

Director shall conduct and document operation safeguards and response evaluations at each sensitive nuclear facility to assess the ability of the members of the nuclear security force at the sensitive nuclear facility to defend against the design basis threat.

“(C) ACTIVITIES.—The evaluation shall include 2 or more force-on-force exercises by the Mock Terrorist Team against the sensitive nuclear facility that simulate air, water, and land assaults (as appropriate).

“(D) CRITERIA.—The Assistant Director shall establish criteria for judging the success of the evaluations.

“(E) CORRECTIVE ACTION.—If a sensitive nuclear facility fails to complete successfully an operation safeguards and response evaluation, the Commission shall require additional operation safeguards and response evaluations not less often than once every 6 months until the sensitive nuclear facility successfully completes an operation safeguards and response evaluation.

“(F) REPORTS.—Not less often than once every year, the Commission shall submit to Congress and the President a report that describes the results of each operation safeguards and response evaluation under this paragraph for the previous year.

“(4) EMERGENCY RESPONSE EXERCISES.—

“(A) IN GENERAL.—Not later than 1 year after the date of enactment of this subsection, the Assistant Director, in consultation with the Assistant to the President for Homeland Security, the Director of the Federal Emergency Management Agency, the Attorney General, and other Federal, State, and local agencies, as appropriate, shall establish an emergency response program to evaluate the ability of Federal, State, and local emergency response personnel within a 50-mile radius of a sensitive nuclear facility to respond to a radiological emergency at the sensitive nuclear facility.

“(B) FREQUENCY.—Not less often than once every 3 years, the Assistant Director shall conduct emergency response exercises to evaluate the ability of Federal, State, and local emergency response personnel within a 50-mile radius of a sensitive nuclear facility to respond to a radiological emergency at the sensitive nuclear facility.

“(C) ACTIVITIES.—The response exercises shall evaluate—

“(i) the response capabilities, response times, and coordination and communication capabilities of the response personnel;

“(ii) the effectiveness and adequacy of emergency response plans, including evacuation plans; and

“(iii) the ability of response personnel to distribute potassium iodide or other prophylactic medicines in an expeditious manner.

“(D) REVISION OF EMERGENCY RESPONSE PLANS.—The Commission shall revise the emergency response plan for a sensitive nuclear facility to correct for any deficiencies identified by an evaluation under this paragraph.

“(E) REPORTS.—Not less often than once every year, the Commission shall submit to Congress and the President a report that describes—

“(i) the results of each emergency response exercise under this paragraph conducted in the previous year; and

“(ii) each revision of an emergency response plan made under subparagraph (D) for the previous year.”

SEC. 5. POTASSIUM IODIDE STOCKPILES.

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

“u. Not later than 180 days after the date of enactment of this subsection, the Commis-

sion, in consultation with the Director of the Federal Emergency Management Agency, the Secretary of Health and Human Services, and other Federal, State, and local agencies, as appropriate, shall—

“(1) ensure that sufficient stockpiles of potassium iodide tablets have been established at public facilities (such as schools and hospitals) within at least a 50-mile radius of all sensitive nuclear facilities;

“(2) develop plans for the prompt distribution of the stockpiles described in paragraph (1) to all individuals located within at least a 50-mile radius of a sensitive nuclear facility in the event of a release of radionuclides; and

“(3) submit to Congress a report—

“(A) certifying that stockpiles have been established as described in paragraph (1); and

“(B) including the plans described in paragraph (2).”

SEC. 6. DEFENSE OF FACILITIES.

(a) IN GENERAL.—In a case in which a state of war or national emergency exists, the Commission shall—

(1) request the Governor of each State in which a sensitive nuclear facility is located to deploy the National Guard to each sensitive nuclear facility in that State; and

(2) request the President to—

(A) deploy the Coast Guard to sensitive nuclear facilities on the coastline of the United States; and

(B) restrict air space in the vicinity of sensitive nuclear facilities in the United States.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section.

AMENDMENTS SUBMITTED AND PROPOSED

SA 2170. Mr. DASCHLE (for Mr. HATCH (for himself and Mr. BAUCUS)) proposed an amendment to the bill H.R. 10, to provide for pension reform, and for other purposes.

SA 2171. Mr. LOTT (for himself, Mr. MURKOWSKI, and Mr. BROWNBACK) proposed an amendment to amendment SA 2170 submitted by Mr. Daschle and intended to be proposed to the bill (H.R. 10) supra.

SA 2172. Mr. HOLLINGS submitted an amendment intended to be proposed by him to the bill S. 1743, to create a temporary reinsurance mechanism to enhance the availability of terrorism insurance; which was referred to the Committee on Commerce, Science, and Transportation.

SA 2173. Mr. BURNS submitted an amendment intended to be proposed by him to the bill H.R. 10, to provide for pension reform, and for other purposes; which was ordered to lie on the table.

SA 2174. Mr. BURNS submitted an amendment intended to be proposed by him to the bill H.R. 10, supra; which was ordered to lie on the table.

