is issued by the Department of Energy, except that any state or local standards prescribed or enacted for any such product prior to the date on which such final rule is issued shall not be preempted until the standard set pursuant to subsection (v) for that product takes effect; and

"(2) to products for which standards are set in subsections (w) through (bb) of this section on the date of enactment of the Energy Policy Act of 2003, except that any state or local standards prescribed or enacted prior to the date of enactment of the Energy Policy Act of 2003 shall not be preempted until the standards set in subsections (w) through (bb) take effect.".

SEC. 622. ENERGY LABELING.

(a) RULEMAKING ON EFFECTIVENESS OF CONSUMER PRODUCT LABELING.—Paragraph (2) of section 324(a) of the Energy Policy and Conservation Act (42 U.S.C. 6294(a)(2)) is amended by adding at the end the following:

"(F) Not later than 3 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 energy efficiency and to consider changes to the labeling rules that would improve the effectiveness of consumer product labels. Such rulemaking shall be completed within 2 years after the date of enactment of this subparagraph.".

(b) RULEMAKING ON LABELING FOR ADDITIONAL PRODUCTS.—Section 324(a) of the Energy Policy and Conservation Act (42 U.S.C. 6294(a)) is further amended by adding at the end the following:

"(5) The Secretary or the Commission, as appropriate, may for covered products referred to in subsections (u) through (aa) of section 325, prescribe, by rule, pursuant to this section, labeling requirements for such products after a test procedure has been set pursuant to section 323. In the case of products to which TP-1 standards under section 325(y) apply, labeling requirements shall be based on the "Standard for the Labeling of Distribution Transformer Efficiency" prescribed by the National Electrical Manufacturers Association (NEMA TP-3) as in effect upon the date of enactment of this Act.".

SEC. 623. ENERGY STAR PROGRAM.

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

"**SEC. 324A. ENERGY STAR PROGRAM.**

"There is established at the Department of Energy and the Environmental Protection Agency a voluntary program to identify and promote energy-efficient products and buildings in order to reduce energy consumption, improve energy security, and reduce pollution through voluntary labeling of or other forms of communication about 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, including special outreach to small businesses;

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

"(4) solicit the comments of interested parties in establishing a new Energy Star product category, specifications, or criteria, or in revising a product category, and upon adoption of a new or revised product category, specifications, or criteria, publish a notice of any changes in product categories, specifications or criteria along with an explanation of such changes, and, where appropriate, responses to comments submitted by interested parties; and

"(5) unless waived or reduced by mutual agreement between the Administrator, the Secretary, and the affected parties, provide not less than 12 months lead time prior to implementation of changes in product categories, specifications, or criteria as may be adopted pursuant to this section.".

(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. 624. HVAC MAINTENANCE CONSUMER EDUCATION PROGRAM.

Section 337 of the Energy Policy and Conservation Act (42 U.S.C. 6307) is amended by adding at the end the following:

"(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, carry out a program to educate homeowners and small business owners concerning the energy savings resulting from properly conducted maintenance of air conditioning, heating, and ventilating systems. The Secretary shall carry out the program in a cost-shared

manner in cooperation with the Administrator of the Environmental Protection Agency and such other entities as the Secretary considers appropriate, including industry trade associations, industry members, and energy efficiency organizations.

"(d) SMALL BUSINESS EDUCATION AND ASSISTANCE.—The Administrator of the Small Business Administration, in consultation with the Secretary of Energy and the Administrator of the Environmental Protection Agency, shall develop and coordinate a Government-wide program, building on the existing Energy Star for Small Business Program, to assist small business to become more energy efficient, understand the cost savings obtainable through efficiencies, and identify financing options for energy efficiency upgrades. The Secretary and the Administrator shall make the program information available directly to small businesses and through other Federal agencies, including the Federal Emergency Management Program, and the Department of Agriculture.".

Subtitle D—Public Housing

SEC. 631. 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—

(a) 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

(b) 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. 632. 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—

(a) by inserting "or efficiency" after "energy conservation";

(b) by striking ", and except that" and inserting "; except that"; and

(c) by inserting before the semicolon 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. 633. 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 and indented paragraph beginning after subparagraph (B)(iii) (relating to solar energy systems)—

(1) by inserting "or paragraph (10)" before the first comma; 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 231(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. 634. PUBLIC HOUSING CAPITAL FUND.

Section 9 of the United States Housing Act of 1937 (42 U.S.C. 1437g) is amended—

(a) in subsection (d)(1)—

(1) in subparagraph (I), by striking “and” at the end;

(2) in subparagraph (J), by striking the period at the end and inserting a semicolon; and

(3) by adding at the end the following new subparagraphs:

“(K) 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; and

“(L) integrated utility management and capital planning to maximize energy conservation and efficiency measures.”; and

(b) in subsection (e)(2)(C)—

(1) by striking “The” and inserting the following:

“(i) IN GENERAL.—The”; and

(2) by adding at the end the following:

“(ii) THIRD PARTY CONTRACTS.—Contracts described in clause (i) may include contracts for equipment conversions to less costly utility sources, projects with resident-paid utilities, and adjustments to frozen base year consumption, including systems repaired to meet applicable building and safety codes and adjustments for occupancy rates increased

by rehabilitation.

"(iii) TERM OF CONTRACT.—The total term of a contract described in clause (i) shall not exceed 20 years to allow longer payback periods for retrofits, including windows, heating system replacements, wall insulation, site-based generations, advanced energy savings technologies, including renewable energy generation, and other such retrofits.".

SEC. 635. 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—

(a) by striking "financed with loans" and inserting "assisted";

(b) 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 mortgage restructuring and rental assistance sufficiency plans under such Act,"; and

(c) 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. 636. 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.".

SEC. 637. ENERGY-EFFICIENT APPLIANCES.

In purchasing appliances, a public housing agency shall purchase energy-efficient appliances that are Energy Star products or FEMP-designated products, as such terms are defined in section 553 of the National Energy Policy and Conservation Act (as amended by this Act), unless the purchase of energy-efficient appliances is not cost-effective to the agency.

SEC. 638. ENERGY EFFICIENCY STANDARDS.

Section 109 of the Cranston-Gonzalez National Affordable Housing Act (42 U.S.C. 12709) is amended—

(1) in subsection (a)—

(A) in paragraph (1)—

(i) by striking "1 year after the date of the enactment of the Energy Policy Act of 1992" and inserting "September 30, 2003";

(ii) in subparagraph (A), by striking "and" at the end;

(iii) in subparagraph (B), by striking the period at the end and inserting "; and"; and

(iv) by adding at the end the following:

"(C) rehabilitation and new construction of public and assisted housing funded by HOPE VI revitalization grants under section 24 of the United States Housing Act of 1937 (42 U.S.C.1437v), where such standards are determined to be cost effective by the Secretary of Housing and Urban Development."; and

(B) in paragraph (2), by striking "Council of American" and all that follows through "90.1–1989')" and inserting "2000 International Energy Conservation Code";

(2) in subsection (b)—

(A) by striking "1 year after the date of the enactment of the

Energy Policy Act of 1992" and inserting "September 30, 2003"; and

(B) by striking "CABO" and all that follows through "1989" and inserting "the 2000 International Energy Conservation Code"; and

(3) in subsection (c)—

(A) in the heading, by striking "MODEL ENERGY CODE" and inserting "INTERNATIONAL ENERGY CONSERVATION CODE"; and

(B) by striking "CABO" and all that follows through "1989" and inserting "the 2000 International Energy Conservation Code".

SEC. 639. ENERGY STRATEGY FOR HUD.

The Secretary of Housing and Urban Development shall develop and implement an integrated strategy to reduce utility expenses through cost-effective energy conservation and efficiency measures and energy efficient design and construction of public and assisted housing. The energy strategy shall include the development of energy reduction goals and incentives for public housing agencies. The Secretary shall submit a report to Congress, not later than one year after the date of the enactment of this Act, on the energy strategy and the actions taken by the Department of Housing and Urban Development to monitor the energy usage of public housing agencies and shall submit an update every two years thereafter on progress in implementing the strategy.

TITLE VII —TRANSPORTATION FUELS

Subtitle A—Alternative Fuel Programs

SEC. 701. USE OF ALTERNATIVE FUELS BY DUAL-FUELED VEHICLES.

Section 400AA(a)(3)(E) of the Energy Policy and Conservation Act (42 U.S.C. 6374(a)(3)(E)) is amended to read as follows:

"(E)(i) Dual fueled vehicles acquired pursuant to this section shall be operated on alternative fuels unless the Secretary determines that an agency qualifies for a waiver of such requirement for vehicles operated by the agency in a particular geographic area where—

"(I) the alternative fuel otherwise required to be used in the vehicle is not reasonably available to retail purchasers of the fuel, as certified to the Secretary by the head of the agency; or

"(II) the cost of the alternative fuel otherwise required to be used in the vehicle is unreasonably more expensive compared to gasoline, as certified to the Secretary by the head of the agency.

"(ii) The Secretary shall monitor compliance with this subparagraph by all such fleets and shall report annually to the Congress on the extent to which the requirements of this subparagraph are being achieved. The report shall include information on annual reductions achieved from the use of petroleum-based fuels and the problems, if any, encountered in acquiring alternative fuels.".

SEC. 702. FUEL USE CREDITS.

(a) IN GENERAL.— Section 312 of the Energy Policy Act of 1992 (42 U.S.C. 13220) is amended to read as follows:

"**SEC. 312. FUEL USE CREDITS.**

"(a) ALLOCATION.—

"(1) The Secretary shall allocate one credit under this section to a fleet or covered person for each qualifying volume of alternative fuel or biodiesel purchased for use in an on-road motor vehicle operated by the fleet that weighs more than 8,500 pounds gross vehicle weight rating.

"(2) No credits shall be allocated under this section for purchase of an alternative fuel or biodiesel that is required by Federal or State law.

"(3) A fleet or covered person seeking a credit under this section shall provide written documentation to the Secretary supporting the allocation of a credit to such fleet or covered person under this section.

"(b) USE.—At the request of a fleet or covered person allocated a credit under subsection (a), the Secretary shall, for the year in which the purchase of a qualifying volume is made, treat that purchase as the acquisition of one alternative fueled vehicle the fleet or covered person is required to acquire

under this title, title IV, or title V.

"(c) TREATMENT.—A credit provided to a fleet or covered person under this section shall be considered a credit under section 508.

"(d) ISSUANCE OF RULE.—Not later than 6 months after the date of enactment of this section, the Secretary shall issue a rule establishing procedures for the implementation of this section.

"(e) DEFINITIONS.—For the purposes of this section—

"(1) the term "biodiesel" means a diesel fuel substitute produced from non-petroleum renewable resources that meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 211 of the Clean Air Act; and

"(2) the term "qualifying volume" means—

"(A) in the case of biodiesel, when used as a component of fuel containing at least 20 percent biodiesel by volume, 450 gallons, or if the Secretary determines by rule that the average annual alternative fuel use in light duty vehicles by fleets and covered persons exceeds 450 gallons or gallon equivalents, the amount of such average annual alternative fuel use; or

"(B) in the case of an alternative fuel, the amount of such fuel determined by the Secretary to have an equivalent energy content to the amount of biodiesel defined as a qualifying volume pursuant to subparagraph (A)."

(b) TABLE OF CONTENTS AMENDMENT.—The table of contents of the Energy Policy Act of 1992 is amended by adding at the end of the items relating to title III the following new item:

"Sec. 312. Fuel use credits."

SEC. 703. NEIGHBORHOOD ELECTRIC VEHICLES.

Section 301 of the Energy Policy Act of 1992 (42 U.S.C. 13211) is amended—

(1) in paragraph (3), by striking "or a dual fueled vehicle" and inserting

", a dual fueled vehicle, or a neighborhood electric vehicle";

(2) by striking "and" at the end of paragraph (13);

(3) by striking the period at the end of paragraph (14) and inserting "; and"; and

(4) by adding at the end the following:

"(15) the term 'neighborhood electric vehicle' means a motor vehicle —

"(A) which meets the definition of a low-speed vehicle, as such term is defined in part 571 of title 49, Code of Federal Regulations;

"(B) which meets the definition of a zero-emission vehicle, as such term is defined in section 86.1702–99 of title 40, Code of Federal Regulations;

"(C) which meets the requirements of Federal Motor Vehicle Safety Standard No. 500; and

"(D) which has a top speed of not greater than 25 miles per hour.".

SEC. 704. CREDITS FOR MEDIUM AND HEAVY DUTY DEDICATED VEHICLES.

Section 508 of the Energy Policy Act of 1992 (42 U.S.C. 13258) is amended by adding at the end the following:

"(e) CREDIT FOR PURCHASE OF MEDIUM AND HEAVY DUTY DEDICATED VEHICLES.—

"(1) DEFINITIONS.—In this subsection:

"(A) The term 'medium duty dedicated vehicle' means a dedicated vehicle that has a gross vehicle weight rating of more than 8,500 pounds but not more than 14,000 pounds.

"(B) The term 'heavy duty dedicated vehicle' means a dedicated vehicle that has a gross vehicle weight rating of more than 14,000 pounds.

"(2) CREDITS FOR MEDIUM DUTY VEHICLES.— The Secretary shall issue 2 full credits to a fleet or covered person under this title, if the fleet or covered

person acquires a medium duty dedicated vehicle.

"(3) CREDITS FOR HEAVY DUTY VEHICLES.— The Secretary shall issue 3 full credits to a fleet or covered person under this title, if the fleet or covered person acquires a heavy duty dedicated vehicle.

"(4) USE OF CREDITS.—At the request of a fleet or covered person allocated a credit under this subsection, the Secretary shall, for the year in which the acquisition of the dedicated vehicle is made, treat that credit as the acquisition of 1 alternative fueled vehicle that the fleet or covered person is required to acquire under this title.".

SEC. 705. ALTERNATIVE FUEL INFRASTRUCTURE.

Section 508 of the Energy Policy Act of 1992 (42 U.S.C. 13258) is further amended by adding at the end the following:

"(f) CREDIT FOR INVESTMENT IN ALTERNATIVE FUEL INFRASTRUCTURE.—

"(1) DEFINITIONS.— In this subsection, the term 'qualifying infrastructure' means—

"(A) equipment required to refuel or recharge alternative fueled vehicles;

"(B) facilities or equipment required to maintain, repair, or operate alternative fueled vehicles;

"(C) such other activities the Secretary considers to constitute an appropriate expenditure in support of the operation, maintenance, or further widespread adoption of or utilization of alternative fueled vehicles.

"(2) ISSUANCE OF CREDITS.—The Secretary shall issue a credit to a fleet or covered person under this title for investment in qualifying infrastructure if the qualifying infrastructure is open to the general public during regular business hours.

"(3) AMOUNT.—For the purposes of credits under this subsection—

"(A) 1 credit shall be equal to a minimum investment of $25,000 in cash or equivalent expenditure, as determined by the Secretary; and

"(B) except in the case of a Federal or State fleet, no part of the investment may be provided by Federal or State funds.

"(4) USE OF CREDITS—At the request of a fleet or covered person allocated a credit under this subsection, the Secretary shall, for the year in which the investment is made, treat that credit as the acquisition of 1 alternative fueled vehicle that the fleet or covered person is required to acquire under this title.".

SEC. 706. INCREMENTAL COST ALLOCATION.

Section 303(c) of the Energy Policy Act of 1992 (42 U.S.C. 13212(c) is amended by striking "may" and inserting "shall".

SEC. 707. REVIEW OF ALTERNATIVE FUEL PROGRAMS.

(a) IN GENERAL.—Not later than 1 year after the date of enactment of this section, the Secretary shall complete a study to determine the effect that titles III, IV and V of the Energy Policy Act of 1992 (42 U.S.C. 13211 et seq.) have had on the development of alternative fueled vehicle technology, its availability in the market, and the cost of light duty motor vehicles that are alternative fueled vehicles.

(b) TOPICS.—As part of such study, the Secretary shall specifically identify—

(1) the number of alternative fueled vehicles acquired by fleets or covered persons required to acquire alternative fueled vehicles;

(2) the amount, by type, of alternative fuel actually used in alternative fueled vehicles acquired by fleets or covered persons;

(3) the amount of petroleum displaced by the use of alternative fuels in alternative fueled vehicles acquired by fleets or covered persons;

(4) the cost of compliance with vehicle acquisition requirements by fleets or covered persons; and

(5) the existence of obstacles preventing compliance with vehicle acquisition requirements and increased use of alternative fuel in alternative fueled vehicles acquired by fleets or covered persons.

(c) REPORT.—Upon completion of the study, the Secretary shall submit to the Congress a report that describes the results of the study conducted under this section

and includes any recommendations of the Secretary for legislative or administrative changes concerning the alternative fueled vehicle requirements under titles III, IV and V of the Energy Policy Act of 1992 (42 U.S.C. 13211 et seq.). Such study shall be updated on a regular basis as deemed necessary by the Secretary.

SEC. 708. HIGH OCCUPANCY VEHICLE EXCEPTION.

Notwithstanding section 102(a)(1) of title 23, United States Code, a State may permit a vehicle with fewer than 2 occupants to operate in high occupancy vehicle lanes if such vehicle is a dedicated vehicle (as defined in section 301 of the Energy Policy Act of 1992 (42 U.S.C. 13211)).

SEC. 709. ALTERNATIVE COMPLIANCE AND FLEXIBILITY.

(a) ALTERNATIVE COMPLIANCE.—Title V of the Energy Policy Act of 1992 is amended by adding at the end the following:

"SEC. 515. ALTERNATIVE COMPLIANCE.

"(a) APPLICATION FOR WAIVER.—Any covered person subject to the requirements of section 501 and any State subject to the requirement of section 507(o) may petition the Secretary for a waiver of the applicable requirements of section 501 or 507(o).

"(b) GRANT OF WAIVER.—The Secretary may grant a waiver of the requirements of section 501 or 507(o) upon a showing that the fleet owned, operated, leased, or otherwise controlled by the State or covered person—

"(1) will achieve a reduction in its annual consumption of petroleum fuels equal to the reduction in consumption of petroleum that would result from compliance with section 501 or 507(o); and

"(2) is in compliance with all applicable vehicle emission standards established by the Administrator under the Clean Air Act.

"(c) REVOCATION OF WAIVER.—The Secretary shall revoke any waiver granted under this section if the State or covered person fails to comply with the requirements of subsection (b).".

(b) CREDIT FOR HYBRID VEHICLES, DEDICATED ALTERNATIVE FUEL VEHICLES, AND INFRASTRUCTURE.—Section 507 of the Energy Policy Act of 1992 (42 U.S.C.

13258) (as amended by section 705) is amended by adding at the end the following:

"(r) CREDITS FOR NEW QUALIFIED HYBRID MOTOR VEHICLES.—

"(1) DEFINITIONS.—In this subsection:

"(A) 2000 MODEL YEAR CITY FUEL EFFICIENCY.—The term '2000 model year city fuel efficiency', with respect to a motor vehicle, means fuel efficiency 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 efficiency 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 to 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 efficiency 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
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 to 8,500 lbs ..... 12.0 mpg.

"(B) ADMINISTRATOR.—The term 'Administrator' means the Administrator of the Environmental Protection Agency.

"(C) ENERGY STORAGE DEVICE.—The term 'energy storage device' means an onboard rechargeable energy storage system or similar storage device.

"(D) FUEL EFFICIENCY.—The term 'fuel efficiency' means the percentage increased fuel efficiency specified in table 1 in paragraph (2)(C) over the average 2000 model year city fuel efficiency of vehicles in the same weight class.

"(E) MAXIMUM AVAILABLE POWER.—The term 'maximum available power', with respect to a new qualified hybrid motor vehicle that is a passenger vehicle or light truck, means the quotient obtained by dividing—

"(i) the maximum power available from the electrical storage device of the new qualified hybrid motor vehicle, during a standard 10-second pulse power or equivalent test; by

"(ii) the sum of—

"(I) the maximum power described in clause (i); and

"(II) the net power of the internal combustion or heat engine, as determined in accordance with standards established by the Society of Automobile Engineers.

"(F) MOTOR VEHICLE.—The term 'motor vehicle' has the meaning given the term in section 216 of the Clean Air Act (42 U.S.C. 7550).

"(G) NEW QUALIFIED HYBRID MOTOR VEHICLE.—The term 'new qualified hybrid motor vehicle' means a motor vehicle that—

"(i) draws propulsion energy from both—

"(I) an internal combustion engine (or heat engine that uses combustible fuel); and

"(II) an energy storage device;

"(ii) in the case of a passenger automobile or light truck—

"(I) in the case of a 2001 or later model vehicle, receives a certificate of conformity under the Clean Air Act (42 U.S.C. 7401 et seq.) and produces emissions at a level that is at or below the standard established by a qualifying California standard described in section 243(e)(2) of the Clean Air Act (42 U.S.C. 7583(e)(2)) for that make and model year; and

"(II) in the case of a 2004 or later model vehicle, is certified by the Administrator as producing emissions at a level that is at or below the level established for Bin 5 vehicles in the Tier 2 regulations promulgated by the Administrator under section 202(i) of the Clean Air Act (42 U.S.C. 7521(i)) for that make and model year vehicle; and

"(iii) employs a vehicle braking system that recovers waste energy to charge an energy storage device.

"(H) VEHICLE INERTIA WEIGHT CLASS.— The term 'vehicle inertia weight class' has the meaning given the term in regulations promulgated by the Administrator for purposes of the administration of title II of the Clean Air Act (42 U.S.C. 7521 et seq.).

"(2) ALLOCATION.—

"(A) IN GENERAL.—The Secretary shall allocate a partial credit

to a fleet or covered person under this title if the fleet or person acquires a new qualified hybrid motor vehicle that is eligible to receive a credit under each of the tables in subparagraph (C).

"(B) AMOUNT.—The amount of a partial credit allocated under subparagraph (A) for a vehicle described in that subparagraph shall be equal to the sum of—

"(i) the partial credits determined under table 1 in subparagraph (C); and

"(ii) the partial credits determined under table 2 in subparagraph (C).

"(C) TABLES.—The tables referred to in subparagraphs (A) and (B) are as follows:

"Table 1

''Partial credit for increased fuel efficiency:	**Amount of credit:**
At least 125% but less than 150% of 2000 model year city fuel efficiency	0.14
At least 150% but less than 175% of 2000 model year city fuel efficiency	0.21
At least 175% but less than 200% of 2000 model year city fuel efficiency	0.28
At least 200% but less than 225% of 2000 model year city fuel efficiency	0.35
At least 225% but less than 250% of 2000 model year city fuel efficiency	0.50.

"Table 2

"Partial credit for 'Maximum Available Power':	**Amount of credit:**
At least 5% but less than 10%	0.125
At least 10% but less than 20%	0.250
At least 20% but less than 30%	0.375

At least 30% or more ..... 0.500.

"(D) USE OF CREDITS.—At the request of a fleet or covered person allocated a credit under this subsection, the Secretary shall, for the year in which the acquisition of the qualified hybrid motor vehicle is made, treat that credit as the acquisition of 1 alternative fueled vehicle that the fleet or covered person is required to acquire under this title.

"(3) REGULATIONS.—The Secretary shall promulgate regulations under which any Federal fleet that acquires a new qualified hybrid motor vehicle will receive partial credits determined under the tables contained in paragraph (2)(C) for purposes of meeting the requirements of section 303.

"(s) CREDIT FOR SUBSTANTIAL CONTRIBUTION TOWARDS USE OF DEDICATED VEHICLES IN NONCOVERED FLEETS.—

"(1) DEFINITIONS.—In this subsection:

"(A) DEDICATED VEHICLE.—The term 'dedicated vehicle' includes—

"(i) a light, medium, or heavy duty vehicle; and

"(ii) a neighborhood electric vehicle.

"(B) MEDIUM OR HEAVY DUTY VEHICLE.—The term 'medium or heavy duty vehicle' includes a vehicle that—

"(i) operates solely on alternative fuel; and

"(ii)(I) in the case of a medium duty vehicle, has a gross vehicle weight rating of more than 8,500 pounds but not more than 14,000 pounds; or

"(II) in the case of a heavy duty vehicle, has a gross vehicle weight rating of more than 14,000 pounds.

"(C) SUBSTANTIAL CONTRIBUTION.—The term 'substantial contribution' (equal to 1 full credit) means not less than $15,000 in cash or in kind services, as determined by the Secretary.

"(2) ISSUANCE OF CREDITS.—The Secretary shall issue a credit to a fleet or covered person under this title if the fleet or person makes a substantial

contribution toward the acquisition and use of dedicated vehicles by a person that owns, operates, leases, or otherwise controls a fleet that is not covered by this title.

"(3) MULTIPLE CREDITS FOR MEDIUM AND HEAVY DUTY DEDICATED VEHICLES.—The Secretary shall issue 2 full credits to a fleet or covered person under this title if the fleet or person acquires a medium or heavy duty dedicated vehicle.

"(4) USE OF CREDITS.—At the request of a fleet or covered person allocated a credit under this subsection, the Secretary shall, for the year in which the acquisition of the dedicated vehicle is made, treat that credit as the acquisition of 1 alternative fueled vehicle that the fleet or covered person is required to acquire under this title.

"(5) LIMITATION.—Per vehicle credits acquired under this subsection shall not exceed the per vehicle credits allowed under this section to a fleet for qualifying vehicles in each of the weight categories (light, medium, or heavy duty).

"(t) CREDIT FOR SUBSTANTIAL INVESTMENT IN ALTERNATIVE FUEL INFRASTRUCTURE.—

"(1) DEFINITIONS.—In this section, the term 'qualifying infrastructure' means—

"(A) equipment required to refuel or recharge alternative fueled vehicles;

"(B) facilities or equipment required to maintain, repair, or operate alternative fueled vehicles;

"(C) training programs, educational materials, or other activities necessary to provide information regarding the operation, maintenance, or benefits associated with alternative fueled vehicles; and

"(D) such other activities the Secretary considers to constitute an appropriate expenditure in support of the operation, maintenance, or further widespread adoption of or utilization of alternative fueled

vehicles.