TEXT OF AMENDMENTS

SA 2170. Mr. DASCHLE (for Mr. HATCH (for himself and Mr. BAUCUS)) proposed an amendment to the bill H.R. 10, to provide for pension reform, and for other purposes; as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “Railroad Retirement and Survivors’ Improvement Act of 2001”.

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

Sec. 1. Short title; table of contents.

- TITLE I—AMENDMENTS TO RAILROAD RETIREMENT ACT OF 1974**
- Sec. 101. Expansion of widow’s and widower’s benefits.
- Sec. 102. Retirement age restoration.
- Sec. 103. Vesting requirement.
- Sec. 104. Repeal of railroad retirement maximum.
- Sec. 105. Investment of railroad retirement assets.
- Sec. 106. Elimination of supplemental annuity account.
- Sec. 107. Transfer authority revisions.
- Sec. 108. Annual ratio projections and certifications by the Railroad Retirement Board.

- TITLE II—AMENDMENTS TO THE INTERNAL REVENUE CODE OF 1986**
- Sec. 201. Amendments to the Internal Revenue Code of 1986.
- Sec. 202. Exemption from tax for National Railroad Retirement Investment Trust.
- Sec. 203. Repeal of supplemental annuity tax.
- Sec. 204. Employer, employee representative, and employee tier 2 tax rate adjustments.

TITLE I—AMENDMENTS TO RAILROAD RETIREMENT ACT OF 1974

SEC. 101. EXPANSION OF WIDOW’S AND WIDOWER’S BENEFITS.

(a) IN GENERAL.—Section 4(g) of the Railroad Retirement Act of 1974 (45 U.S.C. 231c(g)) is amended by adding at the end the following new subdivision:

“(10)(i) If for any month the unreduced annuity provided under this section for a widow or widower is less than the widow’s or widower’s initial minimum amount computed pursuant to paragraph (ii) of this subdivision, the unreduced annuity shall be increased to that initial minimum amount. For the purposes of this subdivision, the unreduced annuity is the annuity without regard to any deduction on account of work, without regard to any reduction for entitlement to an annuity under section 2(a)(1) of this Act, without regard to any reduction for entitlement to a benefit under title II of the Social Security Act, and without regard to any reduction for entitlement to a public service pension pursuant to section 202(e)(7), 202(f)(2), or 202(g)(4) of the Social Security Act.

“(ii) For the purposes of this subdivision, the widow or widower’s initial minimum amount is the amount of the unreduced annuity computed at the time an annuity is awarded to that widow or widower, except that—

“(A) in subsection (g)(1)(i) ‘100 per centum’ shall be substituted for ‘50 per centum’; and

“(B) in subsection (g)(2)(ii) ‘130 per centum’ shall be substituted for ‘80 per centum’ both places it appears.

“(iii) If a widow or widower who was previously entitled to a widow’s or widower’s annuity under section 2(d)(1)(ii) of this Act becomes entitled to a widow’s or widower’s annuity under section 2(d)(1)(i) of this Act, a new initial minimum amount shall be computed at the time of award of the widow’s or widower’s annuity under section 2(d)(1)(i) of this Act.”

(b) EFFECTIVE DATE.—

(1) IN GENERAL.—The amendment made by this section shall take effect on the first day of the first month that begins more than 30 days after enactment, and shall apply to annuity amounts accruing for months after the

effective date in the case of annuities awarded—

(A) on or after that date; and
(B) before that date, but only if the annuity amount under section 4(g) of the Railroad Retirement Act of 1974 (45 U.S.C. 231c(g)) was computed under such section, as amended by the Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35; 95 Stat. 357).

(2) SPECIAL RULE FOR ANNUITIES AWARDED BEFORE THE EFFECTIVE DATE.—In applying the amendment made by this section to annuities awarded before the effective date, the calculation of the initial minimum amount under new section 4(g)(10)(ii) of the Railroad Retirement Act of 1974 (45 U.S.C. 231c(g)(10)(ii)), as added by subsection (a), shall be made as of the date of the award of the widow's or widower's annuity.

SEC. 102. RETIREMENT AGE RESTORATION.

(a) EMPLOYEE ANNUITIES.—Section 3(a)(2) of the Railroad Retirement Act of 1974 (45 U.S.C. 231b(a)(2)) is amended by inserting after “(2)” the following new sentence: “For purposes of this subsection, individuals entitled to an annuity under section 2(a)(1)(ii) of this Act shall, except for the purposes of recomputations in accordance with section 215(f) of the Social Security Act, be deemed to have attained retirement age (as defined by section 216(1) of the Social Security Act).”

(b) SPOUSE AND SURVIVOR ANNUITIES.—Section 4(a)(2) of the Railroad Retirement Act of 1974 (45 U.S.C. 231c(a)(2)) is amended by striking “if an” and all that follows through “section 2(c)(1) of this Act” and inserting “a spouse entitled to an annuity under section 2(c)(1)(ii)(B) of this Act”.

(c) CONFORMING REPEALS.—Sections 3(a)(3), 4(a)(3), and 4(a)(4) of the Railroad Retirement Act of 1974 (45 U.S.C. 231b(a)(3), 231c(a)(3), and 231c(a)(4)) are repealed.

(d) EFFECTIVE DATES.—

(1) GENERALLY.—Except as provided in paragraph (2), the amendments made by this section shall apply to annuities that begin to accrue on or after January 1, 2002.

(2) EXCEPTION.—The amount of the annuity provided for a spouse under section 4(a) of the Railroad Retirement Act of 1974 (45 U.S.C. 231c(a)) shall be computed under section 4(a)(3) of such Act, as in effect on December 31, 2001, if the annuity amount provided under section 3(a) of such Act (45 U.S.C. 231b(a)) for the individual on whose employment record the spouse annuity is based was computed under section 3(a)(3) of such Act, as in effect on December 31, 2001.

SEC. 103. VESTING REQUIREMENT.

(a) CERTAIN ANNUITIES FOR INDIVIDUALS.—Section 2(a) of the Railroad Retirement Act of 1974 (45 U.S.C. 231a(a)) is amended—

(1) by inserting in subdivision (1) “(or, for purposes of paragraphs (i), (iii), and (v), five years of service, all of which accrues after December 31, 1995)” after “ten years of service”; and

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

“(4) An individual who is entitled to an annuity under paragraph (v) of subdivision (1), but who does not have at least ten years of service, shall, prior to the month in which the individual attains age 62, be entitled only to an annuity amount computed under section 3(a) of this Act (without regard to section 3(a)(2) of this Act) or section 3(f)(3) of this Act. Upon attainment of age 62, such an individual may also be entitled to an annuity amount computed under section 3(b), but such annuity amount shall be reduced for early retirement in the same manner as if the individual were entitled to an annuity under section 2(a)(1)(iii).”

(b) COMPUTATION RULE FOR INDIVIDUALS' ANNUITIES.—Section 3(a) of the Railroad Retirement Act of 1974 (45 U.S.C. 231b(a)), as amended by section 102 of this Act, is further amended by adding at the end the following new subdivision:

“(3) If an individual entitled to an annuity under section 2(a)(1)(i) or (iii) of this Act on the basis of less than ten years of service is entitled to a benefit under section 202(a), section 202(b), or section 202(c) of the Social Security Act which began to accrue before the annuity under section 2(a)(1)(i) or (iii) of this Act, the annuity amount provided such individual under this subsection, shall be computed as though the annuity under this Act began to accrue on the later of (A) the date on which the benefit under section 202(a), section 202(b), or section 202(c) of the Social Security Act began, or (B) the date on which the individual first met the conditions for entitlement to an age reduced annuity under this Act other than the conditions set forth in sections 2(e)(1) and 2(e)(2) of this Act and the requirement that an application be filed.”

(c) SURVIVORS' ANNUITIES.—Section 2(d)(1) of the Railroad Retirement Act of 1974 (45 U.S.C. 231a(d)(1)) is amended by inserting “(or five years of service, all of which accrues after December 31, 1995)” after “ten years of service”.

(d) LIMITATION ON ANNUITY AMOUNTS.—Section 2 of the Railroad Retirement Act of 1974 (45 U.S.C. 231a) is amended by adding at the end the following new subsection:

“(i) An individual entitled to an annuity under this section who has completed five years of service, all of which accrues after 1995, but who has not completed ten years of service, and the spouse, divorced spouse, and survivors of such individual, shall not be entitled to an annuity amount provided under section 3(a), section 4(a), or section 4(f) of this Act unless the individual, or the individual's spouse, divorced spouse, or survivors, would be entitled to a benefit under title II of the Social Security Act on the basis of the individual's employment record under both this Act and title II of the Social Security Act.”

(e) COMPUTATION RULE FOR SPOUSES' ANNUITIES.—Section 4(a) of the Railroad Retirement Act of 1974 (45 U.S.C. 231c(a)), as amended by section 102 of this Act, is further amended by adding at the end the following new subdivision:

“(3) If a spouse entitled to an annuity under section 2(c)(1)(ii)(A), section 2(c)(1)(ii)(C), or section 2(c)(2) of this Act or a divorced spouse entitled to an annuity under section 2(c)(4) of this Act on the basis of the employment record of an employee who will have completed less than 10 years of service is entitled to a benefit under section 202(a), section 202(b), or section 202(c) of the Social Security Act which began to accrue before the annuity under section 2(c)(1)(ii)(A), section 2(c)(1)(ii)(C), section 2(c)(2), or section 2(c)(4) of this Act, the annuity amount provided under this subsection shall be computed as though the annuity under this Act began to accrue on the later of (A) the date on which the benefit under section 202(a), section 202(b), or section 202(c) of the Social Security Act began or (B) the first date on which the annuitant met the conditions for entitlement to an age reduced annuity under this Act other than the conditions set forth in sections 2(e)(1) and 2(e)(2) of this Act and the requirement that an application be filed.”