"(2) ISSUANCE OF CREDITS.—The Secretary shall issue a credit to a fleet or covered person under this title for investment in qualifying infrastructure if the qualifying infrastructure is open to the general public during regular business hours.

"(3) AMOUNT.—For the purposes of credits under this subsection—

"(A) 1 credit shall be equal to a minimum investment of $25,000 in cash or in kind services, as determined by the Secretary; and

"(B) except in the case of a Federal or State fleet, no part of the investment may be provided by Federal or State funds.

"(4) USE OF CREDITS.—At the request of a fleet or covered person allocated a credit under this subsection, the Secretary shall, for the year in which the investment is made, treat that credit as the acquisition of 1 alternative fueled vehicle that the fleet or covered person is required to acquire under this title.".

(c) LEASE CONDENSATE FUELS.—Section 301 of the Energy Policy Act of 1992 (42 U.S.C. 13211) is amended —

(1) in paragraph (2), by inserting "mixtures containing 50 percent or more by volume of lease condensate or fuels extracted from lease condensate; " after "liquified petroleum gas; ";

(2) in paragraph (15), by inserting "mixtures containing 50 percent or more by volume of lease condensate or fuels extracted from lease condensate; " after "liquified petroleum gas; "; and

(3) by adding at the end the following:

"(16) the term 'lease condensate' means a mixture, primarily of pentanes and heavier hydrocarbons, which is recovered as a liquid from natural gas in lease separation facilities.".

Subtitle B—Automobile Fuel Economy

SEC. 711. AUTOMOBILE FUEL ECONOMY STANDARDS.

(a) TITLE 49 AMENDMENT.—Section 32902(f) of title 49, United States Code, is

amended to read as follows:

"(f) CONSIDERATIONS.—When deciding maximum feasible average fuel economy under this section, the Secretary of Transportation shall consider the following matters:

"(1) technological feasibility;

"(2) economic practicability;

"(3) the effect of other motor vehicle standards of the Government on fuel economy;

"(4) the need of the United States to conserve energy;

"(5) the effects of fuel economy standards on motor vehicle and passenger safety; and

"(6) the effects of compliance with average fuel economy standards on levels of employment in the United States.".

(b) CLARIFICATION OF AUTHORITY.—Section 32902(b) of title 49, United States Code, is amended by inserting before the period at the end the following: "or such other number as the Secretary prescribes under subsection (c)".

(c) ENVIRONMENTAL ASSESSMENT.—When issuing final regulations setting forth increased average fuel economy standards under section 32902(a) or section 32902(c) of title 49, United States Code, the Secretary of Transportation shall also issue an environmental assessment of the effects of the increased standards on the environment under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

(d) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there are authorized to be appropriated to the Secretary of Transportation $5,000,000 for each of fiscal years 2004 through 2008.

SEC. 712. DUAL-FUELED AUTOMOBILES.

(a) MANUFACTURING INCENTIVES.—Section 32905 of title 49, United States Code, is amended —

(1) in subsections (b) and (d), by striking "1993–2004" and inserting "1993–2008";

(2) in subsection (f), by striking "2001" and inserting "2005".

(3) in subsection (f)(1), by striking "2004" and inserting "2008";

(4) in subsection (g), by striking "September 30, 2000" and inserting "September 30, 2004".

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

(1) in subparagraph (A), by striking "the model years 1993–2004" and inserting "model years 1993–2008"; and

(2) in subparagraph (B), by striking "the model years 2005–2008" and inserting "model years 2009–2012".

SEC. 713. FEDERAL FLEET FUEL ECONOMY.

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 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. 714. RAILROAD EFFICIENCY.

(a) ESTABLISHMENT.—The Secretary of Energy, in cooperation with the Secretary of Transportation and the Administrator of the Environmental Protection Agency, shall establish a cost-shared, public-private research partnership to develop and demonstrate railroad locomotive technologies that increase fuel economy, reduce emissions, and lower costs of operation. Such partnership shall involve the Federal Government, railroad carriers, locomotive manufacturers and equipment suppliers, and the Association of American Railroads.

(b) AUTHORIZATION OF APPROPRIATIONS.— For the purposes of this section, there are authorized to be appropriated to the Secretary of Energy $25,000,000 for fiscal year 2004, $35,000,000 for fiscal year 2005, and $50,000,000 for fiscal year 2006.

SEC. 715. REDUCTION OF ENGINE IDLING IN HEAVY-DUTY VEHICLES.

(a) IDENTIFICATION.—Not later than 180 days after the date of enactment of this section, the Secretary of Energy, in consultation with the Secretary of Transportation and the Administrator of the Environmental Protection Agency, shall commence a study to analyze the potential fuel savings and emissions reductions resulting from use of idling reduction technologies as they are applied to heavy-duty vehicles. Upon completion of the study, the Secretary of Energy shall, by rule, certify those idling reduction technologies with the greatest economic or technical feasibility and the greatest potential for fuel savings and emissions reductions, and publish a list of such

certified technologies in the Federal Register.

(b) VEHICLE WEIGHT EXEMPTION.—Section 127(a) of Title 23, United States Code, is amended by adding at the end the following:

"In order to promote reduction of fuel use and emissions due to engine idling, the maximum gross vehicle weight limit and the axle weight limit for any motor vehicle equipped with an idling reduction technology certified by the U.S. Department of Energy will be increased by an amount necessary to compensate for the additional weight of the idling reduction system, provided that the weight increase shall be no greater than 400 pounds."

(c) DEFINITIONS.—For the purposes of this section:

(1) The term "idling reduction technology" means a device or system of devices utilized to reduce long-duration idling of a vehicle.

(2) The term "heavy-duty vehicle" means a vehicle that has a gross vehicle weight rating greater than 8,500 pounds and is powered by a diesel engine.

(3) The term "long-duration idling" means the operation of a main drive engine, for a period greater than 30 consecutive minutes, where the main drive engine is not engaged in gear. Such term does not apply to routine stoppages associated with traffic movement or congestion.

TITLE VIII—HYDROGEN

Subtitle A—Basic Research Programs

SEC. 801. SHORT TITLE.

This subtitle may be cited as the "George E. Brown, Jr. and Robert S. Walker Hydrogen Future Act of 2003".

SEC. 802. MATSUNAGA ACT AMENDMENT.

The Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 (42 U.S.C. 12401 et seq.) is amended by striking sections 102 through 109 and inserting the following:

"**SEC. 102. DEFINITIONS.**

In this Act —

"(a) the term 'advisory committee' means the Hydrogen and Fuel Cell Technical Advisory Committee established under section 107.

"(b) the term 'Department' means the Department of Energy.

"(c) the term 'fuel cell' means a device that directly converts the chemical energy of a fuel into electricity by an electrochemical process.

"(d) the term 'infrastructure' means the equipment, systems, or facilities used to produce, distribute, deliver, or store hydrogen.

"(e) the term 'Secretary' means the Secretary of Energy.

"SEC. 103. HYDROGEN RESEARCH AND DEVELOPMENT.

(a) IN GENERAL.— The Secretary shall conduct a research and development program on technologies related to the production, distribution, storage, and use of hydrogen energy, fuel cells, and related infrastructure.

(b) GOAL.— The goal of such program shall be to enable the safe, economic, and environmentally sound use of hydrogen energy, fuel cells, and related infrastructure for transportation, commercial, industrial, residential, and electric power generation applications.

(c) FOCUS.— In carrying out activities under this section, the Secretary shall focus on critical technical issues including, but not limited to —

"(1) the production of hydrogen from diverse energy sources, with emphasis on cost-effective production from renewable energy sources;

"(2) the delivery of hydrogen, including safe delivery in fueling stations and use of existing hydrogen pipelines;

"(3) the storage of hydrogen, including storage of hydrogen in surface transportation;

"(4) fuel cell technologies for transportation, stationary and portable applications, with emphasis on cost-reduction of fuel cell stacks; and

"(5) the use of hydrogen energy and fuel cells, including use

in—

"(A) isolated villages, islands, and areas in which other energy sources are not available or are very expensive; and

"(B) foreign markets, particularly where an energy infrastructure is not well developed.

"(d) CODES AND STANDARDS.— The Secretary shall facilitate the development of domestic and international codes and standards and seek to resolve other critical regulatory and technical barriers preventing the introduction of hydrogen energy and fuel cells into the marketplace.

"(e) SOLICITATION.— The Secretary shall carry out the research and development activities authorized under this section through solicitation of proposals, and evaluation using competitive merit review.

"(f) COST SHARING.— The Secretary shall require a commitment from non-Federal sources of at least 20 percent of the cost of proposed research and development projects. The Secretary may reduce or eliminate the cost sharing requirement —

"(1) if the Secretary determines that the research and development is of a basic or fundamental nature, or

"(2) for technical analyses, outreach activities, and educational programs that the Secretary does not expect to result in a marketable product.

"SEC. 104. DEMONSTRATION PROGRAMS.

"(a) REQUIREMENT.— In conjunction with activities conducted under section 103, the Secretary shall conduct demonstrations of hydrogen energy and fuel cell technologies in order to evaluate the commercial potential of such technologies.

"(b) SOLICITATION.— The Secretary shall carry out the demonstrations authorized under this section through solicitation of proposals, and evaluation using competitive merit review.

"(c) COST SHARING.— The Secretary shall require a commitment from

non-Federal sources of at least 50 percent of the costs directly relating to a demonstration project under this section. The Secretary may reduce such non-Federal requirement if the Secretary determines that the reduction is appropriate considering the technological risks involved in the project.

"SEC. 105. TECHNOLOGY TRANSFER.

"The Secretary shall conduct programs to —

"(a) transfer critical hydrogen energy and fuel cell technologies to the private sector in order to promote wider understanding of such technologies and wider use of research progress under this Act;

"(b) to accelerate wider application of hydrogen energy and fuel cell technologies in foreign countries in order to increase the global market for the technologies and foster global development without harmful environmental effects;

"(c) foster the exchange of generic, nonproprietary information and technology developed pursuant to this Act, among industry, academia, and the Federal agencies; and

"(d) inventory and assess the technical and commercial viability of technologies related to production, distribution, storage, and use of hydrogen energy and fuel cells.

"SEC. 106. COORDINATION AND CONSULTATION.

"The Secretary shall have overall management responsibility for carrying out programs under this Act. In carrying out such programs, the Secretary—

"(a) shall establish a central point for the coordination of all hydrogen energy and fuel cell research, development, and demonstration activities of the Department;

"(b) in carrying out the Secretary's authorities pursuant to this Act, shall consult with other Federal agencies as appropriate, and may obtain the assistance of any Federal agency, on a reimbursable basis or otherwise and with the consent of such agency;

"(c) shall attempt to ensure that activities under this Act do not unnecessarily duplicate any available research and development results or displace or compete with privately funded hydrogen and fuel cell energy activities.

"SEC. 107. ADVISORY COMMITTEE.

"(a) ESTABLISHMENT.— There is hereby established the Hydrogen and Fuel Cell Technical Advisory Committee, to advise the Secretary on the programs under this Act.

"(b) MEMBERSHIP.— The advisory committee shall be comprised of not fewer than 12 nor more than 25 members appointed by the Secretary based on their technical and other qualifications from domestic industry, automakers, universities, professional societies, Federal laboratories, financial institutions, and environmental and other organizations as the Secretary deems appropriate. The advisory committee shall have a chairperson, who shall be elected by the members from among their number.

"(c) TERMS.— Members of the advisory committee shall be appointed for terms of 3 years, with each term to begin not later than 3 months after the date of enactment of the Energy Policy Act of 2003, except that one-third of the members first appointed shall serve for 1 year, and one-third of the members first appointed shall serve for 2 years, as designated by the Secretary at the time of appointment.

"(d) REVIEW.— The advisory committee shall review and make any necessary recommendations to the Secretary on —

"(1) implementation and conduct of programs under this Act;

"(2) economic, technological, and environmental consequences of the deployment of technologies related to production, distribution, storage, and use of hydrogen energy, and fuel cells;

"(3) means for resolving barriers to implementing hydrogen and fuel cell technologies; and

"(4) the coordination plan and any updates thereto prepared by

the Secretary pursuant to section 108.

"(e) RESPONSE.— The Secretary shall consider any recommendations made by the advisory committee, and shall provide a response to the advisory committee within 30 days after receipt of such recommendations. Such response shall either describe the implementation of the advisory committee's recommendations or provide an explanation of the reasons that any such recommendations will not be implemented.

"(f) SUPPORT.— The Secretary shall provide such staff, funds and other support as may be necessary to enable the advisory committee to carry out its functions. In carrying out activities pursuant to this section, the advisory committee may also obtain the assistance of any Federal agency, on a reimbursable basis or otherwise and with the consent of such agency.

"SEC. 108. COORDINATION PLAN.

"(a) PLAN.—The Secretary, in consultation with other Federal agencies, shall prepare and maintain on an ongoing basis a comprehensive plan for activities under this Act.

"(b) DEVELOPMENT.— In developing such plan, the Secretary shall—

"(1) consider the guidance of the National Hydrogen Energy Roadmap published by the Department in November 2002 and any updates thereto;

"(2) consult with the advisory committee;

"(3) consult with interested parties from domestic industry, automakers, universities, professional societies, Federal laboratories, financial institutions, and environmental and other organizations as the Secretary deems appropriate.

"(c) CONTENTS.— At a minimum, the plan shall provide —

"(1) an assessment of the effectiveness of the programs authorized under this Act, including a summary of recommendations of the advisory committee for improvements in such programs;

"(2) a description of proposed research, development, and

demonstration activities planned by the Department for the next five years;

"(3) a description of the role Federal laboratories, institutions of higher education, small businesses, and other private sector firms are expected to play in such programs;

"(4) cost and performance milestones that will be used to evaluate the programs for the next five years; and

"(5) any significant technical, regulatory, and other hurdles that stand in the way of achieving such cost and performance milestones, and how the programs will address those hurdles; and

(6) to the extent practicable, an analysis of Federal, State, local, and private sector hydrogen research, development, and demonstration activities to identify areas for increased intergovernmental and private-public sector collaboration.

(d) REPORT.— Not later than January 1, 2005, and biennially thereafter, the Secretary shall transmit to Congress the comprehensive plan developed for the programs authorized under this Act, or any updates thereto."

"SEC. 109. AUTHORIZATION OF APPROPRIATIONS.

"There are authorized to be appropriated to carry out the purposes of this Act —

"(1) such sums as may be necessary for fiscal years 1992 through 2003;

"(2) $105,000,000 for fiscal year 2004;

"(3) $150,000,000 for fiscal year 2005;

"(4) $175,000,000 for fiscal year 2006;

"(5) $200,000,000 for fiscal year 2007; and

"(6) $225,000,000 for fiscal year 2008.".

SEC. 803. HYDROGEN TRANSPORTATION AND FUEL INITIATIVE.

(a) VEHICLE TECHNOLOGIES.— The Secretary shall carry out a research, development, demonstration, and commercial application program on advanced

hydrogen-powered vehicle technologies. Such program shall address—

(1) engine and emission control systems;

(2) energy storage, electric propulsion, and hybrid systems;

(3) automotive materials;

(4) hydrogen-carrier fuels; and

(5) other advanced vehicle technologies.

(b) HYDROGEN FUEL INITIATIVE.— In coordination with the program authorized in subsection (a), the Secretary of Energy, in partnership with the private sector, shall conduct a research, development, demonstration and commercial application program designed to enable the rapid and coordinated introduction of hydrogen-fueled vehicles and associated infrastructure into commerce. Such program shall address—

(1) production of hydrogen from diverse energy resources, including—

(A) renewable energy resources;

(B) fossil fuels, in conjunction with carbon capture and sequestration;

(C) hydrogen-carrier fuels; and

(D) nuclear energy;

(2) delivery of hydrogen or hydrogen-carrier fuels, including—

(A) transmission by pipeline and other distribution methods; and

(B) safe, convenient, and economic refueling of vehicles, either at central refueling stations or through distributed on-site generation;

(3) storage of hydrogen or hydrogen-carrier fuels, including development of materials for safe and economic storage in gaseous, liquid or solid forms at refueling facilities or onboard vehicles; and

(4) development of advanced vehicle technologies, such as efficient fuel cells and direct hydrogen combustion engines, and related component technologies such as advanced materials and control systems; and

(5) development of necessary codes, standards, and safety practices to accompany the production, distribution, storage and use of hydrogen or hydrogen-carrier fuels in transportation.

(c) MATSUNAGA ACT. —In carrying out programs and projects under subsections (a) and (b), the Secretary shall ensure that such programs and projects are consistent with, and do not unnecessarily duplicate, activities carried out under the programs authorized under the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 (42 U.S.C. 12401 et seq.).

(d) ADVISORY COMMITTEE.—The Hydrogen and Fuel Cell Technical Advisory Committee authorized under section 107 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 (42 U.S.C. 12408), as amended in this title, shall also advise the Secretary on the programs and activities carried out under this section.

(e) SOLICITATION.— The Secretary shall carry out the programs authorized under this section through solicitation of proposals, and evaluation using competitive merit review.

(f) COST SHARING.— The Secretary shall require a commitment from non-Federal sources of at least 50 percent of the costs directly relating to a demonstration project under this section. The Secretary may reduce such non-Federal requirement if the Secretary determines that the reduction is appropriate considering the technological risks involved in the project.

(g) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there are authorized to be appropriated to the Secretary—

(1) for activities pursuant to subsection (a), to remain available until expended,—

(A) $100,000,000 for each of fiscal years 2004 and 2005;

(B) $110,000,000 for each of fiscal years 2006 and 2007; and

(C) $120,000,000 for fiscal year 2008; and

(2) for activities pursuant to subsection (b), to remain available until expended —

(A) $125,000,000 for fiscal year 2004;

(B) $150,000,000 for fiscal year 2005;

(C) $175,000,000 for fiscal year 2006;

(D) $200,000,000 for each of fiscal years 2007 and 2008.

SEC. 804. INTERAGENCY TASK FORCE AND COORDINATION PLAN.

(a) ESTABLISHMENT.—Not later than 120 days after the date of enactment of this Act, the Secretary shall establish an interagency task force to coordinate Federal hydrogen and fuel cell energy activities.

(b) COMPOSITION.—The task force shall be chaired by a designee of the Secretary, and shall include representatives of —

(1) the Office of Science and Technology Policy;

(2) the Department of Transportation;

(3) the Department of Defense;

(4) the Department of Commerce (including the National Institute for Standards and Technology);

(5) the Environmental Protection Agency

(6) the National Aeronautics and Space Administration;

(7) the Department of State; and

(8) other Federal agencies as the Director considers appropriate.

(c) COORDINATION PLAN.—The task force shall prepare a comprehensive coordination plan for Federal hydrogen and fuel cell energy activities, which shall include a summary of such activities.

(d) REPORT.—Not later than one year after it is established, the task force shall report to Congress on the coordination plan in subsection (c) and on the interagency coordination of Federal hydrogen and fuel cell energy activities.

SEC. 805. REVIEW BY THE NATIONAL ACADEMIES.

Not later than two years after the date of enactment of this Act, and every four years thereafter, the Secretary shall enter into a contract with the National Academies. Such contract shall require the National Academies to perform a review of the progress made through Federal hydrogen and fuel cell energy programs and activities, including the need for modified or additional programs, and to report to the Congress on the results of such review. There are authorized to be appropriated to the Secretary such sums as may be necessary to carry out the requirements of this section.

Subtitle B — Demonstration Programs

SEC. 811. DEFINITIONS.

For the purposes of this subtitle and subtitle C—

(a) the term "fuel cell" means a device that directly converts the chemical energy of a fuel into electricity by an electrochemical process.

(b) the term "hydrogen-carrier fuel" means any hydrocarbon fuel that is capable of being thermochemically processed or otherwise reformed to produce hydrogen;

(c) the term "infrastructure" means the equipment, systems, or facilities used to produce, distribute, deliver, or store hydrogen or hydrogen-carrier fuels.

(d) the term "institution of higher education" has the meaning given that term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

(b) the term "Secretary" means the Secretary of Energy;

SEC. 812. HYDROGEN VEHICLE DEMONSTRATION PROGRAM.

(a) IN GENERAL.—The Secretary shall establish a program for demonstration and commercial application of hydrogen-powered vehicles and associated hydrogen fueling infrastructure in a variety of transportation-related applications, including—

(1) fuel cell vehicles in light-duty vehicle fleets;

(2) heavy-duty fuel cell on-road and off-road vehicles, including mass transit buses;

(3) use of hydrogen-powered vehicles and hydrogen fueling infrastructure (including multiple hydrogen refueling stations) along major transportation routes or in entire regions; and

(4) other similar projects as the Secretary may deem necessary to contribute to the rapid demonstration and deployment of hydrogen-based technologies in widespread use for transportation.

(b) ELIGIBILITY.—Federal, state, tribal, and local governments, academic and other non-profit organizations, private entities, and consortia of these entities shall be eligible for these projects.

(c) SELECTION.—In selecting projects under this section, the Secretary shall—

(1) consult with Federal, State, local and private fleet managers to identify potential projects where hydrogen-powered vehicles may be placed into service;

(2) identify not less than 10 sites at which to carry out projects under this program, 2 of which must be based at Federal facilities;

(3) select projects based on the following factors—

(A) geographic diversity;

(B) a diverse set of operating environments, duty cycles, and likely weather conditions;

(C) the interest and capability of the participating agencies, entities, or fleets;

(D) the availability and appropriateness of potential sites for refueling infrastructure and for maintenance of the vehicle fleet;

(E) the existence of traffic congestion in the area expected to be served by the hydrogen-powered vehicles;

(F) proximity to non-attainment areas as defined in section 171 of the Clean Air Act (42 U.S.C. 7501); and

(G) such other criteria as the Secretary determines to be appropriate in order to carry out the purposes of the program.

(d) INFRASTRUCTURE.—In funding projects under this section, the Secretary shall also support the installation of refueling infrastructure at sites necessary for success of the project, giving preference to those infrastructure projects that include co-production of both—

(1) hydrogen for use in transportation; and

(2) electricity that can be consumed on site.

(e) OPERATION AND MAINTENANCE PERIOD.—Vehicles purchased for projects under this section shall be operated and maintained by the participating agencies or entities in regular duty cycles for a period of not less than 12 months.

(f) TRAINING AND TECHNICAL SUPPORT.—In funding proposals under this section, the Secretary shall also provide funding for training and technical support as

may be necessary to assure the success of such projects, including training and technical support in—

(1) the installation, operation, and maintenance of fueling infrastructure;

(2) the operation and maintenance of fuel cell vehicles; and

(3) data collection necessary to monitor project performance.

(g) COST-SHARING.—Except as otherwise provided, the Secretary shall require a commitment from non-Federal sources of at least 50 percent of the costs directly relating to a demonstration project under this section. The Secretary may reduce such non-Federal requirement if the Secretary determines that the reduction is appropriate considering the technological risks involved in the project.

(h) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there are authorized to be appropriated to the Secretary $50,000,000 for each of fiscal years 2006 through 2010, to remain available until expended.

SEC. 813. STATIONARY FUEL CELL DEMONSTRATION PROGRAM.

(a) IN GENERAL.— The Secretary shall establish a program for demonstration and commercial application of hydrogen fuel cells in stationary applications, including—

(1) fuel cells for use in residential and commercial buildings;

(2) portable fuel cells, including auxiliary power units in trucks;

(3) small form and micro fuel cells of 20 watts or less;

(4) distributed generation systems with fuel cells using renewable energy; and

(5) other similar projects as the Secretary may deem necessary to contribute to the rapid demonstration and deployment of hydrogen-based technologies in widespread use.

(b) COMPETITIVE EVALUATION.— Proposals submitted in response to solicitations issued pursuant to this section shall be evaluated on a competitive basis using peer review. The Secretary is not required to make an award under this section in the absence of a meritorious proposal.

(c) PREFERENCE.—The Secretary shall give preference, in making an award

under this section, to proposals that—

(1) are submitted jointly from consortia that include two or more participants from institutions of higher education, industry, State, tribal, or local governments, and Federal laboratories; and

(2) that reflect proven experience and capability with technologies relevant to the projects proposed.

(d) TRAINING AND TECHNICAL SUPPORT.— In funding proposals under this section, the Secretary shall also provide funding for training and technical support as may be necessary to assure the success of such projects, including training and technical support in the installation, operation, and maintenance of fuel cells and the collection of data to monitor project performance.

(e) COST-SHARING.—Except as otherwise provided, the Secretary shall require a commitment from non-Federal sources of at least 50 percent of the costs directly relating to a demonstration project under this section. The Secretary may reduce such non-Federal requirement if the Secretary determines that the reduction is appropriate considering the technological risks involved in the project.

(f) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there are authorized to be appropriated to the Secretary $50,000,000 for each of fiscal years 2006 through 2010, to remain available until expended.

SEC. 814. HYDROGEN DEMONSTRATION PROGRAMS IN NATIONAL PARKS.

(a) STUDY.—Not later than 1 year after the date of enactment of this section, the Secretary of the Interior and the Secretary of Energy shall jointly study and report to Congress on—

(1) the energy needs and uses at National Parks; and

(2) the potential for fuel cell and other hydrogen-based technologies to meet such energy needs in—

(A) stationary applications, including power generation, combined heat and power for buildings and campsites, and standby and backup power systems; and

(B) transportation-related applications, including support

vehicles, passenger vehicles and heavy-duty trucks and buses.

(b) PILOT PROJECTS.— Based on the results of the study conducted under subsection (a), the Secretary of the Interior shall fund not fewer than 3 pilot projects in national parks to provide for demonstration of fuel cells or other hydrogen-based technologies in those applications where the greatest potential for such use in National Parks has been identified. Such pilot projects shall be geographically distributed throughout the United States.

(c) DEFINITION.— For the purpose of this section, the term "National Parks" means those areas of land and water now or hereafter administered by the Secretary of the Interior through the National Park Service for park, monument, historic, parkway, recreational, or other purposes.

(d) AUTHORIZATION OF APPROPRIATIONS. — There are authorized to be appropriated to the Secretary of the Interior $1,000,000 for fiscal year 2004, and $15,000,000 for fiscal year 2005, to remain available until expended.