(f) APPLICATION DEEMING PROVISION.—Section 5(b) of the Railroad Retirement Act of

1974 (45 U.S.C. 231d(b)) is amended by striking the second sentence and inserting the following new sentence: “An application filed with the Board for an employee annuity, spouse annuity, or divorced spouse annuity on the basis of the employment record of an employee who will have completed less than ten years of service shall be deemed to be an application for any benefit to which such applicant may be entitled under this Act or section 202(a), section 202(b), or section 202(c) of the Social Security Act. An application filed with the Board for an annuity on the basis of the employment record of an employee who will have completed ten years of service shall, unless the applicant specified otherwise, be deemed to be an application for any benefit to which such applicant may be entitled under this Act or title II of the Social Security Act.”

(g) CREDITING SERVICE UNDER THE SOCIAL SECURITY ACT.—Section 18(2) of the Railroad Retirement Act of 1974 (45 U.S.C. 231q(2)) is amended—

(1) by inserting “(or less than five years of service, all of which accrues after December 31, 1995)” after “ten years of service” every place it appears; and

(2) by inserting “(or five or more years of service, all of which accrues after December 31, 1995)” after “ten or more years of service”.

(h) AUTOMATIC BENEFIT ELIGIBILITY ADJUSTMENTS.—Section 19 of the Railroad Retirement Act of 1974 (45 U.S.C. 231r) is amended—

(1) by inserting “(or five or more years of service, all of which accrues after December 31, 1995)” after “ten years of service” in subsection (c); and

(2) by inserting “(or five or more years of service, all of which accrues after December 31, 1995)” after “ten years of service” in subsection (d)(2).

(i) CONFORMING AMENDMENTS.—

(1) Section 6(e)(1) of the Railroad Retirement Act of 1974 (45 U.S.C. 231e(1)) is amended by inserting “(or five or more years of service, all of which accrues after December 31, 1995)” after “ten years of service”.

(2) Section 7(b)(2)(A) of the Railroad Retirement Act of 1974 (45 U.S.C. 231f(b)(2)(A)) is amended by inserting “(or five or more years of service, all of which accrues after December 31, 1995)” after “ten years of service”.

(3) Section 205(i) of the Social Security Act (42 U.S.C. 405(i)) is amended by inserting “(or five or more years of service, all of which accrues after December 31, 1995)” after “ten years of service”.

(4) Section 6(b)(2) of the Railroad Retirement Act of 1974 (45 U.S.C. 231e(b)(2)) is amended by inserting “(or five or more years of service, all of which accrues after December 31, 1995)” after “ten years of service” the second place it appears.

(j) EFFECTIVE DATE.—The amendments made by this section shall take effect on January 1, 2002.

SEC. 104. REPEAL OF RAILROAD RETIREMENT MAXIMUM.

(a) EMPLOYEE ANNUITIES.—

(1) IN GENERAL.—Section 3(f) of the Railroad Retirement Act of 1974 (45 U.S.C. 231b(f)) is amended—

(A) by striking subdivision (1); and

(B) by redesignating subdivisions (2) and (3) as subdivisions (1) and (2), respectively.

(2) CONFORMING AMENDMENTS.—

(A) The first sentence of section 3(f)(1) of the Railroad Retirement Act of 1974 (45

U.S.C. 231b(f)(1), as redesignated by paragraph (1)(B), is amended by striking “, without regard to the provisions of subdivision (1) of this subsection.”.

(B) Paragraphs (i) and (ii) of section 7(d)(2) of the Railroad Retirement Act of 1974 (45 U.S.C. 231f(d)(2)) are each amended by striking “section 3(f)(3)” and inserting “section 3(f)(2)”.

(b) SPOUSE AND SURVIVOR ANNUITIES.—Section 4 of the Railroad Retirement Act of 1974 (45 U.S.C. 231c) is amended by striking subsection (c).

(c) EFFECTIVE DATE.—The amendments made by this section shall take effect on January 1, 2002, and shall apply to annuity amounts accruing for months after December 2001.

SEC. 105. INVESTMENT OF RAILROAD RETIREMENT ASSETS.

(a) ESTABLISHMENT OF NATIONAL RAILROAD RETIREMENT INVESTMENT TRUST.—Section 15 of the Railroad Retirement Act of 1974 (45 U.S.C. 231n) is amended by inserting after subsection (i) the following new subsection:

“(j) NATIONAL RAILROAD RETIREMENT INVESTMENT TRUST.—

“(1) ESTABLISHMENT.—The National Railroad Retirement Investment Trust (hereinafter in this subsection referred to as the ‘Trust’) is hereby established as a trust domiciled in the District of Columbia and shall, to the extent not inconsistent with this Act, be subject to the laws of the District of Columbia applicable to such trusts. The Trust shall manage and invest its assets in the manner set forth in this subsection.

“(2) NOT A FEDERAL AGENCY OR INSTRUMENTALITY.—The Trust is not a department, agency, or instrumentality of the Government of the United States and shall not be subject to title 31, United States Code.