SEC. 815. INTERNATIONAL DEMONSTRATION PROGRAM.

(a) IN GENERAL.—The Secretary, in consultation with the Administrator of the U.S. Agency for International Development, shall conduct demonstrations of fuel cells and associated hydrogen fueling infrastructure in countries other than the United States, particularly in areas where an energy infrastructure is not already well developed.

(b) ELIGIBLE TECHNOLOGIES.—The program may demonstrate—

(1) fuel cell vehicles in light-duty vehicle fleets;

(2) heavy-duty fuel cell on-road and off-road vehicles;

(3) stationary fuel cells in residential and commercial buildings; or

(4) portable fuel cells, including auxiliary power units in trucks.

(c) PARTICIPANTS.—

(1) ELIGIBILITY.—Foreign nations, non-profit organizations, and private companies shall be eligible for these pilot projects.

(2) COOPERATION.—Eligible entities may perform the projects in cooperation with United States non-profit organizations and private companies.

(3) COST-SHARING.— The Secretary may require a commitment from

participating private companies and from participating foreign countries.

(d) AUTHORIZATION OF APPROPRIATIONS.—For activities conducted under this section, there are authorized to be appropriated to the Secretary $25,000,000 for each of fiscal years 2006 through 2010, to remain available until expended.

SEC. 816. TRIBAL STATIONARY HYBRID POWER DEMONSTRATION.

(a) IN GENERAL.— Not later than 1 year after the date of enactment of this Act, the Secretary, in cooperation with Indian tribes, shall develop and transmit to Congress a strategy for a demonstration and commercial application program to develop hybrid distributed power systems on Indian lands that combine—

(1) one renewable electric power generating technology of 2 megawatts or less located near the site of electric energy use; and

(2) fuel cell power generation suitable for use in distributed power systems.

(b) DEFINITION.— For the purposes of this section, the terms "Indian tribe" and "Indian land" have the meaning given such terms under Title XXVI of the Energy Policy Act of 1992 (25 U.S.C. 3501 et seq.), as amended by this Act.

(c) AUTHORIZATION OF APPROPRIATIONS.— For activities under this section, there are authorized to be appropriated to the Secretary of Energy $1,000,000 for fiscal year 2005, and $5,000,000 for each of fiscal years 2006 through 2008.

SEC. 817. DISTRIBUTED GENERATION PILOT PROGRAM.

(a) ESTABLISHMENT.—The Secretary shall support a demonstration program to develop, deploy, and commercialize distributed generation systems to significantly reduce the cost of producing hydrogen from renewable energy for use in fuel cells. Such program shall provide the necessary infrastructure to test these distributed generation technologies at pilot scales in a real-world environment.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy, to remain available until expended, for the purposes of carrying out this section:

(1) $10,000,000 for fiscal year 2004;

(2) $15,000,000 for fiscal year 2005; and

(3) $20,000,000 for each of fiscal years 2006 through 2008.

Subtitle C — Federal Programs

SEC. 821. PUBLIC EDUCATION AND TRAINING.

(a) EDUCATION.—The Secretary shall conduct a public education program designed to increase public interest in and acceptance of hydrogen energy and fuel cell technologies.

(b) TRAINING.—The Secretary shall conduct a program to promote university-based training in critical skills for research in, production of, and use of hydrogen energy and fuel cell technologies. Such program may include research fellowships at institutions of higher education, centers of excellence in critical technologies, internships in industry, and such other measures as the Secretary deems appropriate.

(c) AUTHORIZATION OF APPROPRIATIONS.—For activities pursuant to this section, there are authorized to be appropriated to the Secretary $7,000,000 for each of fiscal years 2004 through 2008.

SEC. 822. HYDROGEN TRANSITION STRATEGIC PLANNING.

(a) IN GENERAL.—Not later than September 30, 2004, the head of each federal agency with annual outlays of greater than $20,000,000 shall submit to the Director of the Office of Management and Budget and to the Congress a hydrogen transition strategic plan containing a comprehensive assessment of how the transition to a hydrogen-based economy could to assist the mission, operation and regulatory program of the agency.

(b) CONTENTS.—At a minimum, each plan shall contain—

(1) a description of areas within the agency's control where using hydrogen and/or fuel cells could benefit the operation of the agency, assist in the implementation of its regulatory functions or enhance the agency's mission; and

(2) a description of any agency management practices, procurement policies, regulations, policies, or guidelines that may inhibit the agency's transition to use of fuel cells and hydrogen as an energy source;

(c) DURATION AND REVISION.—The strategic plan shall cover a period of not less than the five years following the fiscal year in which it is submitted, and shall be updated and revised at least every three years.

SEC. 823. MINIMUM FEDERAL FLEET REQUIREMENT.

(a) Section 303(b) of the Energy Policy Act of 1992 (42 U.S.C. 13212(b)) is amended by adding at the end the following:

"(4) HYDROGEN VEHICLES.—

"(A) Of the number of vehicles acquired under paragraph (1)(D) by a Federal fleet of 100 or more vehicles, not less than—

(i) 5 percent in fiscal years 2006 and 2007;

(ii) 10 percent in fiscal years 2008 and 2009;

(iii) 15 percent in fiscal years 2010 and 2011; and

(iv) 20 percent in fiscal years 2012 and thereafter,

shall be hydrogen-powered vehicles that meet standards for performance, reliability, cost, and maintenance established by the Secretary.

"(B) The Secretary may establish a lesser percentage, or waive the requirement under subparagraph (A) for any fiscal year entirely, if hydrogen-powered vehicles meeting the standards set by the Secretary pursuant to subparagraph (A) are not available at a purchase price that is less than 150 percent of the purchase price of other comparable alternative fueled vehicles.

"(C) The Secretary may by rule, delay the implementation of the requirements under subparagraph (A) in the event that the Secretary determines that hydrogen-powered vehicles are not commercially or economically available, or that fuel for such vehicles is not commercially or economically available.

"(D) The Secretary, in consultation with the Administrator of General Services, may for reasons of refueling infrastructure use and cost optimization, elect to allocate the acquisitions necessary to achieve the requirements in subparagraph (A) to certain Federal fleets in lieu of requiring each Federal fleet to achieve the requirements in subparagraph (A).".

(b) REFUELING.—Section 304 of the Energy Policy Act of 1992 (42 U.S.C. 13213) is amended—

(1) by redesignating subsection (b) as subsection (c);

(2) in the second sentence of subsection (a), by striking "If publicly" and inserting the following:

"(b) COMMERCIAL ARRANGEMENTS.—

"(1) IN GENERAL.—If publicly"; and

(3) in subsection (b) (as designated by paragraph (2)), by adding at the end the following:

"(2) MANDATORY ARRANGEMENTS.—

"(A) IN GENERAL.—In a case in which publicly available fueling facilities are not convenient or accessible to the locations of 2 or more Federal fleets for which hydrogen-powered vehicles are required to be purchased under section 303(b)(4), the Federal agency for which the Federal fleets are maintained (or the Federal agencies for which the Federal fleets are maintained, acting jointly under a memorandum of agreement providing for cost sharing) shall enter into a commercial arrangement as provided in paragraph (1).

"(B) SUNSET.—Subparagraph (A) ceases to be effective at the end of fiscal year 2013.".

SEC. 824. STATIONARY FUEL CELL PURCHASE REQUIREMENT.

(a) REQUIREMENT.—The President, acting through the Secretary of Energy, shall seek to ensure that, to the extent economically practicable and technically feasible, of the total amount of electric energy the Federal Government consumes during any fiscal year, the following amounts shall be generated by fuel cells—

(1) not less than 1 percent in fiscal years 2006 through 2008;

(2) not less than 2 percent in fiscal years 2009 and 2010; and

(3) not less than 3 percent in fiscal year 2011 and each fiscal year thereafter.

(b) COMPLIANCE.— In complying with the requirements of subsection (a), Federal agencies are encouraged to—

(1) use innovative purchasing practices;

(2) use fuel cells at the site of electricity usage and in combined heat and power applications; and

(3) use fuel cells in stand alone power functions, such as but not limited to battery power and backup power.

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

(1) the term "fuel cells" means an integrated system comprised of a fuel cell stack assembly and balance of plant components that converts a fuel into electricity using an electrochemical means.

(2) the term "electrical energy" includes on and off grid power, including premium power applications, standby power applications and electricity generation..

(d) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there are authorized to be appropriated to the Secretary of Energy $30,000,000 for fiscal years 2004, $70,000,000 for fiscal year 2005, and $100,000,000 for each of fiscal years 2006 and thereafter.

SEC. 825. DEPARTMENT OF ENERGY STRATEGY.

Not later than 1 year after the date of enactment of this Act, the Secretary shall publish and transmit to Congress a plan identifying critical technologies, enabling strategies and applications, technical targets, and associated timeframes that support the commercialization of hydrogen-fueled fuel cell vehicles.

TITLE IX —RESEARCH AND DEVELOPMENT

SEC. 901. SHORT TITLE.

This Title may be cited as the "Energy Research, Development, Demonstration, and Commercial Application Act of 2003".

SEC. 902. GOALS.

(a) IN GENERAL.—In order to achieve the purposes of this title, the Secretary shall conduct a balanced set of programs of energy research, development,

demonstration, and commercial application, focused on—

(1) increasing the efficiency of all energy intensive sectors through conservation and improved technologies,

(2) promoting diversity of energy supply,

(3) decreasing the nation's dependence on foreign energy supplies,

(4) improving United States energy security, and

(4) decreasing the environmental impact of energy-related activities.

(b) GOALS.—The Secretary shall publish measurable cost and performance-based goals with each annual budget submission in at least the following areas:

(1) energy efficiency for buildings, energy-consuming industries, and vehicles;

(2) electric energy generation (including distributed generation), transmission, and storage;

(3) renewable energy technologies including wind power, photovoltaics, solar thermal systems, geothermal energy, hydrogen-fueled systems, biomass-based systems, biofuels, and hydropower;

(4) fossil energy including power generation, onshore and offshore oil and gas resource recovery, and transportation; and

(5) nuclear energy including programs for existing and advanced reactors, and education of future specialists.

(c) PUBLIC COMMENT.—The Secretary shall provide mechanisms for input on the annually published goals from industry, university, and other public sources.

(d) EFFECT OF GOALS.—Nothing in subsection (a) or the annually published goals creates any new authority for any Federal agency, or may be used by a Federal agency to support the establishment of regulatory standards or regulatory requirements.

SEC. 903. DEFINITIONS.

For purposes of this title:

(1) The term "Department" means the Department of Energy.

(2) The term "departmental mission" means any of the functions vested in the Secretary of Energy by the Department of Energy Organization Act (42

U.S.C. 7101 et seq.) or other law.

(3) The term "institution of higher education" has the meaning given that term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

(4) The term "National Laboratory" means any of the following laboratories owned by the Department:

(A) Ames Laboratory.

(B) Argonne National Laboratory.

(C) Brookhaven National Laboratory.

(D) Fermi National Accelerator Laboratory.

(E) Idaho National Engineering and Environmental Laboratory.

(F) Lawrence Berkeley National Laboratory.

(G) Lawrence Livermore National Laboratory.

(H) Los Alamos National Laboratory.

(I) National Energy Technology Laboratory.

(J) National Renewable Energy Laboratory.

(K) Oak Ridge National Laboratory.

(L) Pacific Northwest National Laboratory.

(M) Princeton Plasma Physics Laboratory.

(N) Sandia National Laboratories.

(O) Stanford Linear Accelerator Center.

(P) Thomas Jefferson National Accelerator Facility.

(5) The term "nonmilitary energy laboratory" means the laboratories listed in (4) with the exclusion of (4)(G), (4)(H), and (4)(N).

(6) The term "Secretary" means the Secretary of Energy.

(7) The term "single-purpose research facility" means any of the primarily single-purpose entities owned by the Department or any other organization of the Department designated by the Secretary.

Subtitle A—Energy Efficiency

SEC. 911. ENERGY EFFICIENCY.

(a) IN GENERAL.—The following sums are authorized to be appropriated to the Secretary for energy efficiency and conservation research, development, demonstration, and commercial application activities, including activities authorized under this subtitle:

(1) for fiscal year 2004, $616,000,000;

(2) for fiscal year 2005, $695,000,000;

(3) for fiscal year 2006, $772,000,000;

(4) for fiscal year 2007, $865,000,000; and

(5) for fiscal year 2008, $920,000,000.

(b) ALLOCATIONS.—From amounts authorized under subsection (a), the following sums are authorized:

(1) For activities under section 912—

(A) for fiscal year 2004, $20,000,000; and

(B) for fiscal year 2005, $30,000,000.

(2) For activities under section 914—

(A) for fiscal year 2004, $4,000,000; and

(B) for each of fiscal years 2005 through 2008, $7,000,000.

(3) For activities under section 915—

(A) for fiscal year 2004, $20,000,000;

(B) for fiscal year 2005, $25,000,000;

(C) for fiscal year 2006, $30,000,000;

(D) for fiscal year 2007, $35,000,000; and

(E) for fiscal year 2008, $40,000,000.

(c) EXTENDED AUTHORIZATION.—There are authorized to be appropriated to the Secretary for activities under section 912, $50,000,000 for each of fiscal years 2006 through 2013.

(d) None of the funds authorized to be appropriated under this section may be used for—

(1) the promulgation and implementation of energy efficiency

regulations;

(2) the Weatherization Assistance Program under part A of title IV of the Energy Conservation and Production Act;

(3) the State Energy Program under part D of title III of the Energy Policy and Conservation Act; or

(4) the Federal Energy Management Program under part 3 of title V of the National Energy Conservation Policy Act.

SEC. 912. NEXT GENERATION LIGHTING INITIATIVE.

(a) IN GENERAL.—The Secretary shall carry out a Next Generation Lighting Initiative in accordance with this section to support research, development, demonstration, and commercial application activities related to advanced solid-state lighting technologies based on white light emitting diodes.

(b) OBJECTIVES.—The objectives of the initiative shall be to develop advanced solid-state organic and inorganic lighting technologies based on white light emitting diodes that, compared to incandescent and fluorescent lighting technologies, are longer lasting; more energy-efficient; cost-competitive and have less environmental impact.

(c) INDUSTRY ALLIANCE.—The Secretary shall, within 3 months from the date of enactment of this section, competitively select an Industry Alliance to represent participants who are private, for-profit firms which, as a group, are broadly representative of United States solid state lighting research, development, infrastructure, and manufacturing expertise as a whole.

(d) RESEARCH.—

(1) The Secretary shall carry out the research activities of the Next Generation Lighting Initiative through competitively awarded grants to researchers, including Industry Alliance participants, national laboratories and institutions of higher education.

(2) The Secretary shall annually solicit from the Industry Alliance—

(A) comments to identify solid-state lighting technology needs;

(B) assessment of the progress of the Initiative's research activities; and

(C) assistance in annually updating solid-state lighting technology roadmaps.

(3) The information and roadmaps under (2) shall be available to the public.

(e) DEVELOPMENT, DEMONSTRATION, AND COMMERCIAL APPLICATION.—The Secretary shall carry out a development, demonstration, and commercial application program for the Next Generation Lighting Initiative through competitively selected awards. The Secretary may give preference to participants of the Industry Alliance selected pursuant to subsection (c).

(f) COST SHARING.—The Secretary shall require cost sharing according to 42 U.S.C. 13542.

(g) INTELLECTUAL PROPERTY.—The Secretary may require, in accordance with the authorities provided in 35 U.S.C. 202(a)(ii), 42 U.S.C. 2182 and 42 U.S.C. 5908, that for any new invention from subsection (d)—

(1) that the Industry Alliance members who are active participants in research, development and demonstration activities related to the advanced solid-state lighting technologies that are the subject of this legislation shall be granted first option to negotiate with the invention owner, at least in the field of solid-state lighting, non-exclusive licenses and royalties on terms that are reasonable under the circumstances;

(2) that the invention owner must offer to negotiate licenses with the Industry Alliance participants cited in (1), in good faith, for at least 1 year after U.S. patents are issued on any such new invention; and

(3) such other terms as the Secretary determines are required to promote accelerated commercialization of inventions made under the Initiative.

(h) NATIONAL ACADEMY REVIEW.—The Secretary shall enter into an arrangement with the National Academy of Sciences to conduct periodic reviews of the Next Generation Lighting Initiative.

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

(1) The term "advanced solid-state lighting" means a semiconducting

device package and delivery system that produces white light using externally applied voltage.

(2) The term "research" includes basic research on the technologies, materials and manufacturing processes required for white light emitting diodes.

(3) The term "Industry Alliance" means an entity selected by the Secretary under subsection (c).

(4) The term "white light emitting diode" means a semiconducting package, utilizing either organic or inorganic materials, that produces white light using externally applied voltage.

SEC. 913. NATIONAL BUILDING PERFORMANCE INITIATIVE.

(a) INTERAGENCY GROUP.—Not later than 90 days after the date of enactment of this Act, the Director of the Office of Science and Technology Policy shall establish an interagency group to develop, in coordination with the advisory committee established under subsection (e), a National Building Performance Initiative (in this section referred to as the "Initiative"). The interagency group shall be co-chaired by appropriate officials of the Department and the Department of Commerce, who shall jointly arrange for the provision of necessary administrative support to the group.

(b) INTEGRATION OF EFFORTS.—The Initiative shall integrate Federal, State, and voluntary private sector efforts to reduce the costs of construction, operation, maintenance, and renovation of commercial, industrial, institutional, and residential buildings.

(c) PLAN.—Not later than 1 year after the date of enactment of this Act, the interagency group shall submit to Congress a plan for carrying out the appropriate Federal role in the Initiative. The plan shall include—

(1) research, development, demonstration, and commercial application of systems and materials for new construction and retrofit relating to the building envelope and building system components; and

(2) the collection, analysis, and dissemination of research results and other pertinent information on enhancing building performance to industry,

government entities, and the public.

(d) DEPARTMENT OF ENERGY ROLE.—Within the Federal portion of the Initiative, the Department shall be the lead agency for all aspects of building performance related to use and conservation of energy.

(e) ADVISORY COMMITTEE.—The Director of the Office of Science and Technology Policy shall establish an advisory committee to—

(1) analyze and provide recommendations on potential private sector roles and participation in the Initiative; and

(2) review and provide recommendations on the plan described in subsection (c).

(f) CONSTRUCTION.—Nothing in this section provides any Federal agency with new authority to regulate building performance.

SEC. 914. SECONDARY ELECTRIC VEHICLE BATTERY USE PROGRAM.

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

(1) The term "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.

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

(b) PROGRAM.—The Secretary shall establish and conduct a research, development, demonstration, and commercial application program for the secondary use of batteries. Such program shall be—

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

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

(3) coordinated with ongoing secondary battery use programs at the National Laboratories and in industry.

(c) SOLICITATION.—Not later than 180 days 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.

(d) SELECTION OF PROPOSALS.—

(1) The Secretary shall, not later than 90 days after the closing date established by the Secretary for receipt of proposals under subsection (c), select up to 5 proposals which may receive financial assistance under this section once the Department is in receipt of appropriated funds.

(2) In selecting proposals, the Secretary shall consider diversity of battery type, geographic and climatic diversity, and life-cycle environmental effects of the approaches.

(3) No one project selected under this section shall receive more than 25 percent of the funds authorized for this Program.

(4) The Secretary shall consider the extent of involvement of State or local government and other persons in each demonstration project to optimize use of federal resources.

(5) The Secretary may consider such other criteria as the Secretary considers appropriate.

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

(1) relevant information be provided to the Department, the users of the batteries, the proposers, and the battery manufacturers; and

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

SEC. 915. ENERGY EFFICIENCY SCIENCE INITIATIVE.

(a) ESTABLISHMENT.—The Secretary shall establish an Energy Efficiency Science Initiative to be managed by the Assistant Secretary in the Department with responsibility for energy conservation under section 203(a)(9) of the Department of

Energy Organization Act (42 U.S.C. 7133(a)(9)), in consultation with the Director of the Office of Science, for grants to be competitively awarded and subject to peer review for research relating to energy efficiency.

(b) REPORT.—The Secretary shall submit to the Congress, along with the President's annual budget request under section 1105(a) of title 31, United States Code, a report on the activities of the Energy Efficiency Science Initiative, including a description of the process used to award the funds and an explanation of how the research relates to energy efficiency.

Subtitle B—Distributed Energy and Electric Energy Systems

SEC. 921. DISTRIBUTED ENERGY AND ELECTRIC ENERGY SYSTEMS.

(a) IN GENERAL.—

(1) The following sums are authorized to be appropriated to the Secretary for distributed energy and electric energy systems activities, including activities authorized under this subtitle:

(A) for fiscal year 2004, $190,000,000;

(B) for fiscal year 2005, $200,000,000;

(C) for fiscal year 2006, $220,000,000;

(D) for fiscal year 2007, $240,000,000; and

(E) for fiscal year 2008, $260,000,000.

(2) For the Initiative in subsection 927(e), there are authorized to be appropriated—

(A) for fiscal year 2004, $15,000,000;

(B) for fiscal year 2005, $20,000,000;

(C) for fiscal year 2006, $30,000,000;

(D) for fiscal year 2007, $35,000,000; and

(E) for fiscal year 2008, $40,000,000.

(b) MICRO-COGENERATION ENERGY TECHNOLOGY.— From amounts authorized under subsection (a), $20,000,000 for each of fiscal years 2004 and 2005 shall be

available for activities under section 924.

SEC. 922. HYBRID DISTRIBUTED POWER SYSTEMS.

Not later than 1 year after the date of enactment of this Act, the Secretary shall develop and transmit to the Congress a strategy for a comprehensive research, development, demonstration, and commercial application program to develop hybrid distributed power systems that combine—

(1) one or more renewable electric power generation technologies of 10 megawatts or less located near the site of electric energy use; and

(2) nonintermittent electric power generation technologies suitable for use in a distributed power system.

SEC. 923. HIGH POWER DENSITY INDUSTRY PROGRAM.

The Secretary shall establish a comprehensive research, development, demonstration, and commercial application program to improve energy efficiency of high power density facilities, including data centers, server farms, and telecommunications facilities. Such program shall consider technologies that provide significant improvement in thermal controls, metering, load management, peak load reduction, or the efficient cooling of electronics.

SEC. 924. MICRO-COGENERATION ENERGY TECHNOLOGY.

The Secretary shall make competitive, merit-based grants to consortia for the development of micro-cogeneration energy technology. The consortia shall explore the use of small-scale combined heat and power in residential heating appliances, the use of excess power to operate other appliances within the residence and supply of excess generated power to the power grid.

SEC. 925. DISTRIBUTED ENERGY TECHNOLOGY DEMONSTRATION PROGRAM.

The Secretary, within the sums authorized under section 921(a)(1), may provide financial assistance to coordinating consortia of interdisciplinary participants for demonstrations designed to accelerate the utilization of distributed energy technologies, such as fuel cells, microturbines, reciprocating engines, thermally activated technologies, and combined heat and power systems, in highly energy intensive commercial applications.

SEC. 926. OFFICE OF ELECTRIC TRANSMISSION AND DISTRIBUTION.

(a) CREATION OF AN OFFICE OF ELECTRIC TRANSMISSION AND DISTRIBUTION.—Title II of the Department of Energy Organization Act is amended by inserting the following after section 217 (42 U.S.C. 7144d):

"OFFICE OF ELECTRIC TRANSMISSION AND DISTRIBUTION.

"SEC. 218. (a) There is established within the Department an Office of Electric Transmission and Distribution. This Office shall be headed by a Director, who shall be appointed by the Secretary. The Director shall be compensated at the annual rate prescribed for level IV of the Executive Schedule under section 5315 of title 5, United States Code.

"(b) The Director shall—

"(1) coordinate and develop a comprehensive, multi-year strategy to improve the Nation's electricity transmission and distribution;

"(2) ensure that the recommendations of the Secretary's National Transmission Grid Study are implemented;

"(3) carry out the research, development, and demonstration functions;

"(4) grant authorizations for electricity import and export;

"(5) perform other electricity transmission and distribution-related functions assigned by the Secretary; and

"(6) develop programs for workforce training ni power and transmission engineering.".

(b) CONFORMING AMENDMENTS.—

(1) The table of contents of the Department of Energy Act is amended by inserting after the item relating to section 217 the following new item:

"218. Office of Electric Transmission and Distribution.".

(2) Section 5315 of title 5, United States Code, is amended by inserting "Director, Office of Electric Transmission and Distribution, Department of Energy." after "Inspector General, Department of Energy.".

SECTION 927. ELECTRIC TRANSMISSION AND DISTRIBUTION PROGRAMS.

(a) DEMONSTRATION PROGRAM.—The Secretary, acting through the Director of the Office of Electric Transmission and Distribution, shall establish a comprehensive

research, development, and demonstration program to ensure the reliability, efficiency, and environmental integrity of electrical transmission and distribution systems. This program shall include—

(1) advanced energy and energy storage technologies, materials, and systems, giving priority to new transmission technologies, including composite conductor materials and other technologies that enhance reliability, operational flexibility, or power-carrying capability;

(2) advanced grid reliability and efficiency technology development;

(3) technologies contributing to significant load reductions;

(4) advanced metering, load management, and control technologies;

(5) technologies to enhance existing grid components;

(6) the development and use of high-temperature superconductors to

(A) enhance the reliability, operational flexibility, or power-carrying capability of electric transmission or distribution systems; or

(B) increase the efficiency of electric energy generation, transmission, distribution, or storage systems;

(7) integration of power systems, including systems to deliver high-quality electric power, electric power reliability, and combined heat and power;

(8) supply of electricity to the power grid by small scale, distributed and residential-based power generators;

(9) the development and use of advanced grid design, operation and planning tools;

(10) any other infrastructure technologies, as appropriate; and

(11) technology transfer and education.

(b) PROGRAM PLAN.—Not later than 1 year after the date of the enactment of this legislation, 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 section. In preparing the program plan, the Secretary shall consult with utilities, energy services providers, manufacturers, institutions of higher education, other appropriate State and local agencies, environmental organizations, professional and

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

(c) IMPLEMENTATION.—The Secretary shall consider implementing this program using a consortium of industry, university and national laboratory participants.