“(3) BOARD OF TRUSTEES.—

“(A) GENERALLY.—

“(i) MEMBERSHIP.—The Trust shall have a Board of Trustees, consisting of 7 members. Three shall represent the interests of labor, 3 shall represent the interests of management, and 1 shall be an independent Trustee. The members of the Board of Trustees shall not be considered officers or employees of the Government of the United States.

“(ii) SELECTION.—

“(I) The 3 members representing the interests of labor shall be selected by the joint recommendation of labor organizations, national in scope, organized in accordance with section 2 of the Railway Labor Act, and representing at least ⅔ of all active employees, represented by such national labor organizations, covered under this Act.

“(II) The 3 members representing the interests of management shall be selected by the joint recommendation of carriers as defined in section 1 of the Railway Labor Act employing at least ⅔ of all active employees covered under this Act.

“(III) The independent member shall be selected by a majority of the other 6 members of the Board of Trustees.

A member of the Board of Trustees may be removed in the same manner and by the same constituency that selected that member.

“(iii) DISPUTE RESOLUTION.—In the event that the parties specified in subclause (I), (II), or (III) of the previous clause cannot agree on the selection of Trustees within 60 days of the date of enactment or 60 days from any subsequent date that a position of the Board of Trustees becomes vacant, an impartial umpire to decide such dispute shall, on the petition of a party to the dispute, be appointed by the District Court of

the United States for the District of Columbia.

“(B) QUALIFICATIONS.—Members of the Board of Trustees shall be appointed only from among persons who have experience and expertise in the management of financial investments and pension plans. No member of the Railroad Retirement Board shall be eligible to be a member of the Board of Trustees.

“(C) TERMS.—Except as provided in this subparagraph, each member shall be appointed for a 3-year term. The initial members appointed under this paragraph shall be divided into equal groups so nearly as may be, of which one group will be appointed for a 1-year term, one for a 2-year term, and one for a 3-year term. The Trustee initially selected pursuant to clause (ii)(III) shall be appointed to a 3-year term. A vacancy in the Board of Trustees shall not affect the powers of the Board of Trustees and shall be filled in the same manner as the selection of the member whose departure caused the vacancy. Upon the expiration of a term of a member of the Board of Trustees, that member shall continue to serve until a successor is appointed.

“(4) POWERS OF THE BOARD OF TRUSTEES.—The Board of Trustees shall—

“(A) retain independent advisers to assist it in the formulation and adoption of its investment guidelines;

“(B) retain independent investment managers to invest the assets of the Trust in a manner consistent with such investment guidelines;

“(C) invest assets in the Trust, pursuant to the policies adopted in subparagraph (A);

“(D) pay administrative expenses of the Trust from the assets in the Trust; and

“(E) transfer money to the disbursing agent or as otherwise provided in section 7(b)(4), to pay benefits payable under this Act from the assets of the Trust.

“(5) REPORTING REQUIREMENTS AND FIDUCIARY STANDARDS.—The following reporting requirements and fiduciary standards shall apply with respect to the Trust:

“(A) DUTIES OF THE BOARD OF TRUSTEES.—The Trust and each member of the Board of Trustees shall discharge their duties (including the voting of proxies) with respect to the assets of the Trust solely in the interest of the Railroad Retirement Board and through it, the participants and beneficiaries of the programs funded under this Act—

“(i) for the exclusive purpose of—

“(I) providing benefits to participants and their beneficiaries; and

“(II) defraying reasonable expenses of administering the functions of the Trust;

“(ii) with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims;

“(iii) by diversifying investments so as to minimize the risk of large losses and to avoid disproportionate influence over a particular industry or firm, unless under the circumstances it is clearly prudent not to do so; and

“(iv) in accordance with Trust governing documents and instruments insofar as such documents and instruments are consistent with this Act.

“(B) PROHIBITIONS WITH RESPECT TO MEMBERS OF THE BOARD OF TRUSTEES.—No member of the Board of Trustees shall—

“(i) deal with the assets of the Trust in the trustee's own interest or for the trustee's own account;

“(ii) in an individual or in any other capacity act in any transaction involving the assets of the Trust on behalf of a party (or represent a party) whose interests are adverse to the interests of the Trust, the Railroad Retirement Board, or the interests of participants or beneficiaries; or

“(iii) receive any consideration for the trustee's own personal account from any party dealing with the assets of the Trust.

“(C) EXCULPATORY PROVISIONS AND INSURANCE.—Any provision in an agreement or instrument that purports to relieve a trustee from responsibility or liability for any responsibility, obligation, or duty under this Act shall be void: *Provided, however*, That nothing shall preclude—

“(i) the Trust from purchasing insurance for its trustees or for itself to cover liability or losses occurring by reason of the act or omission of a trustee, if such insurance permits recourse by the insurer against the trustee in the case of a breach of a fiduciary obligation by such trustee;

“(ii) a trustee from purchasing insurance to cover liability under this section from and for his own account; or

“(iii) an employer or an employee organization from purchasing insurance to cover potential liability of one or more trustees with respect to their fiduciary responsibilities, obligations, and duties under this section.