(d) REPORT.—Not later than 2 years after the transmittal of the plan under subsection (b), the Secretary shall transmit a report to Congress describing the progress made under this section and identifying any additional resources needed to continue the development and commercial application of transmission and distribution infrastructure technologies.

(e) POWER DELIVERY RESEARCH INITIATIVE.—The Secretary shall establish a research, development and demonstration initiative specifically focused on power delivery utilizing components incorporating high temperature superconductivity.

(1) Goals of this Initiative shall be to—

(A) establish world-class facilities to develop high temperature superconductivity power applications in partnership with manufacturers and utilities;

(B) provide technical leadership for establishing reliability for high temperature superconductivity power applications including suitable modeling and analysis;

(C) facilitate commercial transition toward direct current power transmission, storage, and use for high power systems utilizing high temperature superconductivity; and

(D) facilitate the integration of very low impedance high temperature superconducting wires and cables in existing electric networks to improve system performance, power flow control and reliability.

(2) The Initiative shall include—

(A) feasibility analysis, planning, research, and design to construct demonstrations of superconducting links in high power, direct current and controllable alternating current transmission systems;

(B) public-private partnerships to demonstrate deployment of

high temperature superconducting cable into testbeds simulating a realistic transmission grid and under varying transmission conditions, including actual grid insertions; and

(C) testbeds developed in cooperation with national laboratories, industries, and universities to demonstrate these technologies, prepare the technologies for commercial introduction, and address cost or performance roadblocks to successful commercial use.

(g) TRANSMISSION AND DISTRIBUTION GRID PLANNING AND OPERATIONS INITIATIVE.—The Secretary shall establish a research, development and demonstration initiative specifically focused on tools needed to plan, operate and expand the transmission and distribution grids in the presence of competitive market mechanisms for energy, load demand, customer response and ancillary services. Goals of this Initiative shall be to:

(1) develop and utilize a geographically distributed Center, consisting of research universities and national laboratories, with expertise and facilities to develop the underlying theory and software for power system application, and to assure commercial development in partnership with software vendors and utilities;

(2) provide technical leadership in engineering and economic analysis for reliability and efficiency of power systems planning and operations in the presence of competitive markets for electricity;

(3) model, simulate and experiment with new market mechanisms and operating practices to understand and optimize such new methods before actual use; and

(4) provide technical support and technology transfer to electric utilities and other participants in the domestic electric industry and marketplace.

Subtitle C—Renewable Energy

SEC. 931. RENEWABLE ENERGY.

(a) IN GENERAL.—The following sums are authorized to be appropriated to the Secretary for renewable energy research, development, demonstration, and commercial

application activities, including activities authorized under this subtitle:

(1) for fiscal year 2004, $480,000,000;

(2) for fiscal year 2005, $550,000,000;

(3) for fiscal year 2006, $610,000,000;

(4) for fiscal year 2007, $659,000,000; and

(5) for fiscal year 2008, $710,000,000.

(b) BIOENERGY.—From the amounts authorized under subsection (a), the following sums are authorized to be appropriated to carry out section 932:

(1) for fiscal year 2004, $135,425,000;

(2) for fiscal year 2005, $155,600,000;

(3) for fiscal year 2006, $167,650,000;

(4) for fiscal year 2007, $180,000,000; and

(5) for fiscal year 2008, $192,000,000.

(c) BIODIESEL ENGINE TESTING.—From amounts authorized under subsection (a), $5,000,000 is authorized to be appropriated in each of fiscal years 2004 and 2008 to carry out section 933.

(d) CONCENTRATING SOLAR POWER.—From amounts authorized under subsection (a), the following sums are authorized to be appropriated to carry out section 934:

(1) for fiscal year 2004, $20,000,000;

(2) for fiscal year 2005, $40,000,000; and

(2) for each of fiscal years 2006, 2007 and 2008, $50,000,000.

(e) LIMITS ON USE OF FUNDS.—

(1) None of the funds authorized to be appropriated under this section may be used for Renewable Support and Implementation.

(2) Of the funds authorized under subsection (b), not less than $5,000,000 for each fiscal year shall be made available for grants to Historically Black Colleges and Universities, Tribal Colleges, and Hispanic-Serving Institutions.

(f) CONSULTATION.—In carrying out this section, the Secretary, in consultation

with the Secretary of Agriculture, shall demonstrate the use of advanced wind power technology, including combined use with coal gasification; biomass; geothermal energy systems; and other renewable energy technologies to assist in delivering electricity to rural and remote locations.

SEC. 932. BIOENERGY PROGRAMS.

(a) IN GENERAL.—The Secretary shall conduct a program of research, development, demonstration, and commercial application for bioenergy, including—

(1) biopower energy systems;

(2) biofuels;

(3) bioproducts;

(4) integrated biorefineries that may produce biopower, biofuels and bioproducts;

(5) cross-cutting research and development in feedstocks; and

(6) economic analysis.

(b) BIOFUELS AND BIOPRODUCTS.—The goals of the biofuels and bioproducts programs shall be to develop, in partnership with industry—

(1) advanced biochemical and thermo-chemical conversion technologies capable of making fuels from cellulosic feedstocks that are price-competitive with gasoline or diesel in either internal combustion engines or fuel cell-powered vehicles; and

(2) advanced biotechnology processes capable of making biofuels and bioproducts with emphasis on development of biorefinery technologies using enzyme-based processing systems.

(c) DEFINITION.—For purposes of (b), the term "cellulosic feedstock" means any portion of a crop not normally used in food production or any non-food crop grown for the purpose of producing biomass feedstock.

SEC. 933. BIODIESEL ENGINE TESTING PROGRAM.

(a) IN GENERAL.—Not later that 180 days after enactment of this Act, the Secretary shall initiate a partnership with diesel engine, diesel fuel injection system, and diesel vehicle manufacturers and diesel and biodiesel fuel providers to include

biodiesel testing in advanced diesel engine and fuel system technology.

(b) SCOPE.—The study shall provide for testing to determine the impact of biodiesel on current and future emission control technologies, with emphasis on—

(1) the impact of biodiesel on emissions warranty, in-use liability, and anti-tampering provisions;

(2) the impact of long-term use of biodiesel on engine operations;

(3) the options for optimizing these technologies for both emissions and performance when switching between biodiesel and diesel fuel; and

(4) the impact of using biodiesel in these fueling systems and engines when used as a blend with 2006 Environmental Protection Agency-mandated diesel fuel containing a maximum of 15-parts-per-million sulfur content.

(c) REPORT.—Not later than 2 years after the date of enactment, the Secretary shall provide an interim report to Congress on the findings of this study, including a comprehensive analysis of impacts from biodiesel on engine operation for both existing and expected future diesel technologies, and recommendations for ensuring optimal emissions reductions and engine performance with biodiesel.

(d) DEFINITION.—For purposes of this section, the term "biodiesel" means a diesel fuel substitute produced from non-petroleum renewable resources that meets the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 211 of the Clean Air Act (42 U.S.C. 7545) and that meets the American Society for Testing and Materials D6751-02a "Standard Specification for Biodiesel Fuel (B100) Blend Stock for Distillate Fuels."

SEC. 934 CONCENTRATING SOLAR POWER RESEARCH PROGRAM.

(a) IN GENERAL.—The Secretary shall conduct a program of research and development to evaluate the potential of concentrating solar power for hydrogen production, including co-generation approaches for both hydrogen and electricity. Such program shall take advantage of existing facilities to the extent possible and shall include—

(1) development of optimized technologies that are common to both electricity and hydrogen production;

(2) evaluation of thermo-chemical cycles for hydrogen production at the temperatures attainable with concentrating solar power;

(3) evaluation of materials issues for the thermo-chemical cycles in (2);

(4) system architectures and economics studies; and

(5) coordination with activities in the Advanced Reactor Hydrogen Co-generation Project on high temperature materials, thermo-chemical cycle and economic issues.

(b) ASSESSMENT.—In carrying out the program under this section, the Secretary is directed to assess conflicting guidance on the economic potential of concentrating solar power for electricity production received from the National Research Council report entitled "Renewable Power Pathways: A Review of the U.S. Department of Energy's Renewable Energy Programs" in 2000 and subsequent DOE-funded reviews of that report and provide an assessment of the potential impact of this technology before, or concurrent with, submission of the fiscal year 2006 budget.

(c) REPORT.—Not later than 5 years after the date of enactment of this section, the Secretary shall provide a report to Congress on the economic and technical potential for electricity or hydrogen production, with or without co-generation, with concentrating solar power, including the economic and technical feasibility of potential construction of a pilot demonstration facility suitable for commercial production of electricity and/or hydrogen from concentrating solar power.

SEC. 935. MISCELLANEOUS PROJECTS.

The Secretary shall conduct research, development, demonstration, and commercial application programs for—

(1) ocean energy, including wave energy;

(2) the combined use of renewable energy technologies with one another and with other energy technologies, including the combined use of wind power and coal gasification technologies; and

(3) renewable energy technologies for cogeneration of hydrogen and electricity.

Subtitle D—Nuclear Energy

SEC. 941. NUCLEAR ENERGY.

(a) CORE PROGRAMS.—The following sums are authorized to be appropriated to the Secretary for nuclear energy research, development, demonstration, and commercial application activities, including activities authorized under this subtitle, other than those described in subsection (b):

(1) for fiscal year 2004, $273,000,000;

(2) for fiscal year 2005, $305,000,000;

(3) for fiscal year 2006, $330,000,000;

(4) for fiscal year 2007, $355,000,000; and

(5) for fiscal year 2008, $495,000,000.

(b) NUCLEAR INFRASTRUCTURE SUPPORT.—The following sums are authorized to be appropriated to the Secretary for activities under section 942(f):

(1) for fiscal year 2004, $125,000,000;

(2) for fiscal year 2005, $130,000,000;

(3) for fiscal year 2006, $135,000,000;

(4) for fiscal year 2007, $140,000,000; and

(5) for fiscal year 2008, $145,000,000.

(c) ALLOCATIONS.—From amounts authorized under subsection (a), the following sums are authorized:

(1) For activities under section 943—

(A) for fiscal year 2004, $140,000,000;

(B) for fiscal year 2005, $145,000,000;

(C) for fiscal year 2006, $150,000,000;

(D) for fiscal year 2007, $155,000,000; and

(E) for fiscal year 2008, $275,000,000.

(2) For activities under section 944—

(A) for fiscal year 2004, $33,000,000;

(B) for fiscal year 2005, $37,900,000;

(C) for fiscal year 2006, $43,600,000;

(D) for fiscal year 2007, $50,100,000; and

(E) for fiscal year 2008, $56,000,000.

(3) For activities under section 946, for each of fiscal years 2004 through 2008, $6,000,000.

(d) None of the funds authorized under this section may be used for decommissioning the Fast Flux Test Facility.

SEC. 942. NUCLEAR ENERGY RESEARCH PROGRAMS.

(a) NUCLEAR ENERGY RESEARCH INITIATIVE.—The Secretary shall carry out a Nuclear Energy Research Initiative for research and development related to nuclear energy.

(b) NUCLEAR ENERGY PLANT OPTIMIZATION PROGRAM.—The Secretary shall carry out a Nuclear Energy Plant Optimization Program to support research and development activities addressing reliability, availability, productivity, component aging, safety and security of existing nuclear power plants.

(c) NUCLEAR POWER 2010 PROGRAM.—The Secretary shall carry out a Nuclear Power 2010 Program, consistent with recommendations in the October 2001 report entitled "A Roadmap to Deploy New Nuclear Power Plants in the United States by 2010" issued by the Nuclear Energy Research Advisory Committee of the Department. The Program shall include—

(1) utilization of the expertise and capabilities of industry, universities, and National Laboratories in evaluation of advanced nuclear fuel cycles and fuels testing;

(2) consideration of a variety of reactor designs suitable for both developed and developing nations;

(3) participation of international collaborators in research, development, and design efforts as appropriate; and

(4) encouragement for university and industry participation.

(d) GENERATION IV NUCLEAR ENERGY SYSTEMS INITIATIVE.—The Secretary shall carry out a Generation IV Nuclear Energy Systems Initiative to develop an overall technology plan and to support research and development necessary to make an informed technical decision about the most promising candidates for eventual

commercial application. The Initiative shall examine advanced proliferation-resistant and passively safe reactor designs, including designs that—

(1) are economically competitive with other electric power generation plants;

(2) have higher efficiency, lower cost, and improved safety compared to reactors in operation on the date of enactment of this Act;

(3) use fuels that are proliferation resistant and have substantially reduced production of high-level waste per unit of output; and

(4) use improved instrumentation.

(e) REACTOR PRODUCTION OF HYDROGEN.—The Secretary shall carry out research to examine designs for high-temperature reactors capable of producing large-scale quantities of hydrogen using thermo-chemical processes.

(f) NUCLEAR INFRASTRUCTURE SUPPORT.—The Secretary shall develop and implement a strategy for the facilities of the Office of Nuclear Energy, Science, and Technology and shall transmit a report containing the strategy along with the President's budget request to the Congress for fiscal year 2006. Such strategy shall provide a cost-effective means for—

(1) maintaining existing facilities and infrastructure, as needed;

(2) closing unneeded facilities;

(3) making facility upgrades and modifications; and

(4) building new facilities.

SEC. 943. ADVANCED FUEL CYCLE INITIATIVE.

(a) IN GENERAL.—The Secretary, through the Director of the Office of Nuclear Energy, Science and Technology, shall conduct an advanced fuel recycling technology research and development program to evaluate proliferation-resistant fuel recycling and transmutation technologies which minimize environmental or public health and safety impacts as an alternative to aqueous reprocessing technologies deployed as of the date of enactment of this Act 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. Opportunities to enhance progress of this program through international cooperation should be sought.

(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.

SEC. 944. UNIVERSITY NUCLEAR SCIENCE AND ENGINEERING SUPPORT.

(a) ESTABLISHMENT.—The Secretary shall support a program to invest in human resources and infrastructure in the nuclear sciences and engineering and related fields (including health physics and nuclear and radiochemistry), consistent with departmental missions related to civilian nuclear research and development.

(b) DUTIES.—In carrying out the program under this section, the Secretary shall establish fellowship and faculty assistance programs, as well as provide support for fundamental research and encourage collaborative research among industry, national laboratories, and universities through the Nuclear Energy Research Initiative. The Secretary is encouraged to support activities addressing the entire fuel cycle through involvement of both the Offices of Nuclear Energy, Science and Technology and Civilian Radioactive Waste Management. The Secretary shall support communication and outreach related to nuclear science, engineering and nuclear waste management.

(c) MAINTAINING UNIVERSITY RESEARCH AND TRAINING REACTORS AND ASSOCIATED INFRASTRUCTURE.—Activities under this section may include—

(1) converting research reactors currently using high-enrichment fuels to low-enrichment fuels, upgrading operational instrumentation, and sharing of reactors among institutions of higher education;

(2) providing technical assistance, in collaboration with the United States nuclear industry, in relicensing and upgrading training reactors as part of a student training program; and

(3) providing funding for reactor improvements as part of a focused effort that emphasizes research, training, and education.

(d) UNIVERSITY–NATIONAL LABORATORY INTERACTIONS.—The Secretary shall develop sabbatical fellowship and visiting scientist programs to encourage sharing of

personnel between national laboratories and universities.

(e) OPERATING AND MAINTENANCE COSTS.—Funding for a research project provided under this section may be used to offset a portion of the operating and maintenance costs of a research reactor at an institution of higher education used in the research project.

SEC. 945. SECURITY OF NUCLEAR FACILITIES.

The Secretary, through the Director of the Office of Nuclear Energy, Science and Technology shall conduct a research and development program on cost-effective technologies for increasing the safety of nuclear facilities from natural phenomena and the security of nuclear facilities from deliberate attacks.

SEC. 946. ALTERNATIVES TO INDUSTRIAL RADIOACTIVE SOURCES.

(a) SURVEY.—Not later than August 1, 2004, the Secretary shall provide to the Congress results of a survey of industrial applications of large radioactive sources. The survey shall—

(1) consider well-logging sources as one class of industrial sources;

(2) include information on current domestic and international Department,

Department of Defense, State Department and commercial programs to manage and dispose of radioactive sources; and

(3) discuss available disposal options for currently deployed or future sources and, if deficiencies are noted for either deployed or future sources, recommend legislative options that Congress may consider to remedy identified deficiencies.

(b) PLAN.—In conjunction with the survey in subsection (a), the Secretary shall establish a research and development program to develop alternatives to such sources that reduce safety, environmental, or proliferation risks to either workers using the sources or the public. Miniaturized particle accelerators for well-logging or other industrial applications and portable accelerators for production of short-lived radioactive materials at an industrial site shall be considered as part of the research and development efforts. Details of the program plan shall be provided to the Congress by

August 1, 2004.

Subtitle E—Fossil Energy

SEC. 951. FOSSIL ENERGY.

(a) IN GENERAL.—The following sums are authorized to be appropriated to the Secretary for fossil energy research, development, demonstration, and commercial application activities, including activities authorized under this subtitle:

(1) for fiscal year 2004, $523,000,000;

(2) for fiscal year 2005, $542,000,000;

(3) for fiscal year 2006, $558,000,000;

(4) for fiscal year 2007, $585,000,000; and

(5) for fiscal year 2008, $600,000,000.

(b) ALLOCATIONS.—From amounts authorized under subsection (a), the following sums are authorized:

(1) For activities under section 952(b)(2), $28,000,000 for each of the fiscal years 2004 through 2008.

(2) For activities under section 953—

(A) for fiscal year 2004, $12,000,000;

(B) for fiscal year 2005, $15,000,000; and

(C) for each of fiscal years 2006 through 2008, $20,000,000.

(3) For activities under section 954, to remain available until expended,—

(A) for fiscal year 2004, $200,000,000;

(B) for fiscal year 2005, $210,000,000; and

(C) for fiscal year 2006, $220,500,000.

(4) For the Office of Arctic Energy under section 3197 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (Public Law 106-398), $25,000,000 for each of fiscal years 2004 through 2008.

(c) EXTENDED AUTHORIZATION.—There are authorized to be appropriated to the Secretary for the Office of Arctic Energy under section 3197 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (Public Law 106-

398), $25,000,000 for each of fiscal years 2009 through 2012.

(d) LIMITS ON USE OF FUNDS.—

(1) None of the funds authorized under this section may be used for Fossil Energy Environmental Restoration or Import/Export Authorization.

(2) Of the funds authorized under subsection (b)(2), not less than 20 percent of the funds appropriated for each fiscal year shall be dedicated to research and development carried out at institutions of higher education.

SEC. 952. OIL AND GAS RESEARCH PROGRAMS.

(a) OIL AND GAS RESEARCH.—The Secretary shall conduct a program of research, development, demonstration, and commercial application on oil and gas, including—

(1) exploration and production;

(2) gas hydrates;

(3) reservoir life and extension;

(4) transportation and distribution infrastructure;

(5) ultraclean fuels;

(6) heavy oil and oil shale; and

(7) related environmental research.

(b) FUEL CELLS.—

(1) The Secretary shall conduct a program of research, development, demonstration, and commercial application on fuel cells for low-cost, high-efficiency, fuel-flexible, modular power systems.

(2) The demonstrations shall include fuel cell proton exchange membrane technology for commercial, residential, and transportation applications, and distributed generation systems, utilizing improved manufacturing production and processes.

(c) NATURAL GAS AND OIL DEPOSITS REPORT.—Not later than 2 years after the date of the enactment of this Act, and every 2 years thereafter, the Secretary of the Interior, in consultation with other appropriate Federal agencies, shall transmit a report to the Congress of the latest estimates of natural gas and oil reserves, reserves growth,

and undiscovered resources in Federal and State waters off the coast of Louisiana and Texas.

(d) INTEGRATED CLEAN POWER AND ENERGY RESEARCH.—

(1) The Secretary shall establish a national center or consortium of excellence in clean energy and power generation, utilizing the resources of the existing Clean Power and Energy Research Consortium, to address the nation's critical dependence on energy and the need to reduce emissions.

(2) The center or consortium will conduct a program of research, development, demonstration and commercial application on integrating the following six focus areas:

(A) efficiency and reliability of gas turbines for power generation;

(B) reduction in emissions from power generation;

(C) promotion of energy conservation issues;

(D) effectively utilizing alternative fuels and renewable energy;

(E) development of advanced materials technology for oil and gas exploration and utilization in harsh environments; and

(F) education on energy and power generation issues.

SEC. 953. RESEARCH AND DEVELOPMENT FOR COAL MINING TECHNOLOGIES.

(a) ESTABLISHMENT.—The Secretary shall carry out a program of research and development on coal mining technologies. The Secretary shall cooperate with appropriate Federal agencies, coal producers, trade associations, equipment manufacturers, institutions of higher education with mining engineering departments, and other relevant entities.

(b) PROGRAM.—The research and development activities carried out under this section shall—

(1) be guided by the mining research and development priorities identified by the Mining Industry of the Future Program and in the recommendations from relevant reports of the National Academy of Sciences on mining technologies;

(2) include activities exploring minimization of contaminants in mined coal that contribute to environmental concerns including development and demonstration of electromagnetic wave imaging ahead of mining operations;

(3) develop and demonstrate coal bed electromagnetic wave imaging and radar techniques for horizontal drilling in order to increase methane recovery efficiency, prevent spoilage of domestic coal reserves and minimize water disposal associated with methane extraction; and

(4) expand mining research capabilities at institutions of higher education.

SEC. 954. COAL AND RELATED TECHNOLOGIES PROGRAM.

(a) IN GENERAL.—In addition to the program authorized under Title II of this Act, the Secretary of Energy shall conduct a program of technology research, development and demonstration and commercial application for coal and power systems, including programs to facilitate production and generation of coal-based power through—

(1) innovations for existing plants;

(2) integrated gasification combined cycle;

(3) advanced combustion systems;

(4) turbines for synthesis gas derived from coal;

(5) carbon capture and sequestration research and development;

(6) coal-derived transportation fuels and chemicals;

(7) solid fuels and feedstocks; and

(8) advanced coal-related research.

(B) COST AND PERFORMANCE GOALS.—In carrying out programs authorized by this section, the Secretary shall identify cost and performance goals for coal-based technologies that would permit the continued cost-competitive use of coal for electricity generation, as chemical feedstocks, and as transportation fuel in 2007, 2015, and the years after 2020. In establishing such cost and performance goals, the Secretary shall—

(1) consider activities and studies undertaken to date by industry in

cooperation with the Department of Energy in support of such assessment;

(2) consult with interested entities, including coal producers, industries using coal, organizations to promote coal and advanced coal technologies, environmental organizations and organizations representing workers;

(3) not later than 120 days after the date of enactment of this section, publish in the Federal Register proposed draft cost and performance goals for public comments; and

(4) not later than 180 days after the date of enactment of this section and every four years thereafter, submit to Congress a report describing final cost and performance goals for such technologies that includes a list of technical milestones as well as an explanation of how programs authorized in this section will not duplicate the activities authorized under the Clean Coal Power Initiative authorized under Title II of this Act.

SEC. 955. COMPLEX WELL TECHNOLOGY TESTING FACILITY.

The Secretary of Energy, in coordination with industry leaders in extended research drilling technology, shall establish a Complex Well Technology Testing Facility at the Rocky Mountain Oilfield Testing Center to increase the range of extended drilling technologies.

Subtitle F—Science

SEC. 961. SCIENCE.

(a) IN GENERAL.—The following sums are authorized to be appropriated to the Secretary for research, development, demonstration, and commercial application activities of the Office of Science, including activities authorized under this subtitle, including the amounts authorized under the amendment made by section 967(c)(2)(D), and including basic energy sciences, advanced scientific and computing research, biological and environmental research, fusion energy sciences, high energy physics, nuclear physics, and research analysis and infrastructure support:

(1) for fiscal year 2004, $3,785,000,000;

(2) for fiscal year 2005, $4,153,000,000;

(3) for fiscal year 2006, $4,586,000,000

(4) for fiscal year 2007, $5,000,000,000; and

(5) For fiscal year 2008, $5,400,000,000.

(b) ALLOCATIONS.—From amounts authorized under subsection (a), the following sums are authorized:

(1) For activities of the Fusion Energy Sciences Program, including activities under section 962—

(A) for fiscal year 2004, $335,000,000;

(B) for fiscal year 2005, $349,000,000;

(C) for fiscal year 2006, $362,000,000;

(D) for fiscal year 2007, $377,000,000; and

(E) for fiscal year 2008, $393,000,000.

(2) For the Spallation Neutron Source—

(A) for construction in fiscal year 2004, $124,600,000;

(B) for construction in fiscal year 2005, $79,800,000; and

(C) for completion of construction in fiscal year 2006, $41,100,000; and

(D) for other project costs (including research and development necessary to complete the project, preoperations costs, and capital equipment related to construction), $103,279,000 for the period encompassing fiscal years 2003 through 2006, to remain available until expended through September 30, 2006.

(3) For Catalysis Research activities under section 965—

(A) for fiscal year 2004, $33,000,000;

(B) for fiscal year 2005, $35,000,000;

(C) for fiscal year 2006, $36,500,000;

(D) for fiscal year 2007, $38,200,000; and

(E) for fiscal year 2008, $40,100,000.

(4) For Nanoscale Science and Engineering Research activities under section 966—

(A) for fiscal year 2004, $270,000,000;

(B) for fiscal year 2005, $290,000,000;

(C) for fiscal year 2006, $310,000,000;

(D) for fiscal year 2007, $330,000,000; and

(E) for fiscal year 2008, $375,000,000.

(5) For activities under subsection 966(c), from the amounts authorized under subparagraph (4)—

(A) for fiscal year 2004, $135,000,000;

(B) for fiscal year 2005, $150,000,000;

(C) for fiscal year 2006, $120,000,000;

(D) for fiscal year 2007, $100,000,000; and

(E) for fiscal year 2008, $125,000,000.

(6) For activities in the Genomes to Life Program under section 968—

(A) for fiscal year 2004, $100,000,000;

(B) for fiscal year 2005, $170,000,000;

(C) for fiscal year 2006, $325,000,000;

(D) for fiscal year 2007, $415,000,000; and

(E) for fiscal year 2008, $455,000,000.

(7) For construction and ancillary equipment of the Genomes to Life User Facilities under section 968(d), of funds authorized under (6)—

(A) for fiscal year 2004, $16,000,000;

(B) for fiscal year 2005, $70,000,000;

(C) for fiscal year 2006, $175,000,000;

(D) for fiscal year 2007, $215,000,000; and

(E) for fiscal year 2008, $205,000,000.

(8) For activities in the Water Supply Technologies Program under section 970, $30,000,000 for each of fiscal years 2004 through 2008.

(c) In addition to the funds authorized under subsection (b)(1), the following sums are authorized for construction costs associated with the ITER project under section 962—

(1) for fiscal year 2006, $55,000,000;

(2) for fiscal year 2007, $95,000,000; and

(3) for fiscal year 2008, $115,000,000.

SEC. 962. UNITED STATES PARTICIPATION IN ITER.

(a) PARTICIPATION.—

(1) The Secretary of Energy is authorized to undertake full scientific and technological cooperation in the International Thermonuclear Experimental Reactor project (referred to in this title as "ITER").

(2) In the event that ITER fails to go forward within a reasonable period of time, the Secretary shall send to Congress a plan, including costs and schedules, for implementing the domestic burning plasma experiment known as the Fusion Ignition Research Expriment. Such a plan shall be developed with full consultation with the Fusion Energy Sciences Advisory Committee and be reviewed by the National Research Council.

(3) It is the intent of Congress that such sums shall be largely for work performed in the United States and that such work contributes the maximum amount possible to the U.S. scientific and technological base.

(b) PLANNING.—

(1) Not later than 180 days of the date of enactment of this act, the Secretary shall present to Congress a plan, with proposed cost estimates, budgets and potential international partners, for the implementation of the goals of this section. The plan shall ensure that—

(A) existing fusion research facilities are more fully utilized;

(B) fusion science, technology, theory, advanced computation, modeling and simulation are strengthened;

(C) new magnetic and inertial fusion research facilities are selected based on scientific innovation, cost effectiveness, and their potential to advance the goal of practical fusion energy at the earliest date possible, and those that are selected are funded at a cost-effective rate;

(D) communication of scientific results and methods between the fusion energy science community and the broader scientific and technology communities is improved;

(E) inertial confinement fusion facilities are utilized to the extent practicable for the purpose of inertial fusion energy research and development; and

(F) attractive alternative inertial and magnetic fusion energy approaches are more fully explored.

(2) Such plan shall also address the status of and, to the degree possible, costs and schedules for—

(A) in coordination with the program in section 969, the design and implementation of international or national facilities for the testing of fusion materials; and

(B) the design and implementation of international or national facilities for the testing and development of key fusion technologies.

SEC. 963. SPALLATION NEUTRON SOURCE.

(a) DEFINITION.—For the purposes of this section, the term "Spallation Neutron Source" means Department Project 9909E 09334, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

(b) 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.

(c) AUTHORIZATION OF APPROPRIATIONS.—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.

SEC. 964. SUPPORT FOR SCIENCE AND ENERGY FACILITIES AND INFRASTRUCTURE.

(a) FACILITY AND INFRASTRUCTURE POLICY.—The Secretary shall develop and implement a strategy for facilities and infrastructure supported primarily from the Office of Science, the Office of Energy Efficiency and Renewable Energy, the Office of Fossil Energy, or the Office of Nuclear Energy, Science and Technology Programs at all national laboratories and single-purpose research facilities. Such strategy shall provide cost-effective means for—

(1) maintaining existing facilities and infrastructure, as needed;

(2) closing unneeded facilities;

(3) making facility modifications; and

(4) building new facilities.

(b) REPORT.—

(1) The Secretary shall prepare and transmit, along with the President's budget request to the Congress for fiscal year 2006, a report containing the strategy developed under subsection (a).

(2) For each national laboratory and single-purpose research facility, for the facilities primarily used for science and energy research, 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 facility and infrastructure project compared to the original baseline cost, schedule, and scope.

SEC. 965. CATALYSIS RESEARCH PROGRAM.

(A) ESTABLISHMENT.—The Secretary, through the Office of Science, shall support a program of research and development in catalysis science consistent with the Department's statutory authorities related to research and development. The program

shall include efforts to—

(1) enable catalyst design using combinations of experimental and mechanistic methodologies coupled with computational modeling of catalytic reactions at the molecular level;

(2) develop techniques for high throughput synthesis, assay, and characterization at nanometer and sub-nanometer scales in situ under actual operating conditions,

(3) synthesize catalysts with specific site architectures;

(4) conduct research on the use of precious metals for catalysis; and

(5) translate molecular understanding to the design of catalytic compounds.

(b) DUTIES OF THE OFFICE OF SCIENCE.—In carrying out this program, the Director of the Office of Science shall—

(1) support both individual investigators and multidisciplinary teams of investigators to pioneer new approaches in catalytic design;

(2) develop, plan, construct, acquire, share, or operate special equipment or facilities for the use of investigators in collaboration with national user facilities such as nanoscience and engineering centers;

(3) support technology transfer activities to benefit industry and other users of catalysis science and engineering; and

(4) coordinate research and development activities with industry and other federal agencies.

(c) TRIENNIAL ASSESSMENT.—The National Academy of Sciences shall review the catalysis program every three years to report on gains made in the fundamental science of catalysis and its progress towards developing new fuels for energy production and material fabrication processes.

SEC. 966. NANOSCALE SCIENCE AND ENGINEERING RESEARCH.

(a) ESTABLISHMENT.—The Secretary, acting through the Office of Science, shall support a program of research, development, demonstration, and commercial application in nanoscience and nanoengineering. The program shall include efforts to

further the understanding of the chemistry, physics, materials science, and engineering of phenomena on the scale of nanometers and to apply this knowledge to the Department's mission areas.

(b) DUTIES OF THE OFFICE OF SCIENCE.—In carrying out the program under this section, the Office of Science shall—

(1) support both individual investigators and teams of investigators, including multidisciplinary teams;

(2) carry out activities under subsection (c);

(3) support technology transfer activities to benefit industry and other users of nanoscience and nanoengineering; and

(4) coordinate research and development activities with other DOE programs, industry and other Federal agencies.

(c) NANOSCIENCE AND NANOENGINEERING RESEARCH CENTERS AND MAJOR INSTRUMENTATION.—

(1) The Secretary shall carry out projects to develop, plan, construct, acquire, operate, or support special equipment, instrumentation, or facilities for investigators conducting research and development in nanoscience and nanoengineering.

(2) Projects under paragraph (1) may include the measurement of properties at the scale of nanometers, manipulation at such scales, and the integration of technologies based on nanoscience or nanoengineering into bulk materials or other technologies.

(3) Facilities under paragraph (1) may include electron microcharacterization facilities, microlithography facilities, scanning probe facilities, and related instrumentation.

(4) The Secretary shall encourage collaborations among DOE programs, institutions of higher education, laboratories, and industry at facilities under this subsection.

SEC. 967. ADVANCED SCIENTIFIC COMPUTING FOR ENERGY MISSIONS.

(a) IN GENERAL.—The Secretary, acting through the Office of Science, shall

support a program to advance the Nation's computing capability across a diverse set of grand challenge, computationally based, science problems related to departmental missions.

(b) DUTIES OF THE OFFICE OF SCIENCE.—In carrying out the program under this section, the Office of Science shall—

(1) advance basic science through computation by developing software to solve grand challenge science problems on new generations of computing platforms in collaboration with other DOE program offices;

(2) enhance the foundations for scientific computing by developing the basic mathematical and computing systems software needed to take full advantage of the computing capabilities of computers with peak speeds of 100 teraflops or more, some of which may be unique to the scientific problem of interest;

(3) enhance national collaboratory and networking capabilities by developing software to integrate geographically separated researchers into effective research teams and to facilitate access to and movement and analysis of large (petabyte) data sets;

(4) maintain a robust scientific computing hardware infrastructure to ensure that the computing resources needed to address departmental missions are available; and

(5) explore new computing approaches and technologies that promise to advance scientific computing including developments in quantum computing.

(c) HIGH-PERFORMANCE COMPUTING ACT OF 1991 AMENDMENTS.—The High-Performance Computing Act of 1991 is amended—

(1) in section 4 (15 U.S.C. 5503)—

(A) in paragraph (3) by striking "means" and inserting "and 'networking and information technology' mean", and by striking "(including vector supercomputers and large scale parallel systems)"; and

(B) in paragraph (4), by striking "packet switched".

(2) in section 203 (15 U.S.C. 5523)—

(A) in subsection (a), by striking all after "As part of the" and inserting—

"Networking and Information Technology Research and Development Program, the Secretary of Energy shall conduct basic and applied research in networking and information technology, with emphasis on supporting fundamental research in the physical sciences and engineering, and energy applications; providing supercomputer access and advanced communication capabilities and facilities to scientific researchers; and developing tools for distributed scientific collaboration.";

(B) in subsection (b), by striking "Program" and inserting "Networking and Information Technology Research and Development Program"; and

(C) by amending subsection (e) to read as follows:

"(e) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary of Energy to carry out the Networking and Information Technology Research and Development Program such sums as may be necessary for fiscal years 2004 through 2008.".

(d) COORDINATION.—The Secretary shall ensure that the program under this section is integrated and consistent with—

(1) the Accelerated Strategic Computing Initiative of the National Nuclear Security Administration; and

(2) other national efforts related to advanced scientific computing for science and engineering.

SEC. 968. GENOMES TO LIFE PROGRAM.

(a) ESTABLISHMENT.—The Secretary shall carry out a program of research, development, demonstration, and commercial application, to be known as the Genomes to Life Program, in systems biology and proteomics consistent with the Department's statutory authorities.

(b) PLANNING.—

(1) The Secretary shall prepare a program plan describing how knowledge and capabilities would be developed by the program and applied to Department missions relating to energy security, environmental cleanup, and national security.

(2) The program plan will be developed in consultation with other relevant Department technology programs.

(3) The program plan shall focus science and technology on long-term goals, including—

(A) contributing to U.S. independence from foreign energy sources, including production of hydrogen;

(B) converting carbon dioxide to organic carbon;

(C) advancing environmental cleanup;

(D) providing the science and technology for new biotechnology industries; and

(E) improving national security and combating bioterrorism.

(4) The program plan shall establish specific short-term goals and update these goals with the Secretary's annual budget submission.

(c) PROGRAM EXECUTION.—In carrying out the program under this Act, the Secretary shall—

(1) support individual investigators and multidisciplinary teams of investigators;

(2) subject to subsection (d), develop, plan, construct, acquire, or operate special equipment or facilities for the use of investigators conducting research, development, demonstration, or commercial application in systems biology and proteomics;

(3) support technology transfer activities to benefit industry and other users of systems biology and proteomics; and

(4) coordinate activities by the Department with industry and other federal agencies.

(d) GENOMES TO LIFE USER FACILITIES AND ANCILLARY EQUIPMENT.—

(1) Within the funds authorized to be appropriated pursuant to this Act, the amounts specified under section 961(b)(7) shall, subject to appropriations, be available for projects to develop, plan, construct, acquire, or operate special equipment, instrumentation, or facilities for investigators conducting research, development, demonstration, and commercial application in systems biology and proteomics and associated biological disciplines.

(2) Projects under paragraph (1) may include—

(A) the identification and characterization of multiprotein complexes;

(B) characterization of gene regulatory networks;

(C) characterization of the functional repertoire of complex microbial communities in their natural environments at the molecular level; and

(D) development of computational methods and capabilities to advance understanding of complex biological systems and predict their behavior.

(3) Facilities under paragraph (1) may include facilities, equipment, or instrumentation for—

(A) the production and characterization of proteins;

(B) whole proteome analysis;

(C) characterization and imaging of molecular machines; and

(D) analysis and modeling of cellular systems.

(4) The Secretary shall encourage collaborations among universities, laboratories and industry at facilities under this subsection. All facilities under this subsection shall have a specific mission of technology transfer to other institutions.

SEC. 969. FISSION AND FUSION ENERGY MATERIALS RESEARCH PROGRAM.

In the President's fiscal year 2006 budget request, the Secretary shall establish a research and development program on material science issues presented by advanced

fission reactors and the Department's fusion energy program. The program shall develop a catalog of material properties required for these applications, develop theoretical models for materials possessing the required properties, benchmark models against existing data, and develop a roadmap to guide further research and development in this area.

SEC. 970. ENERGY-WATER SUPPLY TECHNOLOGIES PROGRAM.

(a) ESTABLISHMENT.— There is established within the Office of Science, Office of Biological and Environmental Research, the "Energy-Water Supply Technologies Program," to study energy-related issues associated with water resources and municipal waterworks and to study water supply issues related to energy production.

(b) DEFINITIONS.—

(1) The term "Foundation" means the American Water Works Association Research Foundation.

(2) The term "Indian tribe" has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).

(3) The term "Program" means the Water Supply Technologies Program established by section 970(a).

(c) PROGRAM AREAS.—The program shall conduct research and development, including—

(1) arsenic removal under subsection (d);

(2) desalination research program under subsection (e);

(3) the water and energy sustainability program under subsection (f); and

(4) other energy-intensive water supply and treatment technologies and other technologies selected by the Secretary.

(d) ARSENIC REMOVAL PROGRAM.—

(1) As soon as practicable after the date of enactment of this Act, the Secretary shall enter into a contract with the Foundation to utilize the facilities,

institutions and relationships established in the "Consolidated Appropriations Resolution, 2003" as described in Senate Report 107-220 that will carry out a research program to develop and demonstrate innovative arsenic removal technologies.

(2) In carrying out the arsenic removal program, the Foundation shall, to the maximum extent practicable, conduct research on means of—

(A) reducing energy costs incurred in using arsenic removal technologies;

(B) minimizing materials, operating, and maintenance costs incurred in using arsenic removal technologies; and

(C) minimizing any quantities of waste (especially hazardous waste) that result from use of arsenic removal technologies.

(3) The Foundation shall carry out peer-reviewed research and demonstration projects to develop and demonstrate water purification technologies.

(4) In carrying out the arsenic removal program—

(A) demonstration projects will be implemented with municipal water system partners to demonstrate the applicability of innovative arsenic removal technologies in areas with different water chemistries representative of areas across the United States with arsenic levels near or exceeding EPA guidelines; and

(B) not less than 40 percent of the funds of the Department used for demonstration projects under the arsenic removal program shall be expended on projects focused on needs of and in partnership with rural communities or Indian tribes.

(5) The Foundation shall develop evaluations of cost effectiveness of arsenic removal technologies used in the program and an education, training, and technology transfer component for the program.

(6) The Secretary shall consult with the Administrator of the Environmental Protection Agency to ensure that activities under the arsenic

removal program are coordinated with appropriate programs of the Environmental Protection Agency and other federal agencies, state programs and academia.

(7) Not later than 1 year after the date of commencement of the arsenic removal program, and annually thereafter, the Secretary shall submit to Congress a report on the results of the arsenic removal program.

(e) DESALINATION PROGRAM.—

(1) The Secretary, in cooperation with the Commissioner of Reclamation, shall carry out a desalination research program in accordance with the desalination technology progress plan developed in Title II of the Energy and Water Development Appropriations Act, 2002 (115 Stat. 498), and described in Senate Report 107-39 under the heading "WATER AND RELATED RESOURCES" in the "BUREAU OF RECLAMATION" section.

(2) The desalination program shall—

(A) draw on the national laboratory partnership established with the Bureau of Reclamation to develop the January 2003 national Desalination and Water Purification Technology Roadmap for next-generation desalination technology;

(B) focus on research relating to, and development and demonstration of, technologies that are appropriate for use in desalinating brackish groundwater, wastewater and other saline water supplies; disposal of residual brine or salt; and

(C) consider the use of renewable energy sources.

(3) Under the desalination program, funds made available may be used for construction projects, including completion of the National Desalination Research Center for brackish groundwater and ongoing facility operational costs.

(4) The Secretary and the Commissioner of Reclamation shall jointly establish a steering committee for the desalination program. The steering committee shall be jointly chaired by 1 representative from this Program and 1

representative from the Bureau of Reclamation.

(f) WATER AND ENERGY SUSTAINABILITY PROGRAM.—

(1) The Secretary shall carry out a research program to develop understanding and technologies to assist in ensuring that sufficient quantities of water are available to meet present and future requirements.

(2) Under this program and in collaboration with other programs within the Department including those within the Offices of Fossil Energy and Energy Efficiency and Renewable Energy, the Secretary of the Interior, Army Corps of Engineers, Environmental Protection Agency, Department of Commerce, Department of Defense, state agencies, non-governmental agencies and academia, the Secretary shall assess the current state of knowledge and program activities concerning—

(A) future water resources needed to support energy production within the United States including but not limited to the water needs for hydropower and thermo-electric power generation;

(B) future energy resources needed to support development of water purification and treatment including desalination and long-distance water conveyance;

(C) reuse and treatment of water produced as a by-product of oil and gas extraction;

(D) use of impaired and non-traditional water supplies for energy production and other uses; and

(E) technologies to reduce water use in energy production.

(3) In addition to the assessments in (2), the Secretary shall—

(A) develop a research plan defining the scientific and technology development needs and activities required to support long-term water needs and planning for energy sustainability, use of impaired water for energy production and other uses, and reduction of water use in energy production;

(B) carry out the research plan required under (A) including

development of numerical models, decision analysis tools, economic analysis tools, databases, planning methodologies and strategies;

(C) implement at least three planning demonstration projects using the models, tools and planning approaches developed under subparagraph (B) and assess the viability of these tools at the scale of river basins with at least one demonstration involving an international border; and

(D) transfer these tools to other federal agencies, state agencies, non-profit organizations, industry and academia for use in their energy and water sustainability efforts.

(4) Not later than 1 year after the date of enactment of this Act, the Secretary shall submit to Congress a report on the water and energy sustainability program that describes the research elements described under paragraph (2), and makes recommendations for a management structure that optimizes use of Federal resources and programs.

(g) COST SHARING.—

(1) Research projects under this section shall not require cost-sharing.

(2) Each demonstration project carried out under the Program shall be carried out on a cost-shared basis, as determined by the Secretary.

(3) With respect to a demonstration project, the Secretary may accept in-kind contributions, and waive the cost-sharing requirement in appropriate circumstances.

Subtitle G—Energy and Environment

SEC. 971. UNITED STATES-MEXICO ENERGY TECHNOLOGY COOPERATION.

(a) PROGRAM.—The Secretary shall establish a research, development, demonstration, and commercial application program to be carried out in collaboration with entities in Mexico and the United States to promote energy efficient, environmentally sound economic development along the United States-Mexico border which minimizes public health risks from industrial activities in the border region.

(b) PROGRAM MANAGEMENT.—The program under subsection (a) shall be

managed by the Department of Energy Carlsbad Environmental Management Field Office.

(c) TECHNOLOGY TRANSFER.—In carrying out projects and activities under this section, the Secretary shall assess the applicability of technology developed under the Environmental Management Science Program of the Department.

(d) INTELLECTUAL PROPERTY.—In carrying out this section, the Secretary shall comply with the requirements of any agreement entered into between the United States and Mexico regarding intellectual property protection.

(e) AUTHORIZATION OF APPROPRIATIONS.—The following sums are authorized to be appropriated to the Secretary to carry out activities under this section:

(1) For each of fiscal years 2004 and 2005, $5,000,000; and

(2) For each of fiscal years 2006, 2007, and 2008, $6,000,000.

SEC. 972. COAL TECHNOLOGY LOAN.

There are authorized to be appropriated to the Secretary $125,000,000 to provide a loan to the owner of the experimental plant constructed under United States Department of Energy cooperative agreement number DE-FC-22-91PC90544 on such terms and conditions as the Secretary determines, including interest rates and upfront payments.

Subtitle H—Management

SEC. 981. AVAILABILITY OF FUNDS.

Funds authorized to be appropriated to the Department under this title shall remain available until expended.

SEC. 982. COST SHARING.

(a) RESEARCH AND DEVELOPMENT.—Except as otherwise provided in this title, for research and development programs carried out under this title, the Secretary shall require a commitment from non-Federal sources of at least 20 percent of the cost of the project. Cost sharing is not required for research and development of a basic or fundamental nature.

(b) DEMONSTRATION AND COMMERCIAL APPLICATION.—Except as otherwise provided in this subtitle, the Secretary shall require at least 50 percent of the costs

directly and specifically related to any demonstration or commercial application project under this subtitle to be provided from non-Federal sources. The Secretary may reduce the non-Federal requirement under this subsection if the Secretary determines that the reduction is necessary and appropriate considering the technological risks involved in the project and is necessary to meet the objectives of this title.

(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. 983. MERIT REVIEW OF PROPOSALS.

Awards of funds authorized under this title shall be made only after an impartial review of the scientific and technical merit of the proposals for such awards has been carried out by or for the Department.

SEC. 984. EXTERNAL TECHNICAL REVIEW OF DEPARTMENTAL PROGRAMS.

(a) NATIONAL ENERGY RESEARCH AND DEVELOPMENT ADVISORY BOARDS.—

(1) The Secretary shall establish one or more advisory boards to review Department research, development, demonstration, and commercial application programs in energy efficiency, renewable energy, nuclear energy, and fossil energy.

(2) The Secretary may designate an existing advisory board within the Department to fulfill the responsibilities of an advisory board under this subsection, and may enter into appropriate arrangements with the National Academy of Sciences to establish such an advisory board.

(b) UTILIZATION OF EXISTING COMMITTEES.—The Secretary shall continue to use the scientific program advisory committees chartered under the Federal Advisory Committee Act by the Office of Science to oversee research and development programs under that Office.

(c) MEMBERSHIP.—Each advisory board under this section shall consist of persons with appropriate expertise representing a diverse range of interests.

(d) MEETINGS AND PURPOSES.—Each advisory board under this section shall meet at least semi-annually to review and advise on the progress made by the

respective research, development, demonstration, and commercial application program or programs. The advisory board shall also review the measurable cost and performance-based goals for such programs as established under section 902, and the progress on meeting such goals.

(e) PERIODIC REVIEWS AND ASSESSMENTS.—The Secretary shall enter into appropriate arrangements with the National Academy of Sciences to conduct periodic reviews and assessments of the programs authorized by this title, the measurable cost and performance-based goals for such programs as established under section 902, if any, and the progress on meeting such goals. Such reviews and assessments shall be conducted every 5 years, or more often as the Secretary considers necessary, and the Secretary shall transmit to the Congress reports containing the results of all such reviews and assessments.

SEC. 985. IMPROVED COORDINATION OF TECHNOLOGY TRANSFER ACTIVITIES.

(a) TECHNOLOGY TRANSFER COORDINATOR.—The Secretary shall designate a Technology Transfer Coordinator to perform oversight of and policy development for technology transfer activities at the Department. The Technology Transfer Coordinator shall coordinate the activities of the Technology Transfer Working Group, shall oversee the expenditure of funds allocated to the Technology Transfer Working Group, and shall coordinate with each technology partnership ombudsman appointed under section 11 of the Technology Transfer Commercialization Act of 2000 (42 U.S.C. 7261c).

(b) TECHNOLOGY TRANSFER WORKING GROUP.—The Secretary shall establish a Technology Transfer Working Group, which shall consist of representatives of the National Laboratories and single-purpose research facilities, to—

(1) coordinate technology transfer activities occurring at National Laboratories and single-purpose research facilities;

(2) exchange information about technology transfer practices, including alternative approaches to resolution of disputes involving intellectual property rights and other technology transfer matters; and

(3) develop and disseminate to the public and prospective technology

partners information about opportunities and procedures for technology transfer with the Department, including those related to alternative approaches to resolution of disputes involving intellectual property rights and other technology transfer matters.

(c) TECHNOLOGY TRANSFER RESPONSIBILITY.—Nothing in this section shall affect the technology transfer responsibilities of Federal employees under the Stevenson-Wydler Technology Innovation Act of 1980.

SEC. 986. TECHNOLOGY INFRASTRUCTURE PROGRAM.

(a) ESTABLISHMENT.—The Secretary shall establish a Technology Infrastructure Program in accordance with this section.

(b) PURPOSE.—The purpose of the Technology Infrastructure Program shall be to improve the ability of National Laboratories and single-purpose research facilities to support departmental missions by—

(1) stimulating the development of technology clusters that can support departmental missions at the National Laboratories or single-purpose research facilities;

(2) improving the ability of National Laboratories and single-purpose research facilities to leverage and benefit from commercial research, technology, products, processes, and services; and

(3) encouraging the exchange of scientific and technological expertise between National Laboratories or single-purpose research facilities and entities that can support departmental missions at the National Laboratories or single-purpose research facilities, such as institutions of higher education; technology-related business concerns; nonprofit institutions; and agencies of State, tribal, or local governments.

(c) PROJECTS.—The Secretary shall authorize the Director of each National Laboratory or single-purpose research facility to implement the Technology Infrastructure Program at such National Laboratory or facility through projects that meet the requirements of subsections (d) and (e).

(d) PROGRAM REQUIREMENTS.—Each project funded under this section shall

meet the following requirements:

(1) Each project shall include at least one of each of the following entities: a business; an institution of higher education; a nonprofit institution; and an agency of a State, local, or tribal government.

(2) Not less than 50 percent of the costs of each project funded under this section shall be provided from non-Federal sources. The calculation of costs paid by the non-Federal sources to a project shall include cash, personnel, services, equipment, and other resources expended on the project after start of the project. Independent research and development expenses of Government contractors that qualify for reimbursement under section 3109205 0918(e) of the Federal Acquisition Regulations issued pursuant to section 25(c)(1) of the Office of Federal Procurement Policy Act (41 U.S.C. 421(c)(1)) may be credited towards costs paid by non-Federal sources to a project, if the expenses meet the other requirements of this section.