“(D) BONDING.—Every trustee and every person who handles funds or other property of the Trust (hereafter in this subsection referred to as ‘Trust official’) shall be bonded. Such bond shall provide protection to the Trust against loss by reason of acts of fraud or dishonesty on the part of any Trust official, directly or through the connivance of others, and shall be in accordance with the following:

“(i) The amount of such bond shall be fixed at the beginning of each fiscal year of the Trust by the Railroad Retirement Board. Such amount shall not be less than 10 percent of the amount of the funds handled. In no case shall such bond be less than \$1,000 nor more than \$500,000, except that the Railroad Retirement Board, after consideration of the record, may prescribe an amount in excess of \$500,000, subject to the 10 percent limitation of the preceding sentence.

“(ii) It shall be unlawful for any Trust official to receive, handle, disburse, or otherwise exercise custody or control of any of the funds or other property of the Trust without being bonded as required by this subsection and it shall be unlawful for any Trust official, or any other person having authority to direct the performance of such functions, to permit such functions, or any of them, to be performed by any Trust official, with respect to whom the requirements of this subsection have not been met.

“(iii) It shall be unlawful for any person to procure any bond required by this subsection from any surety or other company or through any agent or broker in whose business operations such person has any control or significant financial interest, direct or indirect.

“(E) AUDIT AND REPORT.—

“(i) The Trust shall annually engage an independent qualified public accountant to audit the financial statements of the Trust.

“(ii) The Trust shall submit an annual management report to the Congress not later than 180 days after the end of the Trust's fiscal year. A management report under this subsection shall include—

“(I) a statement of financial position;

“(II) a statement of operations;

“(III) a statement of cash flows;
“(IV) a statement on internal accounting and administrative control systems;

“(V) the report resulting from an audit of the financial statements of the Trust conducted under clause (i); and

“(VI) any other comments and information necessary to inform the Congress about the operations and financial condition of the Trust.

“(iii) The Trust shall provide the President, the Railroad Retirement Board, and the Director of the Office of Management and Budget a copy of the management report when it is submitted to Congress.

“(F) ENFORCEMENT.—The Railroad Retirement Board may bring a civil action—

“(i) to enjoin any act or practice by the Trust, its Board of Trustees, or its employees or agents that violates any provision of this Act; or

“(ii) to obtain other appropriate relief to redress such violations, or to enforce any provisions of this Act.

“(6) RULES AND ADMINISTRATIVE POWERS.—The Board of Trustees shall have the authority to make rules to govern its operations, employ professional staff, and contract with outside advisers, including the Railroad Retirement Board, to provide legal, accounting, investment advisory, or other services necessary for the proper administration of this subsection. In the case of contracts with investment advisory services, compensation for such services may be on a fixed contract fee basis or on such other terms and conditions as are customary for such services.

“(7) QUORUM.—Five members of the Board of Trustees constitute a quorum to do business. Investment guidelines must be adopted by a unanimous vote of the entire Board of Trustees. All other decisions of the Board of Trustees shall be decided by a majority vote of the quorum present. All decisions of the Board of Trustees shall be entered upon the records of the Board of Trustees.

“(8) FUNDING.—The expenses of the Trust and the Board of Trustees incurred under this subsection shall be paid from the Trust.”.

(b) CONFORMING AND TECHNICAL AMENDMENTS GOVERNING INVESTMENTS.—Section 15(e) of the Railroad Retirement Act of 1974 (45 U.S.C. 231n(e)) is amended—

(1) in the first sentence, by striking “, the Dual Benefits Payments Account” and all that follows through “may be made only” in the second sentence and inserting “and the Dual Benefits Payments Account as are not transferred to the National Railroad Retirement Investment Trust as the Board may determine”;

(2) by striking “the Second Liberty Bond Act, as amended” and inserting “chapter 31 of title 31”; and

(3) by striking “the foregoing requirements” and inserting “the requirements of this subsection”.

(c) MEANS OF FINANCING.—For all purposes of the Congressional Budget Act of 1974, the Balanced Budget and Emergency Deficit Control Act of 1985, and chapter 11 of title 31, United States Code, and notwithstanding section 20 of the Office of Management and Budget Circular No. A-11, the purchase or sale of non-Federal assets (other than gains or losses from such transactions) by the National Railroad Retirement Investment Trust shall be treated as a means of financing.

(d) EFFECTIVE DATE.—The amendments made by this section shall take effect on the first day of the month that begins more than 30 days after enactment.

SEC. 106. ELIMINATION OF SUPPLEMENTAL ANNUITY ACCOUNT.

(a) SOURCE OF PAYMENTS.—Section 7(c)(1) of the Railroad Retirement Act of 1974 (45 U.S.C. 231f(c)(1)) is amended by striking “payments of supplemental annuities under section 2(b) of this Act shall be made from the Railroad Retirement Supplemental Account, and”.

(b) ELIMINATION OF ACCOUNT.—Section 15(c) of the Railroad Retirement Act of 1974 (45 U.S.C. 231n(c)) is repealed.