(3) All projects under this section shall be competitively selected using procedures determined by the Secretary.

(4) Any participant that receives funds under this section may use generally accepted accounting principles for maintaining accounts, books, and records relating to the project.

(5) No Federal funds shall be made available under this section for construction or any project for more than 5 years.

(e) SELECTION CRITERIA.—

(1) The Secretary shall allocate funds under this section only if the Director of the National Laboratory or single-purpose research facility managing the project determines that the project is likely to improve the ability of the National Laboratory or single-purpose research facility to achieve technical success in meeting departmental missions.

(2) The Secretary shall consider the following criteria in selecting a project to receive Federal funds—

(A) the potential of the project to promote the development of a

commercially sustainable technology cluster following the period of Department investment, which will derive most of the demand for its products or services from the private sector, and which will support departmental missions at the participating National Laboratory or single-purpose research facility;

(B) the potential of the project to promote the use of commercial research, technology, products, processes, and services by the participating National Laboratory or single-purpose research facility to achieve its mission or the commercial development of technological innovations made at the participating National Laboratory or single-purpose research facility;

(C) the extent to which the project involves a wide variety and number of institutions of higher education, nonprofit institutions, and technology-related business concerns that can support the missions of the participating National Laboratory or single-purpose research facility and that will make substantive contributions to achieving the goals of the project;

(D) the extent to which the project focuses on promoting the development of technology-related business concerns that are small businesses or involves such small businesses substantively in the project; and

(E) such other criteria as the Secretary determines to be appropriate.

(f) ALLOCATION.—In allocating funds for projects approved under this section, the Secretary shall provide—

(1) the Federal share of the project costs; and

(2) additional funds to the National Laboratory or single-purpose research facility managing the project to permit the National Laboratory or single-purpose research facility to carry out activities relating to the project, and to coordinate such activities with the project.

(g) REPORT TO CONGRESS.—Not later than July 1, 2006, the Secretary shall report to Congress on whether the Technology Infrastructure Program should be continued and, if so, how the program should be managed.

(h) DEFINITIONS.—In this section:

(1) The term "technology cluster" means a concentration of technology-related business concerns, institutions of higher education, or nonprofit institutions, that reinforce each other's performance in the areas of technology development through formal or informal relationships.

(2) The term "technology-related business concern" means a for-profit corporation, company, association, firm, partnership, or small business concern that conducts scientific or engineering research; develops new technologies; manufactures products based on new technologies; or performs technological services.

(i) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary for activities under this section $10,000,000 for each of fiscal years 2004, 2005, and 2006.

SEC. 987. SMALL BUSINESS ADVOCACY AND ASSISTANCE.

(a) SMALL BUSINESS ADVOCATE.—The Secretary shall require the Director of each National Laboratory, and may require the Director of a single-purpose research facility, to designate a small business advocate to—

(1) increase the participation of small business concerns, including socially and economically disadvantaged small business concerns, in procurement, collaborative research, technology licensing, and technology transfer activities conducted by the National Laboratory or single-purpose research facility;

(2) report to the Director of the National Laboratory or single-purpose research facility on the actual participation of small business concerns in procurement and collaborative research along with recommendations, if appropriate, on how to improve participation;

(3) make available to small businesses training, mentoring, and

information on how to participate in procurement and collaborative research activities;

(4) increase the awareness inside the National Laboratory or single-purpose research facility of the capabilities and opportunities presented by small business concerns; and

(5) establish guidelines for the program under subsection (b) and report on the effectiveness of such program to the Director of the National Laboratory or single-purpose research facility.

(b) ESTABLISHMENT OF SMALL BUSINESS ASSISTANCE PROGRAM.—The Secretary shall require the Director of each National Laboratory, and may require the Director of a single-purpose research facility, to establish a program to provide small business concerns—

(1) assistance directed at making them more effective and efficient subcontractors or suppliers to the National Laboratory or single-purpose research facility; or

(2) general technical assistance, the cost of which shall not exceed $10,000 per instance of assistance, to improve the small business concern's products or services.

(c) USE OF FUNDS.—None of the funds expended under subsection (b) may be used for direct grants to the small business concerns.

(d) DEFINITIONS.—In this section:

(1) The term "small business concern" has the meaning given such term in section 3 of the Small Business Act (15 U.S.C. 632).

(2) The term "socially and economically disadvantaged small business concerns" has the meaning given such term in section 8(a)(4) of the Small Business Act (15 U.S.C. 637(a)(4)).

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to the Secretary for activities under this section $5,000,000 for each of fiscal years 2004 through 2008.

SEC. 988. MOBILITY OF SCIENTIFIC AND TECHNICAL PERSONNEL.

Not later than 2 years after the date of enactment of this section, the Secretary shall transmit a report to the Congress identifying any policies or procedures of a contractor operating a National Laboratory or single-purpose research facility that create disincentives to the temporary transfer of scientific and technical personnel among the contractor-operated National Laboratories or contractor-operated single-purpose research facilities and provide suggestions for improving inter-laboratory exchange of scientific and technical personnel.

SEC. 989. NATIONAL ACADEMY OF SCIENCES REPORT.

Not later than 90 days after the date of enactment of this Act, the Secretary shall enter into an arrangement with the National Academy of Sciences for the Academy to—

(1) conduct a study on—

(A) the obstacles to accelerating the research, development, demonstration, and commercial application cycle for energy technology; and

(B) the adequacy of Department policies and procedures for, and oversight of, technology transfer-related disputes between contractors of the Department and the private sector; and

(2) report to the Congress on recommendations developed as a result of the study.

SEC. 990. OUTREACH.

The Secretary shall ensure that each program authorized by this title includes an outreach component to provide information, as appropriate, to manufacturers, consumers, engineers, architects, builders, energy service companies, institutions of higher education, facility planners and managers, State and local governments, and other entities.

SEC. 991. COMPETITIVE AWARD OF MANAGEMENT CONTRACTS.

None of the funds authorized to be appropriated to the Secretary by this title may be used to award a management and operating contract for a nonmilitary energy laboratory of the Department unless such contract is competitively awarded 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 and shall submit to the Congress a report notifying the Congress of the waiver and setting forth the reasons for the waiver at least 60 days prior to the date of the award of such a contract.

SEC. 992. REPROGRAMMING.

(a) DISTRIBUTION REPORT.—Not later than 60 days after the date of the enactment of an Act appropriating amounts authorized under this title, the Secretary shall transmit to the appropriate authorizing committees of the Congress a report explaining how such amounts will be distributed among the authorizations contained in this title.

(b) PROHIBITION.—

(1) No amount identified under subsection (a) shall be reprogrammed if such reprogramming would result in an obligation which changes an individual distribution required to be reported under subsection (a) by more than 5 percent unless the Secretary has transmitted to the appropriate authorizing committees of the Congress a report described in subsection (c) and a period of 30 days has elapsed after such committees receive the report.

(2) In the computation of the 30-day period described in paragraph (1), 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) REPROGRAMMING REPORT.—A report referred to in subsection (b)(1) shall contain a full and complete statement of the action proposed to be taken and the facts and circumstances relied on in support of the proposed action.

SEC. 993. CONSTRUCTION WITH OTHER LAWS.

Except as otherwise provided in this title, the Secretary shall carry out the research, development, demonstration, and commercial application programs, projects, and activities authorized by this title in accordance with the applicable provisions of the Atomic Energy Act of 1954 (42 U.S.C. et seq.), the Federal Nonnuclear Research and Development Act of 1974 (42 U.S.C. 5901 et seq.), the Energy Policy Act of 1992 (42 U.S.C. 13201 et seq.), the Stevenson-Wydler Technology Innovation Act of 1980 (15

U.S.C. 3701 et seq.), chapter 18 of title 35, United States Code (commonly referred to as the Bayh-Dole Act), and any other Act under which the Secretary is authorized to carry out such activities.

SEC. 994. IMPROVED COORDINATION AND MANAGEMENT OF CIVILIAN SCIENCE AND TECHNOLOGY PROGRAMS.

(a) EFFECTIVE TOP-LEVEL COORDINATION OF RESEARCH AND DEVELOPMENT PROGRAMS.—Section 202(b) of the Department of Energy Organization Act (42 U.S.C. 7132(b)) is amended to read as follows:

"(b)(1) There shall be in the Department an Under Secretary for Energy and Science, who shall be appointed by the President, by and with the advice and consent of the Senate. The Under Secretary shall be compensated at the rate provided for at level III of the Executive Schedule under section 5314 of title 5, United States Code.

"(2) The Under Secretary for Energy and Science shall be appointed from among persons who–

"(A) have extensive background in scientific or engineering fields; and

"(B) are well qualified to manage the civilian research and development programs of the Department of Energy.

"(3) The Under Secretary for Energy and Science shall—

"(A) serve as the Science and Technology Advisor to the Secretary;

"(B) monitor the Department's research and development programs in order to advise the Secretary with respect to any undesirable duplication or gaps in such programs;

"(C) advise the Secretary with respect to the well-being and management of the multipurpose laboratories under the jurisdiction of the Department;

"(D) advise the Secretary with respect to education and training activities required for effective short- and long-term basic and applied research activities of the Department;

"(E) advise the Secretary with respect to grants and other forms of financial assistance required for effective short- and long-term basic and applied

research activities of the Department; and

"(F) exercise authority and responsibility over Assistant Secretaries carrying out energy research and development and energy technology functions under sections 203 and 209, as well as other elements of the Department assigned by the Secretary.".

(b) RECONFIGURATION OF POSITION OF DIRECTOR OF THE OFFICE OF SCIENCE.—

(1) Section 209 of the Department of Energy Organization Act (41 U.S.C. 7139) is amended to read as follows:

"OFFICE OF SCIENCE

"SEC. 209. (a) There shall be within the Department an Office of Science, to be headed by an Assistant Secretary for Science, who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall be compensated at the rate provided for level IV of the Executive Schedule under section 5315 of title 5, United States Code.

"(b) The Assistant Secretary for Science shall be in addition to the Assistant Secretaries provided for under section 203 of this Act.

"(c) It shall be the duty and responsibility of the Assistant Secretary for Science to carry out the fundamental science and engineering research functions of the Department, including the responsibility for policy and management of such research, as well as other functions vested in the Secretary which he may assign to the Assistant Secretary.".

(2) Notwithstanding section 3345(b)(1) of title 5, United States Code, the President may designate the Director of the Office of Science immediately prior to the effective date of this Act to act in the office of the Assistant Secretary of Energy for Science until the office is filled as provided in section 209 of the Department of Energy Organization Act, as amended by paragraph (1). While so acting, such person shall receive compensation at the rate provided by this Act for the office of Assistant Secretary for Science.

(c) ADDITIONAL ASSISTANT SECRETARY POSITION TO ENABLE IMPROVED MANAGEMENT OF NUCLEAR ENERGY ISSUES.—

(1) Section 203(a) of the Department of Energy Organization Act (42 U.S.C. 7133(a)) is amended by striking "There shall be in the Department six Assistant Secretaries" and inserting "Except as provided in section 209, there shall be in the Department seven Assistant Secretaries".

(2) It is the sense of the Congress that the leadership for departmental missions in nuclear energy should be at the Assistant Secretary level.

(d) TECHNICAL AND CONFORMING AMENDMENTS—

(1) Section 202 of the Department of Energy Organization Act (42 U.S.C. 7132) is further amended by adding the following at the end:

"(d) There shall be in the Department an Under Secretary, who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall perform such functions and duties as the Secretary shall prescribe, consistent with this section. The Under Secretary shall be compensated at the rate provided for level III of the Executive Schedule under section 5314 of title 5, United States Code.

"(e) There shall be in the Department a General Counsel, who shall be appointed by the President, by and with the advice and consent of the Senate, and who shall perform such functions and duties as the Secretary shall prescribe. The General Counsel shall be compensated at the rate provided for level IV of the Executive Schedule under section 5315 of title 5, United States Code.".

(2) Section 5314 of title 5, United States Code, is amended by striking "Under Secretaries of Energy (2)" and inserting "Under Secretaries of Energy (3)".

(3) Section 5315 of title 5, United States Code, is amended by—

(A) striking "Director, Office of Science, Department of Energy."; and

(B) striking "Assistant Secretaries of Energy (6)" and inserting "Assistant Secretaries of Energy (8)".

(4) The table of contents for the Department of Energy Organization Act (42 U.S.C. 7101 note) is amended–

(A) by striking "Section 209" and inserting "Sec. 209";

(B) by striking "213." and inserting "Sec. 213.";

(C) by striking "214." and inserting "Sec. 214.";

(D) by striking "215." and inserting "Sec. 215."; and

(E) by striking "216." and inserting "Sec. 216.".

SEC. 995. EDUCATIONAL PROGRAMS IN SCIENCE AND MATHEMATICS

(a) Section 3165a of the Department of Energy Science Education Enhancement Act (42 U.S.C. 7381a) is amended by adding at the end:

"(14) Support competitive events for students, under supervision of teachers, designed to encourage student interest and knowledge in science and mathematics."

(b) Section 3169 of the Department of Energy Science Education Enhancement Act (42 U.S.C. 7381e), as redesignated by this Act, is amended by inserting before the period: "; and $40,000,000 for each of fiscal years 2004 through 2008."

SEC. 996. OTHER TRANSACTIONS AUTHORITY.

Section 646 of the Department of Energy Organization act (42 U.S.C. 7256) is amended by adding at the end the following:

"(g)(1) In addition to other authorities granted to the Secretary under law, the Secretary may enter into other transactions on such terms as the Secretary may deem appropriate in furtherance of research, development, or demonstration functions vested in the Secretary. Such other transactions shall not be subject to the provisions of section 9 of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5908).

"(2)(A) The Secretary shall ensure that—

"(i) to the maximum extent the Secretary determines practicable, no transaction entered into under paragraph (1) provides for research, development, or demonstration that duplicates research, development, or demonstration being conducted under existing projects carried out by the Department; and

"(ii) To the extent the Secretary determines practicable, the funds provided by the Government under a transaction authorized by paragraph (1) do not exceed the total amount provided by other parties to the transaction.

"(iii) To the extent the Secretary determines practicable, competitive,

merit-based selection procedures shall be used when entering into transactions under paragraph (1).

"(B) A transaction authorized by paragraph (1) may be used for a research, development, or demonstration project only if the Secretary determines the use of a standard contract, grant, or cooperative agreement for the project is not feasible or appropriate.

"(3)(A) The Secretary shall protect from disclosure, including disclosure under section 552 of title 5, United States Code, for up to 5 years after the date the information is received by the Secretary—

"(i) a proposal, proposal abstract, and supporting documents submitted to the Department in a competitive or noncompetitive process having the potential for resulting in an award to the party submitting the information entering into a transaction under paragraph (1); and

"(ii) a business plan and technical information relating to a transaction authorized by paragraph (1) submitted to the Department as confidential business information.

"(B) The Secretary may protect from disclosure, for up to 5 years after the information was developed, any information developed pursuant to a transaction under paragraph (1) which developed information is of a character that it would be protected from disclosure under section 552(b)(4) of title 5, United States Code, if obtained from a person other than a Federal agency.

"(4) Not later than 90 days after the date of enactment of this section, the Secretary shall prescribe guidelines for using other transactions authorized by the amendment under subsection (a). Such guidelines shall be published in the Federal Register for public comment under rulemaking procedures of the Department.

"(5) The authority of the Secretary under this subsection may be delegated only to an officer of the Department who is appointed by the President by and with the advice and consent of the Senate and may not be delegated to any other person.".

SEC. 997. REPORT ON RESEARCH AND DEVELOPMENT PROGRAM EVALUATION METHODOLOGIES.

Not later than 180 days after the date of enactment of this Act, the Secretary shall enter into appropriate arrangements with the National Academy of Sciences to investigate and report on the scientific and technical merits of any evaluation methodology currently in use or proposed for use in relation to the scientific and technical programs of the Department by the Secretary or other Federal official. Not later than 6 months after receiving the report of the National Academy, the Secretary shall submit such report to Congress, along with any other views or plans of the Secretary with respect to the future use of such evaluation methodology.

TITLE X— PERSONNEL AND TRAINING

SEC. 1001. WORKFORCE TRENDS AND TRAINEESHIP GRANTS.

(a) WORKFORCE TRENDS.—

(1) The Secretary of Energy (in this title referred to as the "Secretary"), in consultation with the Secretary of Labor and utilizing statistical data collected by the Secretary of Labor, shall monitor trends in the workforce of skilled technical personnel supporting energy technology industries, including renewable energy industries, companies developing and commercializing devices to increase energy efficiency, the oil and gas industry, the nuclear power industry, the coal industry, and other industrial sectors as the Secretary may deem appropriate.

(2) The Secretary shall report to the Congress whenever the Secretary determines that significant national shortfalls of skilled technical personnel in one or more energy industry segments are forecast or have occurred.

(b) TRAINEESHIP GRANTS FOR SKILLED TECHNICAL PERSONNEL.—The Secretary, in consultation with the Secretary of Labor, may establish grant programs in the appropriate offices of the Department of Energy to enhance training of skilled technical personnel for which a shortfall is determined under subsection (a).

(c) DEFINITION.—For purposes of this section, the term "skilled technical personnel" means journey and apprentice level workers who are enrolled in or have completed a State or federally recognized apprenticeship program and other skilled workers in energy technology industries.

(d) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there are authorized to be appropriated to the Secretary $20,000,000 for each of fiscal years 2004 through 2008, to remain available until expended.

SEC. 1002. RESEARCH FELLOWSHIPS IN ENERGY RESEARCH.

(a) POSTDOCTORAL FELLOWSHIPS.—The Secretary shall establish a program of fellowships to encourage outstanding young scientists and engineers to pursue postdoctoral research appointments in energy research and development at institutions of higher education of their choice.

(b) DISTINGUISHED SENIOR RESEARCH FELLOWSHIPS.—The Secretary shall establish a program of fellowships to allow outstanding senior researchers in energy research and development and their research groups to explore research and development topics of their choosing for a fixed period of time. Awards under this program shall be made on the basis of past scientific or technical accomplishment and promise for continued accomplishment during the period of support, which shall not be less than 3 years.

(c) AUTHORIZATION OF APPROPRIATIONS.—For the purposes of this section, there are authorized to be appropriated to the Secretary $40,000,000 for each of fiscal years 2004 through 2008, to remain available until expended.

SEC. 1003. TRAINING GUIDELINES FOR ELECTRIC ENERGY INDUSTRY PERSONNEL.

The Secretary of Labor, in consultation with the Secretary of Energy and jointly with the electric industry and recognized employee representatives, shall develop model personnel training guidelines to support electric system reliability and safety. The training guidelines shall, at a minimum—

(1) include training requirements for workers engaged in the construction, operation, inspection, and maintenance of electric generation, transmission, and distribution, including competency and certification requirements, and assessment requirements that include initial and ongoing evaluation of workers, recertification assessment procedures, and methods for examining or testing the qualification of individuals performing covered tasks; and

(2) consolidate existing training guidelines on the construction, operation, maintenance, and inspection of electric generation, transmission, and distribution facilities, such as those established by the National Electric Safety Code and other industry consensus standards.

SEC. 1004. NATIONAL CENTER ON ENERGY MANAGEMENT AND BUILDING TECHNOLOGIES.

The Secretary shall support the establishment of a National Center on Energy Management and Building Technologies, to carry out research, education, and training activities to facilitate the improvement of energy efficiency and indoor air quality in industrial, commercial, and residential buildings. The National Center shall be established by—

(1) recognized representatives of employees in the heating, ventilation, and air-conditioning industry;

(2) contractors that install and maintain heating, ventilation, and air-conditioning systems and equipment;

(3) manufacturers of heating, ventilation, and air-conditioning systems and equipment;

(4) representatives of the advanced building envelope industry, including design, windows, lighting, and insulation industries; and

(5) other entities as the Secretary may deem appropriate.

SEC. 1005. IMPROVED ACCESS TO ENERGY-RELATED SCIENTIFIC AND TECHNICAL CAREERS.

(a) DEPARTMENT OF ENERGY SCIENCE EDUCATION PROGRAMS.—Section 3164 of the Department of Energy Science Education Enhancement Act (42 U.S.C. 7381a) is amended by adding at the end the following:

"(c) PROGRAMS FOR STUDENTS FROM UNDER-REPRESENTED GROUPS.—In carrying out a program under subsection (a), the Secretary shall give priority to activities that are designed to encourage students from under-represented groups to pursue scientific and technical careers.".

(b) PARTNERSHIPS WITH HISTORICALLY BLACK COLLEGES AND UNIVERSITIES, HISPANIC-SERVICING INSTITUTIONS, AND TRIBAL COLLEGES.—The Department of

Energy Science Education Enhancement Act (42 U.S.C. 7381 et seq.) is amended—

(1) by redesignating sections 3167 and 3168 as sections 3168 and 3169, respectively; and

(2) by inserting after section 3166 the following:

"SEC. 3167. PARTNERSHIPS WITH HISTORICALLY BLACK COLLEGES AND UNIVERSITIES, HISPANIC-SERVING INSTITUTIONS, AND TRIBAL COLLEGES.

"(a) DEFINITIONS.—In this section:

"(1) HISPANIC-SERVING INSTITUTION.—The term 'Hispanic-serving institution' has the meaning given that term in section 502(a) of the Higher Education Act of 1965 (20 U.S.C. 1101a(a)).

"(2) HISTORICALLY BLACK COLLEGE OR UNIVERSITY.—The term 'historically Black college or university' has the meaning given the term 'part B institution' in section 322 of the Higher Education Act of 1965 (20 U.S.C. 1061).

"(3) NATIONAL LABORATORY.—The term 'National Laboratory' has the meaning given that term in section 903(5) of the Energy Policy Act of 2003.

"(4) SCIENCE FACILITY.—The term 'science facility' has the meaning given the term 'single-purpose research facility' in section 903(8) of the Energy Policy Act of 2003.

"(5) TRIBAL COLLEGE.—The term 'tribal college' has the meaning given the term 'tribally controlled college or university' in section 2(a) of the Tribally Controlled College or University Assistance Act of 1978 (25 U.S.C. 1801(a)).

"(b) EDUCATION PARTNERSHIP.—The Secretary shall direct the Director of each National Laboratory, and may direct the head of any science facility, to increase the participation of historically Black colleges or universities, Hispanic-serving institutions, or tribal colleges

in activities that increase the capacity of the historically Black colleges or universities, Hispanic-serving institutions, or tribal colleges to train personnel in science or engineering.

"(c) ACTIVITIES.—An activity under subsection (b) may include—

"(1) collaborative research;

"(2) equipment transfer;

"(3) training activities conducted at a National Laboratory or science facility; and

"(4) mentoring activities conducted at a National Laboratory or science facility.

"(d) REPORT.—Not later than 2 years after the date of enactment of this section, the Secretary shall submit to the Congress a report on the activities carried out under this section.".

SEC. 1006. NATIONAL POWER PLANT OPERATIONS TECHNOLOGY AND EDUCATION CENTER.

(a) ESTABLISHMENT.—The Secretary shall support the establishment of a National Power Plant Operations Technology and Education Center (in this section referred to as the "Center"), to address the need for training and educating certified operators for electric power generation plants.

(b) ROLE.—The Center shall provide both training and continuing education relating to electric power generation plant technologies and operations. The Center shall conduct training and education activities on site and through Internet-based information technologies that allow for learning at remote sites.

(c) CRITERIA FOR COMPETITIVE SELECTION.—The Secretary shall support the establishment of the Center at an institution of higher education with expertise in power plant technology and operation and with the ability to provide on-site as well as Internet-based training.

SEC. 1007. FEDERAL MINE INSPECTORS.

In light of projected retirements of Federal mine inspectors and the need for

additional personnel, the Secretary of Labor shall hire, train, and deploy such additional skilled Federal mine inspectors as necessary to ensure the availability of skilled and experienced individuals and to maintain the number of Federal mine inspectors at or above the levels authorized by law or established by regulation.

TITLE XI —ELECTRICITY

SEC. 1101. DEFINITIONS.

(a) ELECTRIC UTILITY—Section 3(22) of the Federal Power Act (16 U.S.C. 796(22)) is amended to read as follows:

"(22) 'electric utility' means any person or Federal or State agency (including any municipality) that sells electric energy; such term includes the Tennessee Valley Authority and each Federal power marketing agency;".

(b) TRANSMITTING UTILITY—Section 3(23) of the Federal Power Act (16 U.S.C. 796(23)) is amended to read as follows:

"(23) 'transmitting utility' means an entity, including any entity described in section 201(f), that owns or operates facilities used for the transmission of electric energy—

"(A) in interstate commerce; or

"(B) for the sale of electric energy at wholesale;".

(c) ADDITIONAL DEFINITIONS—At the end of section (3) of the Federal Power Act, add the following:

"(26) 'unregulated transmitting utility' means an entity that—

"(A) owns or operates facilities used for the transmission of electric energy in interstate commerce, and

"(B) is an entity described in section 201(f) or a rural electric cooperative with financing from the Rural Utilities Service.

"(27) 'distribution utility' means an electric utility that does not own or operate transmission facilities or an unregulated transmitting utility that provides 90 percent of the electric energy its transmits to customers at retail."

(d) For the purposes of this title, the term " the Commission" means the Federal Energy Regulatory Commission.

Subtitle A—Reliability

SEC. 1111. ELECTRIC RELIABILITY STANDARDS.

Part II of the Federal Power Act (16 U.S.C. 824 et seq.) is amended by adding the following:

"ELECTRIC RELIABILITY

"SEC. 215. (a) For the purposes of this section:

"(1) The term 'bulk-power system' means—

"(A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and

"(B) electric energy from generation facilities needed to maintain transmission system reliability.

The term does not include facilities used in the local distribution of electric energy.

"(2) The terms 'Electric Reliability Organization' and 'ERO' mean the organization certified by the Commission under subsection (c), the purpose of which is to establish and enforce reliability standards for the bulk-power system, subject to Commission review.

"(3) The term 'reliability standard' means a requirement, approved by the Commission under this section, to provide for reliable operation of the bulk-power system. The term includes requirements for the operation of existing bulk-power system components and the design of planned additions or modifications to such components to the extent necessary to provide for reliable operation of the bulk-power system, but the term does not include any requirement to enlarge such components or to construct new transmission capacity or generation capacity.

"(4) The term 'reliable operation' means operating the components of the bulk-power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance or

unanticipated failure of system components.

"(5) The term 'Interconnection' means a geographic area in which the operation of bulk-power system components is synchronized such that the failure of one or more of such components may adversely affect the ability of the operators of other components within the system to maintain reliable operation of the portion of the system within their control.

"(6) The term 'transmission organization' means an RTO or other transmission organization finally approved by the Commission for the operation of transmission facilities.

"(7) The term 'regional entity' means an entity having enforcement authority pursuant to subsection (e)(4).

"(b) The Commission shall have jurisdiction, within the United States, over the ERO certified by the Commission under subsection (c), any regional entities, and all users, owners and operators of the bulk-power system, including the entities described in section 201(f), for purposes of approving reliability standards established under this section and enforcing compliance with this section. All users, owners and operators of the bulk-power system shall comply with reliability standards that take effect under this section. The Commission shall issue a final rule to implement the requirements of this section not later than 180 days after the date of enactment of this section.

"(c) Following the issuance of a Commission rule under subsection (b), any person may submit an application to the Commission for certification as the Electric Reliability Organization. The Commission may certify one such ERO if the Commission determines that such ERO—

"(1) has the ability to develop and enforce, subject to subsection (d)(2), reliability standards that provide for an adequate level of reliability of the bulk-power system; and

"(2) has established rules that—

"(A) assure its independence of the users and owners and operators of the bulk-power system, while assuring fair stakeholder representation in the selection of its directors and balanced

decisionmaking in any ERO committee or subordinate organizational structure;

"(B) allocate equitably reasonable dues, fees, and other charges among end users for all activities under this section;

"(C) provide fair and impartial procedures for enforcement of reliability standards through the imposition of penalties in accordance with subsection (e) (including limitations on activities, functions, or operations, or other appropriate sanctions);

"(D) provide for reasonable notice and opportunity for public comment, due process, openness, and balance of interests in developing reliability standards and otherwise exercising its duties; and

"(E) provide for taking, after certification, appropriate steps to gain recognition in Canada and Mexico.

"(d)(1) The ERO shall file each reliability standard or modification to a reliability standard that it proposes to be made effective under this section with the Commission.

"(2) The Commission may approve by rule or order a proposed reliability standard or modification to a reliability standard if it determines that the standard is just, reasonable, not unduly discriminatory or preferential, and in the public interest. The Commission shall give due weight to the technical expertise of the ERO with respect to the content of a proposed standard or modification to a reliability standard and to the technical expertise of a regional entity organized on an Interconnection-wide basis with respect to a reliability standard to be applicable within that Interconnection, but shall not defer with respect to the effect of a standard on competition. A proposed standard or modification shall take effect upon approval by the Commission.

"(3) The ERO shall rebuttably presume that a proposal from a regional entity organized on an Interconnection-wide basis for a reliability standard or modification to a reliability standard to be applicable on an Interconnection-wide basis is just, reasonable, and not unduly discriminatory or preferential, and in the public interest.

"(4) The Commission shall remand to the ERO for further consideration a

proposed reliability standard or a modification to a reliability standard that the Commission disapproves in whole or in part.

"(5) The Commission, upon its own motion or upon complaint, may order the ERO to submit to the Commission a proposed reliability standard or a modification to a reliability standard that addresses a specific matter if the Commission considers such a new or modified reliability standard appropriate to carry out this section.

"(6) The final rule adopted under subsection (b) shall include fair processes for the identification and timely resolution of any conflict between a reliability standard and any function, rule, order, tariff, rate schedule, or agreement accepted, approved, or ordered by the Commission applicable to a transmission organization. Such transmission organization shall continue to comply with such function, rule, order, tariff, rate schedule or agreement accepted approved, or ordered by the Commission until—

"(A) the Commission finds a conflict exists between a reliability standard and any such provision;

"(B) the Commission orders a change to such provision pursuant to section 206 of this part; and

"(C) the ordered change becomes effective under this part.

If the Commission determines that a reliability standard needs to be changed as a result of such a conflict, it shall order the ERO to develop and file with the Commission a modified reliability standard under paragraph (4) or (5) of this subsection.

"(e)(1) The ERO may impose, subject to paragraph (2), a penalty on a user or owner or operator of the bulk-power system for a violation of a reliability standard approved by the Commission under subsection (d) if the ERO, after notice and an opportunity for a hearing—

"(A) finds that the user or owner or operator has violated a reliability standard approved by the Commission under subsection (d); and

"(B) files notice and the record of the proceeding with the Commission.

"(2) A penalty imposed under paragraph (1) may take effect not earlier than the 31st day after the ERO files with the Commission notice of the penalty and the record

of proceedings. Such penalty shall be subject to review by the Commission, on its own motion or upon application by the user, owner or operator that is the subject of the penalty filed within 30 days after the date such notice is filed with the Commission. Application to the Commission for review, or the initiation of review by the Commission on its own motion, shall not operate as a stay of such penalty unless the Commission otherwise orders upon its own motion or upon application by the user, owner or operator that is the subject of such penalty. In any proceeding to review a penalty imposed under paragraph (1), the Commission, after notice and opportunity for hearing (which hearing may consist solely of the record before the ERO and opportunity for the presentation of supporting reasons to affirm, modify, or set aside the penalty), shall by order affirm, set aside, reinstate, or modify the penalty, and, if appropriate, remand to the ERO for further proceedings. The Commission shall implement expedited procedures for such hearings.

"(3) On its own motion or upon complaint, the Commission may order compliance with a reliability standard and may impose a penalty against a user or owner or operator of the bulk-power system, if the Commission finds, after notice and opportunity for a hearing, that the user or owner or operator of the bulk-power system has engaged or is about to engage in any acts or practices that constitute or will constitute a violation of a reliability standard.

"(4) The Commission shall establish regulations authorizing the ERO to enter into an agreement to delegate authority to a regional entity for the purpose of proposing reliability standards to the ERO and enforcing reliability standards under paragraph (1) if—

"(A) the regional entity is governed by an independent board, a balanced stakeholder board, or a combination independent and balanced stakeholder board;

"(B) the regional entity otherwise satisfies the provisions of subsection (c)(1) and (2); and

"(C) the agreement promotes effective and efficient administration of bulk-power system reliability.

The Commission may modify such delegation. The ERO and the Commission shall rebuttably presume that a proposal for delegation to a regional entity organized on an Interconnection-wide basis promotes effective and efficient administration of bulk-power system reliability and should be approved. Such regulation may provide that the Commission may assign the ERO's authority to enforce reliability standards under paragraph (1) directly to a regional entity consistent with the requirements of this paragraph.

"(5) The Commission may take such action as is necessary or appropriate against the ERO or a regional entity to ensure compliance with a reliability standard or any Commission order affecting the ERO or a regional entity.

"(6) Any penalty imposed under this section shall bear a reasonable relation to the seriousness of the violation and shall take into consideration the efforts of such user, owner, or operator to remedy the violation in a timely manner.

"(f) The ERO shall file with the Commission for approval any proposed rule or proposed rule change, accompanied by an explanation of its basis and purpose. The Commission, upon its own motion or complaint, may propose a change to the rules of the ERO. A proposed rule or proposed rule change shall take effect upon a finding by the Commission, after notice and opportunity for comment, that the change is just, reasonable, not unduly discriminatory or preferential, is in the public interest, and satisfies the requirements of subsection (c).

"(g) The ERO shall conduct periodic assessments of the reliability and adequacy of the bulk-power system in North America.

"(h) The President is urged to negotiate international agreements with the governments of Canada and Mexico to provide for effective compliance with reliability standards and the effectiveness of the ERO in the United States and Canada or Mexico.

"(i)(1) The ERO shall have authority to develop and enforce compliance with reliability standards for only the bulk-power system.

"(2) This section does not authorize the ERO or the Commission to order the construction of additional generation or transmission capacity or to set and enforce compliance with standards for adequacy or safety of electric facilities or services.

"(3) Nothing in this section shall be construed to preempt any authority of any State to take action to ensure the safety, adequacy, and reliability of electric service within that State, as long as such action is not inconsistent with any reliability standard.

"(4) Within 90 days of the application of the ERO or other affected party, and after notice and opportunity for comment, the Commission shall issue a final order determining whether a State action is inconsistent with a reliability standard, taking into consideration any recommendation of the ERO.

"(5) The Commission, after consultation with the ERO, may stay the effectiveness of any State action, pending the Commission's issuance of a final order.

"(j) The Commission shall establish a regional advisory body on the petition of at least two-thirds of the States within a region that have more than one-half of their electric load served within the region. A regional advisory body shall be composed of one member from each participating State in the region, appointed by the Governor of each State, and may include representatives of agencies, States, and provinces outside the United States. A regional advisory body may provide advice to the ERO, a regional entity, or the Commission regarding the governance of an existing or proposed regional entity within the same region, whether a standard proposed to apply within the region is just, reasonable, not unduly discriminatory or preferential, and in the public interest, whether fees proposed to be assessed within the region are just, reasonable, not unduly discriminatory or preferential, and in the public interest and any other responsibilities requested by the Commission. The Commission may give deference to the advice of any such regional advisory body if that body is organized on an Interconnection-wide basis.

"(k) The provisions of this section do not apply to Alaska or Hawaii.".

Subtitle B—Regional Markets

SEC. 1121. IMPLEMENTATION DATE FOR PROPOSED RULEMAKING ON STANDARD MARKET DESIGN.

The Commission's proposed rulemaking entitled "Remedying Undue Discrimination through Open Access Transmission Service and Standard Electricity Market Design" (Docket No. RM01-12-000) is remanded to the Commission for

reconsideration. No final rule pursuant to the proposed rulemaking, including any rule or order of general applicability within the scope of the proposed rulemaking, may be issued before July 1, 2005. Any final rule issued by the Commission pursuant to the proposed rulemaking, including any rule or order of general applicability within the scope of the proposed rulemaking, shall be proceeded by a notice of proposed rulemaking issued after the date of enactment of this Act and an opportunity for public comment.

SEC. 1122. SENSE OF THE CONGRESS ON REGIONAL TRANSMISSION ORGANIZATIONS.

It is the sense of Congress that, in order to promote fair, open access to electric transmission service, benefit retail consumers, facilitate wholesale competition, improve efficiencies in transmission grid management, promote grid reliability, remove opportunities for unduly discriminatory or preferential transmission practices, and provide for the efficient development of transmission infrastructure needed to meet the growing demands of competitive wholesale power markets, all transmitting utilities in interstate commerce should voluntarily become members of independently administered Regional Transmission Organizations ("RTO") that have operational or functional control of facilities used for the transmission of electric energy in interstate commerce and do not own or control generation facilities used to supply electric energy for sale at wholesale.

SEC. 1123 FEDERAL UTILITY PARTICIPATION IN REGIONAL TRANSMISSION ORGANIZATIONS.

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

(1) The term "appropriate Federal regulatory authority" means—

(A) with respect to a Federal power marketing agency, the Secretary of Energy, except that the Secretary may designate the Administrator of a Federal power marketing agency to act as the appropriate Federal regulatory authority with respect to the transmission system of that Federal power marketing agency; and

(B) with respect to the Tennessee Valley Authority, the Board of Directors of the Tennessee Valley Authority.

(2) The term "Federal utility" means a Federal power marketing agency or the Tennessee Valley Authority.

(3) The term "transmission system" means electric transmission facilities owned, leased, or contracted for by the United States and operated by a Federal utility.

(b) TRANSFER.—

(1) The appropriate Federal regulatory authority is authorized to enter into a contract, agreement or other arrangement transferring control and use of all or part of the Federal utility's transmission system to a Regional Transmission Organization ("RTO"). Such contract, agreement or arrangement shall be voluntary and include—

(A) performance standards for operation and use of the transmission system that the head of the Federal utility determines necessary or appropriate, including standards that assure recovery of all the Federal utility's costs and expenses related to the transmission facilities that are the subject of the contract, agreement or other arrangement, consistency with existing contracts and third-party financing arrangements, and consistency with said Federal utility's statutory authorities, obligations, and limitations;

(B) provisions for monitoring and oversight by the Federal utility of the RTO fulfillment of the terms and conditions of the contract, agreement or other arrangement, including a provision that may provide for the resolution of disputes through arbitration or other means with the RTO or with other participants, notwithstanding the obligations and limitations of any other law regarding arbitration; and

(C) a provision that allows the Federal utility to withdraw from the RTO and terminate the contract, agreement or other arrangement in accordance with its terms.

(2) Neither this section, actions taken pursuant to it, nor any other transaction of a Federal utility using an RTO shall serve to confer upon the

Commission jurisdiction or authority over the Federal utility's electric generation assets, electric capacity or energy that the Federal utility is authorized by law to market, or the Federal utility's power sales activities.

(c) EXISTING STATUTORY AND OTHER OBLIGATIONS.—

(1) Any statutory provision requiring or authorizing a Federal utility to transmit electric power, or to construct, operate or maintain its transmission system shall not be construed to prohibit a transfer of control and use of its transmission system pursuant to, and subject to all requirements of subsection (b).

(2) This subsection shall not be construed to—

(A) suspend, or exempt any Federal utility from any provision of existing Federal law, including but not limited to any requirement or direction relating to the use of the Federal utility's transmission system, environmental protection, fish and wildlife protection, flood control, navigation, water delivery, or recreation; or

(B) authorize abrogation of any contract or treaty obligation.

SEC. 1124. REGIONAL CONSIDERATION OF COMPETITIVE WHOLESALE MARKETS.

(a) STATE REGULATORY COMMISSIONS.—Not later than 90 days after the date of enactment of this Act, the Commission shall convene regional discussions with State regulatory commissions, as defined in section 3(21) of the Federal Power Act. The regional discussions should address whether wholesale electric markets in each region are working effectively to provide reliable service to electric consumers in the region at the lowest reasonable cost. Priority should be given to discussions in regions that do not have, as of the date of enactment of this Act, a Regional Transmission Organization "(RTO"). The regional discussions shall consider—

(1) the need for an RTO or other organizations in the region to provide non-discriminatory transmission access and generation interconnection;

(2) a process for regional planning of transmission facilities with State regulatory authority participation and for consideration of multi-state projects;

(3) a means for ensuring that costs for all electric consumers, as defined

in section 3(5) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2602(5)), and buyers of wholesale energy or capacity are reasonable and economically efficient;

(4) a means for ensuring that all electric consumers, as defined in section 3(5) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2602(5)), within the region maintain their ability to use the existing transmission system without incurring unreasonable additional costs in order to expand the transmission system for new customers;

(5) whether the integrated transmission and electric power supply system can and should be operated in a manner that schedules and economically prioritizes all available electric generation resources, so as to minimize the costs of electric energy to all consumers ("economic dispatch") and maintaining system reliability;

(6) a means to provide transparent price signals to ensure efficient expansion of the electric system and efficiently manage transmission congestion;

(7) eliminating in a reasonable manner, consistent with applicable State and Federal law, multiple, cumulative charges for transmission service across successive locations within a region ("pancaked rates");

(8) resolution of seams issues with neighboring regions and inter-regional coordination;

(9) a means of providing information electronically to potential users of the transmission system;

(10) implementation of a market monitor for the region with State regulatory authority and Commission oversight and establishment of rules and procedures that ensure that State regulatory authorities are provided access to market information and that provides for expedited consideration by the Commission of any complaints concerning exercise of market power and the operation of wholesale markets;

(11) a process by which to phase-in any proposed RTO or other

organization designated to provide non-discriminatory transmission access so as to best meet the needs of a region, and, if relevant, shall take into account the special circumstances that may be found in the Western Interconnection related to the existence of transmission congestion, the existence of significant hydroelectric capacity, the participation of unregulated transmitting utilities, and the distances between generation and load; and,

(12) a timetable to meet the objectives of this section.

(b) REPORT.—Not later than 1 year after the date of enactment of this Act, the Commission shall report to Congress on the progress made in addressing the issues in subsection (a) of this section in discussions with the States.

(c) SAVINGS.—Nothing in this section shall affect any discussions between the Commission and State or other retail regulatory authorities that are on-going prior to enactment of this Act.

Subtitle C—Improving Transmission Access and Protecting Service Obligations

SEC. 1131. SERVICE OBLIGATION SECURITY AND PARITY.

The Federal Power Act (16 U.S.C. 824e) is amended by adding the following:

"SEC. 220. (a)(1) The Commission shall exercise its authority under this Act to ensure that any load-serving entity that, as of the date of enactment of this section—

"(A) owns generation facilities, markets the output of federal generation facilities, or holds rights under one or more long-term contracts to purchase electric energy, for the purpose of meeting a service obligation, and

"(B) by reason of ownership of transmission facilities, or one or more contracts or service agreements for firm transmission service, holds firm transmission rights for delivery of the output of such generation facilities or such purchased energy to meet such service obligation,

is entitled to use such firm transmission rights, or equivalent financial transmission rights, in order to deliver such output or purchased energy, or the output of other generating facilities or purchased energy to the extent deliverable using such rights, to

meet its service obligation.

"(2) To the extent that all or a portion of the service obligation covered by such firm transmission rights is transferred to another load-serving entity, the successor load-serving entity shall be entitled to use the firm transmission rights associated with the transferred service obligation. Subsequent transfers to another load-serving entity, or back to the original load-serving entity, shall be entitled to the same rights.

"(3) The Commission shall exercise its authority under this Act in a manner that facilitates the planning and expansion of transmission facilities to meet the reasonable needs of load-serving entities to satisfy their service obligations.

"(b) Nothing in this section shall affect any methodology for the allocation of transmission rights by a Commission-approved entity that, prior to the date of enactment of this section, has been authorized by the Commission to allocate transmission rights.

"(c) Nothing in this Act shall relieve a load-serving entity from any obligation under State or local law to build transmission or distribution facilities adequate to meet its service obligations."

"(d) Nothing in this section shall provide a basis for abrogating any contract or service agreement for firm transmission service or rights in effect as of the date of the enactment of this subsection.

"(e) For purposes of this section:

"(1) The term 'distribution utility' means an electric utility that has a service obligation to end-users.

"(2) The term 'load-serving entity' means a distribution utility or an electric utility (including an entity described in section 201(f) or a rural cooperative) that has a service obligation to end-users or a distribution utility.

"(3) The term 'service obligation' means a requirement applicable to, or the exercise of authority granted to, an electric utility (including an entity described in section 201(f) or a rural cooperative) under Federal, State or local law or under long-term contracts to provide electric service to end-users or to a distribution utility."

"(f) Nothing in the section shall apply to an entity located in an area referred to in section 212(k)(2)(A)."

SEC. 1132. OPEN NON-DISCRIMINATORY ACCESS.

Part II of the Federal Power Act (16 U.S.C. 824 et seq.) is amended by inserting after section 211 the following:

"OPEN ACCESS BY UNREGULATED TRANSMITTING UTILITIES

"SEC. 211A. (a) Subject to section 212(h), the Commission may, by rule or order, require an unregulated transmitting utility to provide transmission services—

"(1) at rates that are comparable to those that the unregulated transmitting utility charges itself; and

"(2) on terms and conditions (not relating to rates) that are comparable to those under which such unregulated transmitting utility provides transmission services to itself and that are not unduly discriminatory or preferential.

"(b) The Commission shall exempt from any rule or order under this subsection any unregulated transmitting utility that—

"(1) is a distribution utility that a sells no more than 4,000,000 megawatt hours of electricity per year; or

"(2) does not own or operate any transmission facilities that are necessary for operating an interconnected transmission system (or any portion thereof); or

"(3) meets other criteria the Commission determines to be in the public interest.

"(c) Whenever the Commission, after a hearing held upon a complaint, finds any exemption granted pursuant to subsection (b) adversely affects the reliable and efficient operation of an interconnected transmission system, it may revoke the exemption.

"(d) The rate changing procedures applicable to public utilities under subsections (c) and (d) of section 205 are applicable to unregulated transmitting utilities for purposes of this section.

"(e) In exercising its authority under paragraph (1) of subsection (a), the

Commission may remand transmission rates to an unregulated transmitting utility for review and revision where necessary to meet the requirements of subsection (a).

"(f) The provision of transmission services under subsection (a) does not preclude a request for transmission services under section 211.

"(g) The Commission may not require a State or municipality to take action under this section that constitutes a private business use for purposes of section 141 of the Internal Revenue Code of 1986 (26 U.S.C. 141).

"(h) Nothing in this Act authorizes the Commission to require an unregulated transmitting utility to transfer control or operational control of its transmitting facilities to an RTO or any other Commission-approved organization designated to provide non-discriminatory transmission access.".

SEC. 1133. TRANSMISSION INFRASTRUCTURE INVESTMENT.

Part II of the Federal Power Act is amended by adding the following:

"SUSTAINABLE TRANSMISSION NETWORKS RULEMAKING

"SEC. 221. Within six months of enactment of this section, the Commission shall issue a final rule establishing transmission pricing policies applicable to all public utilities and policies for the allocation of costs associated with the expansion, modification or upgrade of existing interstate transmission facilities and for the interconnection of new transmission facilities for utilities and facilities which are not included within a Commission approved RTO. Consistent with section 205 of this Act, such rule shall, to the maximum extent practicable:

"(1) promote capital investment in the economically efficient transmission systems;

"(2) encourage the construction of transmission and generation facilities in a manner which provides the lowest overall risk and cost to consumers;

"(3) encourage improved operation of transmission facilities and deployment of transmission technologies designed to increase capacity and efficiency of existing networks;

"(4) ensure that the costs of any transmission expansion or interconnection be allocated in such a way that all users of the affected

transmission system bear the appropriate share of costs; and

"(5) ensure that parties who pay for facilities necessary for transmission expansion or interconnection receive appropriate compensation for those facilities.".

Subtitle D—Amendments to the Public Utility Regulatory Policies Act of 1978

SEC. 1141. NET METERING.

(a) ADOPTION OF STANDARD.—Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding at the end the following:

"(11) NET METERING.—

"(A) Each electric utility shall make available upon request net metering service to any electric consumer that the electric utility serves.

"(B) For purposes of implementing this paragraph, any reference contained in this section to the date of enactment of the Public Utility Regulatory Policies Act of 1978 shall be deemed to be a reference to the date of enactment of this paragraph.

"(C) Notwithstanding subsections (b) and (c) of section 112, each State regulatory authority shall consider and make a determination concerning whether it is appropriate to implement the standard set out in subparagraph (A) not later than 1 year after the date of enactment of this paragraph.".

(b) SPECIAL RULES FOR NET METERING.—Section 115 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2625) is further amended by adding at the end the following:

"(i) NET METERING.—In undertaking the consideration and making the determination under section 111 with respect to the standard concerning net metering established by section 111(d)(13), the term net metering service shall mean a service provided in accordance with the following standards:

"(1) An electric utility—

"(A) shall charge the owner or operator of an on-site generating facility rates and charges that are identical to those that would be charged other electric consumers of the electric utility in the same rate class; and

"(B) shall not charge the owner or operator of an on-site generating facility any additional standby, capacity, interconnection, or other rate or charge.

"(2) An electric utility that sells electric energy to the owner or operator of an on-site generating facility shall measure the quantity of electric energy produced by the on-site facility and the quantity of electric energy consumed by the owner or operator of an on-site generating facility during a billing period in accordance with reasonable metering practices.

"(3) If the quantity of electric energy sold by the electric utility to an on-site generating facility exceeds the quantity of electric energy supplied by the on-site generating facility to the electric utility during the billing period, the electric utility may bill the owner or operator for the net quantity of electric energy sold, in accordance with reasonable metering practices.

"(4) If the quantity of electric energy supplied by the on-site generating facility to the electric utility exceeds the quantity of electric energy sold by the electric utility to the on-site generating facility during the billing period—

"(A) the electric utility may bill the owner or operator of the on-site generating facility for the appropriate charges for the billing period in accordance with paragraph (2); and

"(B) the owner or operator of the on-site generating facility shall be credited for the excess kilowatt-hours generated during the billing period, with the kilowatt-hour credit appearing on the bill for the following billing period.

"(5) An eligible on-site generating facility and net metering system used by an electric consumer shall meet all applicable safety, performance,

reliability, and interconnection standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and Underwriters Laboratories.

"(6) The Commission, after consultation with State regulatory authorities and unregulated electric utilities and after notice and opportunity for comment, may adopt, by rule, additional control and testing requirements for on-site generating facilities and net metering systems that the Commission determines are necessary to protect public safety and system reliability.

"(7) For purposes of this subsection—

"(A) The term 'eligible on-site generating facility' means a facility on the site of a residential electric consumer with a maximum generating capacity of 10 kilowatts or less that is fueled by solar energy, wind energy, or fuel cells; or a facility on the site of a commercial electric consumer with a maximum generating capacity of 500 kilowatts or less that is fueled solely by a renewable energy resource, landfill gas, or a high efficiency system.

"(B) The term 'renewable energy resource' means solar, wind, biomass, or geothermal energy.

"(C) The term 'high efficiency system' means fuel cells or combined heat and power.

"(D) The term 'net metering service' means service to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility and delivered to the local distribution facilities may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period.".

SEC. 1142. SMART METERING.

(a) IN GENERAL.—Section 111(d) of the Public Utilities Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) is amended by adding at the end the following:

"(12) TIME-BASED METERING AND COMMUNICATIONS.—

"(A) Each electric utility shall offer each of its customer classes, and provide individual customers upon customer request, a time-based rate schedule under which the rate charged by the electric utility varies during different time periods and reflects the variance in the costs of generating and purchasing electricity at the wholesale level. The time-based rate schedule shall enable the electric consumer to manage energy use and cost through advanced metering and communications technology.