(c) AMENDMENT TO RAILROAD RETIREMENT ACCOUNT.—Section 15(a) of the Railroad Retirement Act of 1974 (45 U.S.C. 231n(a)) is amended by striking “, except those portions of the amounts covered into the Treasury under sections 3211(b),” and all that follows through the end of the subsection and inserting a period.

(d) TRANSFER.—

(1) DETERMINATION.—As soon as possible after December 31, 2001, the Railroad Retirement Board shall—

(A) determine the amount of funds in the Railroad Retirement Supplemental Account under section 15(c) of the Railroad Retirement Act of 1974 (45 U.S.C. 231n(c)) as of the date of such determination; and

(B) direct the Secretary of the Treasury to transfer such funds to the National Railroad Retirement Investment Trust under section 15(j) of such Act (as added by section 105).

(2) TRANSFER BY THE SECRETARY OF THE TREASURY.—The Secretary of the Treasury shall make the transfer described in paragraph (1).

(e) EFFECTIVE DATE.—

(1) IN GENERAL.—Subject to paragraph (2), the amendments made by subsections (a), (b), and (c) shall take effect January 1, 2002.

(2) ACCOUNT IN EXISTENCE UNTIL TRANSFER MADE.—The Railroad Retirement Supplemental Account under section 15(c) of the Railroad Retirement Act of 1974 (45 U.S.C. 231n(c)) shall continue to exist until the date that the Secretary of the Treasury makes the transfer described in subsection (d)(2).

SEC. 107. TRANSFER AUTHORITY REVISIONS.

(a) RAILROAD RETIREMENT ACCOUNT.—Section 15 of the Railroad Retirement Act of 1974 (45 U.S.C. 231n) is amended by adding after subsection (j) the following new subsection:

“(k) TRANSFERS TO THE TRUST.—The Board shall, upon establishment of the National Railroad Retirement Investment Trust and from time to time thereafter, direct the Secretary of the Treasury to transfer, in such manner as will maximize the investment returns to the Railroad Retirement system, that portion of the Railroad Retirement Account that is not needed to pay current administrative expenses of the Board to the National Railroad Retirement Investment Trust. The Secretary shall make that transfer.”.

(b) TRANSFERS FROM THE NATIONAL RAILROAD RETIREMENT INVESTMENT TRUST.—Section 15 of the Railroad Retirement Act of 1974 (45 U.S.C. 231n), as amended by subsection (a), is further amended by adding after subsection (k) the following new subsection:

“(1) NATIONAL RAILROAD RETIREMENT INVESTMENT TRUST.—The National Railroad Retirement Investment Trust shall from time to time transfer to the disbursing agent described in section 7(b)(4) or as otherwise directed by the Railroad Retirement Board pursuant to section 7(b)(4), such amounts as may be necessary to pay benefits under this Act (other than benefits paid from the Social Security Equivalent Benefit Account or the Dual Benefit Payments Account).”.

(c) SOCIAL SECURITY EQUIVALENT BENEFIT ACCOUNT.—

(1) TRANSFERS TO TRUST.—Section 15A(d)(2) of the Railroad Retirement Act of 1974 (45 U.S.C. 231n-1(d)(2)) is amended to read as follows:

“(2) Upon establishment of the National Railroad Retirement Investment Trust and from time to time thereafter, the Board shall direct the Secretary of the Treasury to transfer, in such manner as will maximize the investment returns to the Railroad Retirement system, the balance of the Social Security Equivalent Benefit Account not needed to pay current benefits and administrative expenses required to be paid from that Account to the National Railroad Retirement Investment Trust, and the Secretary shall make that transfer. Any balance transferred under this paragraph shall be used by the National Railroad Retirement Investment Trust only to pay benefits under this Act or to purchase obligations of the United States that are backed by the full faith and credit of the United States pursuant to chapter 31 of title 31, United States Code. The proceeds of sales of, and the interest income from, such obligations shall be used by the Trust only to pay benefits under this Act.”.

(2) TRANSFERS TO DISBURSING AGENT.—Section 15A(c)(1) of the Railroad Retirement Act of 1974 (45 U.S.C. 231n-1(c)(1)) is amended by adding at the end the following new sentence: “The Secretary shall from time to time transfer to the disbursing agent under section 7(b)(4) amounts necessary to pay those benefits.”.

(3) CONFORMING AMENDMENT.—Section 15A(d)(1) of the Railroad Retirement Act of 1974 (45 U.S.C. 231n-1(d)(1)) is amended by striking the second and third sentences.

(d) DUAL BENEFITS PAYMENTS ACCOUNT.—Section 15(d)(1) of the Railroad Retirement Act of 1974 (45 U.S.C. 231n(d)(1)) is amended by adding at the end the following new sentence: “The Secretary of the Treasury shall from time to time transfer from the Dual Benefits Payments Account to the disbursing agent under section 7(b)(4) amounts necessary to pay benefits payable from that Account.”.