"(B) The types of time-based rate schedules that may be offered under the schedule referred to in subparagraph (A) include, among others—

"(i) time-of-use pricing whereby electricity prices are set for a specific time period on an advance or forward basis, typically not changing more often than twice a year. Prices paid for energy consumed during these periods shall be pre-established and known to consumers in advance of such consumption, allowing them to vary their demand and usage in response to such prices and manage their energy costs by shifting usage to a lower cost period or reducing their consumption overall;

"(ii) critical peak pricing whereby time-of-use prices are in effect except for certain peak days, when prices may reflect the costs of generating and purchasing electricity at the wholesale level and when consumers may receive additional discounts for reducing peak period energy consumption; and

"(iii) real-time pricing whereby electricity prices are set for a specific time period on an advanced or forward basis and may change as often as hourly.

"(C) Each electric utility subject to subparagraph (A) shall provide each customer requesting a time-based rate with a time-based

meter capable of enabling the utility and customer to offer and receive such rate, respectively.

"(D) For purposes of implementing this paragraph, any reference contained in this section to the date of enactment of the Public Utility Regulatory Policies Act of 1978 shall be deemed to be a reference to the date of enactment of this paragraph.

"(E) In a State that permits third-party marketers to sell electric energy to retail electric consumers, such consumers shall be entitled to receive that same time-based metering and communications device and service as a retail electric consumer of the electric utility.

"(F) Notwithstanding subsections (b) and (c) of section 112, each State regulatory authority shall, not later than twelve (12) months after enactment of this paragraph conduct an investigation in accordance with section 115(i) and issue a decision whether it is appropriate to implement the standards set out in subparagraphs (A) and (C).".

(b) STATE INVESTIGATION OF DEMAND RESPONSE AND TIME-BASED METERING.—Section 115 of the Public Utilities Regulatory Policies Act of 1978 (16 U.S.C. 2625) is amended by adding the at the end the following:

"(k) TIME-BASED METERING AND COMMUNICATIONS.—Each State regulatory authority shall conduct an investigation and issue a decision whether or not it is appropriate for electric utilities to provide and install time-based meters and communications devices for each of their customers which enable such customers to participate in time-based pricing rate schedules and other demand response programs.".

(c) FEDERAL ASSISTANCE ON DEMAND RESPONSE.—Section 132(a) of the Public Utility Regulatory Polices Act of 1978 (16 U.S.C. 2642(a)) is amended by striking "and" at the end of paragraph (3), striking the period at the end of paragraph (4) and inserting "; and", and by adding the following at the end thereof:

"(5) technologies, techniques and rate-making methods related to advanced metering and communications and the use of these technologies, techniques and methods in demand response programs.".

(d) FEDERAL GUIDANCE.—Section 132 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2643) is amended by adding the following at the end thereof:

"(d) DEMAND RESPONSE.—The Secretary shall be responsible for—

"(1) educating consumers on the availability, advantages and benefits of advanced metering and communications technologies, including the funding of demonstration or pilot projects;

"(2) working with States, utilities, other energy providers and advanced metering and communications experts to identify and address barriers to the adoption of demand response programs; and

"(3) not later than 180 days after the date of enactment of the Energy Policy Act of 2003, providing the Congress with a report that identifies and quantifies the national benefits of demand response and makes a recommendation on achieving specific levels of such benefits by January 1, 2005.".

(e) DEMAND RESPONSE AND REGIONAL COORDINATION.—

(1) It is the policy of the United States to encourage States to coordinate, on a regional basis, State energy policies to provide reliable and affordable demand response services to the public.

(2) The Secretary of Energy shall provide technical assistance to States and regional organizations formed by two or more States to assist them in—

(A) identifying the areas with the greatest demand response potential;

(B) identifying and resolving problems in transmission and distribution networks, including through the use of demand response; and

(C) developing plans and programs to use demand response to respond to peak demand or emergency needs.

(3) Not later than 1 year after the date of enactment of this Act, the Commission shall prepare and publish an annual report, by appropriate region, that assesses demand response resources, including those available from all

consumer classes, and which identifies and reviews—

(A) saturation and penetration rate of advanced meters and communications technologies, devices and systems;

(B) existing demand response programs and time-based rate programs;

(C) the annual resource contribution of demand resources;

(D) the potential for demand response as a quantifiable, reliable resource for regional planning purposes; and

(E) steps taken to ensure that, in regional transmission planning and operations, demand resources are provided equitable treatment as a quantifiable, reliable resource relative to the resource obligations of any load-serving entity, transmission provider, or transmitting party.

(f) FEDERAL ENCOURAGEMENT OF DEMAND RESPONSE DEVICES.—It is the policy of the United States that time-based pricing and other forms of demand response, whereby electricity customers are provided with electricity price signals and the ability to benefit by responding to them, shall be encouraged and the deployment of such technology and devices that enable electricity customers to participate in such pricing and demand response systems shall be facilitated.

SEC. 1143. ADOPTION OF ADDITIONAL STANDARDS.

(a) ADOPTION OF STANDARDS.—Section 113(b) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2623(b)) is amended by adding at the end the following:

"(6) Each electric utility shall provide distributed generation, combined heat and power, and district heating and cooling systems competitive access to the local distribution grid and competitive pricing of service, and shall use simplified standard contracts for the interconnection of generating facilities that have a power production capacity of 250 kilowatts or less.

"(7) No electric utility may refuse to interconnect a generating facility with the distribution facilities of the electric utility if the owner or operator of the generating facility complies with technical standards adopted by the State

regulatory authority and agrees to pay the costs established by such State regulatory authority.

"(8) Each electric utility shall develop a plan to minimize dependence on one fuel source and to ensure that the electric energy it sells to consumers is generated using a diverse range of fuels and technologies, including renewable technologies.

"(9) Each electric utility shall develop and implement a ten-year plan to increase the efficiency of its fossil fuel generation.".

(b) TIME FOR ADOPTING STANDARDS.—Section 113 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2623) is further amended by adding at the end the following:

"(d) SPECIAL RULE.—For purposes of implementing paragraphs (6), (7), (8), and (9) of subsection (b), any reference contained in this section to the date of enactment of the Public Utility Regulatory Policies Act of 1978 shall be deemed to be a reference to the date of enactment of this subsection.".

SEC. 1144. TECHNICAL ASSISTANCE.

Section 132(c) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2642(c)) is amended to read as follows:

"(c) TECHNICAL ASSISTANCE FOR CERTAIN RESPONSIBILITIES.—The Secretary may provide such technical assistance as determined appropriate to assist State regulatory authorities and electric utilities in carrying out their responsibilities under section 111(d)(11) and paragraphs (6), (7), (8), and (9) of section 113(b).".

SEC. 1145. COGENERATION AND SMALL POWER PRODUCTION PURCHASE AND SALE REQUIREMENTS.

(a) TERMINATION OF MANDATORY PURCHASE AND SALE REQUIREMENTS.—Section 210 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 824a–3) is amended by adding at the end the following:

"(m) TERMINATION OF MANDATORY PURCHASE AND SALE REQUIREMENTS.—

"(1) OBLIGATION TO PURCHASE.— After the date of enactment of this subsection, no electric utility shall be required to enter into a new contract or

obligation to purchase electric energy from a qualifying cogeneration facility or a qualifying small power production facility under this section if the Commission finds that the qualifying cogeneration facility or qualifying small power production facility has access to an independently administered, auction-based day ahead and real time wholesale market for the sale of electric energy.

"(2) OBLIGATION TO SELL.—After the date of enactment of this subsection, no electric utility shall be required to enter into a new contract or obligation to sell electric energy to a qualifying cogeneration facility or a qualifying small power production facility under this section if competing retail electric suppliers are able to provide electric energy to the qualifying cogeneration facility or qualifying small power production facility.

"(3) NO EFFECT ON EXISTING RIGHTS AND REMEDIES.—Nothing in this subsection affects the rights or remedies of any party under any contract or obligation, in effect on the date of enactment of this subsection, to purchase electric energy or capacity from or to sell electric energy or capacity to a facility under this Act (including the right to recover costs of purchasing electric energy or capacity).

"(4) RECOVERY OF COSTS.—

"(A) REGULATION.—The Commission shall promulgate such regulations as are necessary to ensure that an electric utility that purchases electric energy or capacity from a qualifying cogeneration facility or qualifying small power production facility in accordance with any legally enforceable obligation entered into or imposed under this section before the date of enactment of this subsection recovers all prudently incurred costs associated with the purchase.

"(B) ENFORCEMENT.—A regulation under subparagraph (A) shall be enforceable in accordance with the provisions of law applicable to enforcement of regulations under the Federal Power Act (16 U.S.C. 791a et seq.).''.

(b) ELIMINATION OF OWNERSHIP LIMITATIONS.—Section 3 of the Federal Power Act (16 U.S.C. 796) is amended—

(1) by striking paragraph (17)(C) and inserting the following:

"(C) 'qualifying small power production facility' means a small power production facility that the Commission determines, by rule, meets such requirements (including requirements respecting minimum size, fuel use, and fuel efficiency) as the Commission may, by rule, prescribe;"; and

(2) by striking paragraph (18)(B) and inserting the following:

"(B) 'qualifying cogeneration facility' means a cogeneration facility that the Commission determines, by rule, meets such requirements (including requirements respecting minimum size, fuel use, and fuel efficiency) as the Commission may, by rule, prescribe;''.

SEC. 1146. RECOVERY OF COSTS.

(a) REGULATION.—To ensure recovery by any electric utility that purchases electricity or capacity from a qualifying facility pursuant to any legally enforceable obligation entered into or imposed under section 210 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 824a–3) before the date of enactment of this Act of all costs associated with the purchases, the Commission shall promulgate and enforce such regulations as are required to ensure that no utility shall be required directly or indirectly to absorb the costs associated with the purchases.

(b) TREATMENT.—A regulation under subsection (a) shall be treated as a rule enforceable under the Federal Power Act (16 U.S.C. 791a et seq.).

Subtitle E—Provisions Regarding the Public Utility Holding Company Act of 1935

SEC. 1151. DEFINITIONS.

For the purposes of this subtitle:

(1) The term "affiliate" of a company means any company 5 percent or more of the outstanding voting securities of which are owned, controlled, or held with power to

vote, directly or indirectly, by such company.

(2) The term "associate company" of a company means any company in the same holding company system with such company.

(3) The term "Commission" means the Federal Energy Regulatory Commission.

(4) The term "company" means a corporation, partnership, association, joint stock company, business trust, or any organized group of persons, whether incorporated or not, or a receiver, trustee, or other liquidating agent of any of the foregoing.

(5) The term "electric utility company" means any company that owns or operates facilities used for the generation, transmission, or distribution of electric energy for sale.

(6) The terms "exempt wholesale generator" and "foreign utility company" have the same meanings as in sections 32 and 33, respectively, of the Public Utility Holding Company Act of 1935 (15 U.S.C. 79z-5, 79z-5b), as those sections existed on the day before the effective date of this subtitle.

(7) The term "gas utility company" means any company that owns or operates facilities used for distribution at retail (other than the distribution only in enclosed portable containers or distribution to tenants or employees of the company operating such facilities for their own use and not for resale) of natural or manufactured gas for heat, light, or power.

(8) the term "holding company" means—

(A) any company that directly or indirectly owns, controls, or holds, with power to vote, 10 percent or more of the outstanding voting securities of a public utility company or of a holding company of any public utility company; and

(B) any person, determined by the Commission, after notice and opportunity for hearing, to exercise directly or indirectly (either alone or pursuant to an arrangement or understanding with one or more persons) such a controlling influence over the management or policies of any public utility company or holding company as to make it necessary or appropriate for the rate

protection of utility customers with respect to rates that such person be subject to the obligations, duties, and liabilities imposed by this subtitle upon holding companies.

(9) The term "holding company system" means a holding company, together with its subsidiary companies.

(10) The term "jurisdictional rates" means rates established by the Commission for the transmission of electric energy in interstate commerce, the sale of electric energy at wholesale in interstate commerce, the transportation of natural gas in interstate commerce, and the sale in interstate commerce of natural gas for resale for ultimate public consumption for domestic, commercial, industrial, or any other use.

(11) The term "natural gas company" means a person engaged in the transportation of natural gas in interstate commerce or the sale of such gas in interstate commerce for resale.

(12) The term "person" means an individual or company.

(13) The term "public utility" means any person who owns or operates facilities used for transmission of electric energy in interstate commerce or sales of electric energy at wholesale in interstate commerce.

(14) The term "public utility company" means an electric utility company or a gas utility company.

(15) The term "State commission" means any commission, board, agency, or officer, by whatever name designated, of a State, municipality, or other political subdivision of a State that, under the laws of such State, has jurisdiction to regulate public utility companies.

(16) The term "subsidiary company" of a holding company means—

(A) any company, 10 percent or more of the outstanding voting securities of which are directly or indirectly owned, controlled, or held with power to vote, by such holding company; and

(B) any person, the management or policies of which the Commission, after notice and opportunity for hearing, determines to be

subject to a controlling influence, directly or indirectly, by such holding company (either alone or pursuant to an arrangement or understanding with one or more other persons) so as to make it necessary for the rate protection of utility customers with respect to rates that such person be subject to the obligations, duties, and liabilities imposed by this subtitle upon subsidiary companies of holding companies.

(17) The term "voting security" means any security presently entitling the owner or holder thereof to vote in the direction or management of the affairs of a company.

SEC. 1152. REPEAL OF THE PUBLIC UTILITY HOLDING COMPANY ACT OF 1935.

The Public Utility Holding Company Act of 1935 (15 U.S.C. 79a et seq.) is repealed, effective 12 months after the date of enactment of this Act.

SEC. 1153. FEDERAL ACCESS TO BOOKS AND RECORDS.

(a) IN GENERAL.—Each holding company and each associate company thereof shall maintain, and shall make available to the Commission, such books, accounts, memoranda, and other records as the Commission determines are relevant to costs incurred by a public utility or natural gas company that is an associate company of such holding company and necessary or appropriate for the protection of utility customers with respect to jurisdictional rates.

(b) AFFILIATE COMPANIES.—Each affiliate of a holding company or of any subsidiary company of a holding company shall maintain, and make available to the Commission, such books, accounts, memoranda, and other records with respect to any transaction with another affiliate, as the Commission determines are relevant to costs incurred by a public utility or natural gas company that is an associate company of such holding company and necessary or appropriate for the protection of utility customers with respect to jurisdictional rates.

(c) HOLDING COMPANY SYSTEMS.—The Commission may examine the books, accounts, memoranda, and other records of any company in a holding company system, or any affiliate thereof, as the Commission determines are relevant to costs incurred by a public utility or natural gas company within such holding company system and

necessary or appropriate for the protection of utility customers with respect to jurisdictional rates.

(d) CONFIDENTIALITY.—No member, officer, or employee of the Commission shall divulge any fact or information that may come to his or her knowledge during the course of examination of books, accounts, memoranda, or other records as provided in this section, except as may be directed by the Commission or by a court of competent jurisdiction.

SEC. 1154. STATE ACCESS TO BOOKS AND RECORDS.

(a) IN GENERAL.—Upon the written request of a State commission having jurisdiction to regulate a public utility company in a holding company system, and subject to such terms and conditions as may be necessary and appropriate to safeguard against unwarranted disclosure to the public of any trade secrets or sensitive commercial information, a holding company or any associate company or affiliate thereof, wherever located, shall produce for inspection books, accounts, memoranda, and other records that—

(1) have been identified in reasonable detail in a proceeding before the State commission;

(2) the State commission determines are relevant to costs incurred by such public utility company; and

(3) are necessary for the effective discharge of the responsibilities of the State commission with respect to such proceeding.

(b) EFFECT ON STATE LAW.—Nothing in this section shall preempt applicable State law concerning the provision of books, accounts, memoranda, or other records, or in any way limit the rights of any State to obtain books, accounts, memoranda, or other records, under Federal law, contract, or otherwise.

(c) COURT JURISDICTION.—Any United States district court located in the State in which the State commission referred to in subsection (a) is located shall have jurisdiction to enforce compliance with this section.

SEC. 1155. EXEMPTION AUTHORITY.

(a) RULEMAKING.—Not later than 90 days after the date of enactment of this

title, the Commission shall promulgate a final rule to exempt from the requirements of section 203 any person that is a holding company, solely with respect to one or more—

(1) qualifying facilities under the Public Utility Regulatory Policies Act of 1978;

(2) exempt wholesale generators; or

(3) foreign utility companies.

(b) OTHER AUTHORITY.—If, upon application or upon its own motion, the Commission finds that the books, accounts, memoranda, and other records of any person are not relevant to the jurisdictional rates of a public utility company or natural gas company, or if the Commission finds that any class of transactions is not relevant to the jurisdictional rates of a public utility company, the Commission shall exempt such person or transaction from the requirements of section 203.

SEC. 1156. AFFILIATE TRANSACTIONS.

Nothing in this subtitle shall preclude the Commission or a State commission from exercising its jurisdiction under otherwise applicable law to determine whether a public utility company, public utility, or natural gas company may recover in rates any costs of an activity performed by an associate company, or any costs of goods or services acquired by such public utility company, public utility, or natural gas company from an associate company.

SEC. 1157. APPLICABILITY.

No provision of this subtitle shall apply to, or be deemed to include—

(1) the United States;

(2) a State or any political subdivision of a State;

(3) any foreign governmental authority not operating in the United States;

(4) any agency, authority, or instrumentality of any entity referred to in paragraph (1), (2), or (3); or

(5) any officer, agent, or employee of any entity referred to in paragraph (1), (2), or (3) acting as such in the course of such officer, agent, or employee's official duty.

SEC. 1158. EFFECT ON OTHER REGULATIONS.

Nothing in this subtitle precludes the Commission or a State commission from exercising its jurisdiction under otherwise applicable law to protect utility customers.

SEC. 1159. ENFORCEMENT.

The Commission shall have the same powers as set forth in sections 306 through 317 of the Federal Power Act (16 U.S.C. 825e-825p) to enforce the provisions of this subtitle.

SEC. 1160. SAVINGS PROVISIONS.

(a) IN GENERAL.—Nothing in this subtitle prohibits a person from engaging in or continuing to engage in activities or transactions in which it is legally engaged or authorized to engage on the date of enactment of this Act, if that person continues to comply with the terms of any such authorization, whether by rule or by order.

(b) EFFECT ON OTHER COMMISSION AUTHORITY.—Nothing in this subtitle limits the authority of the Commission under the Federal Power Act (16 U.S.C. 791a and following) (including section 301 of that Act) or the Natural Gas Act (15 U.S.C. 717 and following) (including section 8 of that Act).

SEC. 1161. IMPLEMENTATION.

Not later than 12 months after the date of enactment of this title, the Commission shall—

(1) promulgate such regulations as may be necessary or appropriate to implement this subtitle; and

(2) submit to Congress detailed recommendations on technical and conforming amendments to Federal law necessary to carry out this subtitle and the amendments made by this subtitle.

SEC. 1162. TRANSFER OF RESOURCES.

All books and records that relate primarily to the functions transferred to the Commission under this subtitle shall be transferred from the Securities and Exchange Commission to the Commission.

SEC. 1163. EFFECTIVE DATE.

This subtitle shall take effect 12 months after the date of enactment of this title.

SEC. 1164. CONFORMING AMENDMENT TO THE FEDERAL POWER ACT.

Section 318 of the Federal Power Act (16 U.S.C. 825q) is repealed.

Subtitle F—Market Transparency, Anti-Manipulation And Enforcement

SEC. 1171. MARKET TRANSPARENCY RULES.

Part II of the Federal Power Act is amended by adding:

"MARKET TRANSPARENCY RULES

"SEC. 222. (a) Not later than 180 days after the date of enactment of this section, the Commission shall issue rules establishing an electronic information system to provide the Commission and the public with access to such information as is necessary or appropriate to facilitate price transparency and participation in markets subject to the Commission's jurisdiction. Such systems shall provide information about the availability and market price of wholesale electric energy and transmission services to the Commission, State commissions, buyers and sellers of wholesale electric energy, users of transmission services, and the public. The Commission shall have authority to obtain such information from any electric and transmitting utility, including any entity described in section 201(f).

"(b) The Commission shall exempt from disclosure information it determines would, if disclosed, be detrimental to the operation of an effective market or jeopardize system security. This section shall not apply to an entity described in section 212(k)(2)(B) with respect to transactions for the purchase or sale of wholesale electric energy and transmission services within the area described in section 212(k)(2)(A).".

SEC. 1172. MARKET MANIPULATION.

Part II of the Federal Power Act is amended by the following:

"PROHIBITION ON FILING FALSE INFORMATION

"SEC. 223. It shall be a violation of this Act for any person or any other entity (including entities described in section 201(f)) willfully and knowingly to report any information relating to the price of electricity sold at wholesale, which information the person or any other entity knew to be false at the time of the reporting, to any governmental entity with the intent to manipulate the data being compiled by such governmental entity.

"PROHIBITION ON ROUND TRIP TRADING

"SEC. 224. (a) It shall be a violation of this Act for any person or any other entity (including entities described in section 201(f)) willfully and knowingly to enter into any contract or other arrangement to execute a 'round-trip trade' for the purchase or sale of electric energy at wholesale.

"(b) For the purposes of this section, the term 'round trip trade' means a transaction, or combination of transactions, in which a person or any other entity—

"(1) enters into a contract or other arrangement to purchase from, or sell to, any other person or other entity electric energy at wholesale;

"(2) simultaneously with entering into the contract or arrangement described in paragraph (1), arranges a financially offsetting trade with such other person or entity for the same such electric energy, at the same location, price, quantity and terms so that, collectively, the purchase and sale transactions in themselves result in no financial gain or loss; and

"(3) enters into the contract or arrangement with the intent to deceptively affect reported revenues, trading volumes, or prices.".

SEC. 1173. ENFORCEMENT.

(a) COMPLAINTS.—Section 306 of the Federal Power Act (16 U.S.C. 825e) is amended by—

(1) inserting "electric utility (including entities described in section 201(f) and rural cooperative entities)," after "Any person,"; and

(2) inserting "transmitting utility," after "licensee" each place it appears.

(b) INVESTIGATIONS.—Section 307(a) of the Federal Power Act (16 U.S.C. 825f(a)) is amended by inserting "or transmitting utility" after "any person" in the first sentence.

(c) REVIEW OF COMMISSION ORDERS.—Section 313(a) of the Federal Power Act (16 U.S.C. 8251) is amended by inserting "electric utility," after "Any person," in the first sentence.

(d) CRIMINAL PENALTIES.—Section 316 of the Federal Power Act (16 U.S.C. 825o) is amended—

(1) in subsection (a), by striking "$5,000" and inserting "$1,000,000", and by striking "two years" and inserting "five years";

(2) in subsection (b), by striking "$500" and inserting "$25,000"; and

(3) by striking subsection (c).

(e) CIVIL PENALTIES.—Section 316A of the Federal Power Act (16 U.S.C. 825o-1) is amended—

(1) in subsections (a) and (b), by striking "section 211, 212, 213, or 214" each place it appears and inserting "Part II"; and

(2) in subsection (b), by striking "$10,000" and inserting "$1,000,000".

(f) GENERAL PENALTIES.—Section 21 of the Natural Gas Act (15 U.S.C. 717t) is amended—

(1) in subsection (a), by striking "$5,000" and inserting "$1,000,000", and by striking "two years" and inserting "five years'; and

(2) in subsection (b), by striking "$500" and inserting "$50,000".

SEC. 1174. REFUND EFFECTIVE DATE.

Section 206(b) of the Federal Power Act (16 U.S.C. 824e(b)) is amended by—

(1) striking "the date 60 days after the filing of such complaint nor later than 5 months after the expiration of such 60-day period" in the second sentence and inserting "the date of the filing of such complaint nor later than 5 months after the filing of such complaint";

(2) striking "60 days after" in the third sentence and inserting "of";

(3) striking "expiration of such 60-day period" in the third sentence and inserting "publication date"; and

(4) striking the fifth sentence and inserting: "If no final decision is rendered by the conclusion of the 180-day period commencing upon initiation of a proceeding pursuant to this section, the Commission shall state the reasons why it has failed to do so and shall state its best estimate as to when it reasonably expects to make such decision.".

Subtitle G—Consumer Protections

SEC. 1181. CONSUMER PRIVACY.

The Federal Trade Commission shall issue rules protecting the privacy of electric consumers from the disclosure of consumer information in connection with the sale or delivery of electric energy to a retail electric consumer. If the Federal Trade Commission determines that a State's regulations
provide equivalent or greater protection than the provisions of this section, such State regulations shall apply in that State in lieu of the regulations issued by the Commission under this section.

SEC. 1182. UNFAIR TRADE PRACTICES.

(a) SLAMMING.—The Federal Trade Commission shall issue rules prohibiting the change of selection of an electric utility except with the informed consent of the electric consumer or if determined by the appropriate State regulatory authority to be necessary to prevent loss of service.

(b) CRAMMING.—The Federal Trade Commission shall issue rules prohibiting the sale of goods and services to an electric consumer unless expressly authorized by law or the electric consumer.

(c) STATE AUTHORITY.—If the Federal Trade Commission determines that a State's regulations provide equivalent or greater protection than the provisions of this section, such State regulations shall apply in that State in lieu of the regulations issued by the Commission under this section.

SEC. 1183. DEFINITIONS.

For purposes of this subtitle—

(1) "State regulatory authority " has the meaning given that term in section 3(21) of the Federal Power Act (16 U.S.C. 796(21)).

(2) "electric consumer" and "electric utility" have the meanings given those terms in section 3 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2602).

Subtitle H—Technical Amendments

SEC. 1191. TECHNICAL AMENDMENTS.

(a) Section 211(c) of the Federal Power Act (16 U.S.C. 824j(c)) is amended by—

(1) striking “(2)’;

(2) striking “(A)” and inserting “(1)”’

(3) striking “(B)” and inserting “(2)”; and

(4) striking “termination of modification” and inserting “termination or modification”.

(b) Section 211(d)(1) of the Federal Power Act (16 U.S.C. 824j(d)) is amended by striking “electric utility” the second time it appears and inserting “transmitting utility”.

(c) Section 315 of the Federal Power Act (16 U.S.C. 825n) is amended by striking “subsection” and inserting “section”.