(e) CERTIFICATION BY THE BOARD AND PAYMENT.—Paragraph (4) of section 7(b) of the Railroad Retirement Act of 1974 (45 U.S.C. 231f(b)(4)) is amended to read as follows:

“(4)(A) The Railroad Retirement Board, after consultation with the Board of Trustees of the National Railroad Retirement Investment Trust and the Secretary of the Treasury, shall enter into an arrangement with a nongovernmental financial institution to serve as disbursing agent for benefits payable under this Act who shall disburse consolidated benefits under this Act to each recipient. Pending the taking effect of that arrangement, benefits shall be paid as under the law in effect prior to the enactment of the Railroad Retirement and Survivors' Improvement Act of 2001.

“(B) The Board shall from time to time certify—

“(i) to the Secretary of the Treasury the amounts required to be transferred from the Social Security Equivalent Benefit Account and the Dual Benefits Payments Account to the disbursing agent to make payments of benefits and the Secretary of the Treasury shall transfer those amounts;

“(ii) to the Board of Trustees of the National Railroad Retirement Investment Trust the amounts required to be transferred from the National Railroad Retirement Investment Trust to the disbursing agent to

make payments of benefits and the Board of Trustees shall transfer those amounts; and

“(iii) to the disbursing agent the name and address of each individual entitled to receive a payment, the amount of such payment, and the time at which the payment should be made.”.

(f) **BENEFIT PAYMENTS.**—Section 7(c)(1) of the Railroad Retirement Act of 1974 (45 U.S.C. 231f(c)(1)) is amended—

(1) by striking “from the Railroad Retirement Account” and inserting “by the disbursing agent under subsection (b)(4) from money transferred to it from the National Railroad Retirement Investment Trust or the Social Security Equivalent Benefit Account, as the case may be”; and

(2) by inserting “by the disbursing agent under subsection (b)(4) from money transferred to it” after “Public Law 93-445 shall be made”.

(g) **TRANSITIONAL RULE FOR EXISTING OBLIGATION.**—In making transfers under sections 15(k) and 15A(d)(2) of the Railroad Retirement Act of 1974, as amended by subsections (a) and (c), respectively, the Railroad Retirement Board shall consult with the Secretary of the Treasury to design an appropriate method to transfer obligations held as of the date of enactment of this Act or to convert such obligations to cash at the discretion of the Railroad Retirement Board prior to transfer. The National Railroad Retirement Investment Trust may hold to maturity any obligations so received or may redeem them prior to maturity, as the Trust deems appropriate.

SEC. 108. ANNUAL RATIO PROJECTIONS AND CERTIFICATIONS BY THE RAILROAD RETIREMENT BOARD.

(a) **PROJECTIONS.**—Section 22(a)(1) of the Railroad Retirement Act of 1974 (45 U.S.C. 231u(a)(1)) is amended—

(1) by inserting after the first sentence the following new sentence: “On or before May 1 of each year beginning in 2003, the Railroad Retirement Board shall compute its projection of the account benefits ratio and the average account benefits ratio (as defined by section 3241(c) of the Internal Revenue Code of 1986) for each of the next succeeding five fiscal years.”; and

(2) by striking “the projection prepared pursuant to the preceding sentence” and inserting “the projections prepared pursuant to the preceding two sentences”.

(b) **CERTIFICATIONS.**—The Railroad Retirement Act of 1974 (45 U.S.C. 231 et seq.) is amended by adding at the end the following new section:

“COMPUTATION AND CERTIFICATION OF ACCOUNT BENEFIT RATIOS

“SEC. 23. (a) **INITIAL COMPUTATION AND CERTIFICATION.**—On or before November 1, 2003, the Railroad Retirement Board shall—

“(1) compute the account benefits ratios for each of the most recent 10 preceding fiscal years, and

“(2) certify the account benefits ratios for each such fiscal year to the Secretary of the Treasury.

“(b) **COMPUTATIONS AND CERTIFICATIONS AFTER 2003.**—On or before November 1 of each year after 2003, the Railroad Retirement Board shall—

“(1) compute the account benefits ratio for the fiscal year ending in such year, and

“(2) certify the account benefits ratio for such fiscal year to the Secretary of the Treasury.

“(c) **DEFINITION.**—As used in this section, the term ‘account benefits ratio’ has the meaning given that term in section 3241(c) of the Internal Revenue Code of 1986.”.

TITLE II—AMENDMENTS TO THE INTERNAL REVENUE CODE OF 1986

SEC. 201. AMENDMENTS TO THE INTERNAL REVENUE CODE OF 1986.

Except as otherwise provided, whenever in this title an amendment or repeal is expressed in terms of an amendment to, or repeal of, a section or other provision, the reference shall be considered to be made to a section or other provision of the Internal Revenue Code of 1986.

SEC. 202. EXEMPTION FROM TAX FOR NATIONAL RAILROAD RETIREMENT INVESTMENT TRUST.

Subsection (c) of section 501 is amended by adding at the end the following new paragraph:

“(28) The National Railroad Retirement Investment Trust established under section 15(j) of the Railroad Retirement Act of 1974.”.

SEC. 203. REPEAL OF SUPPLEMENTAL ANNUITY TAX.

(a) **REPEAL OF TAX ON EMPLOYEE REPRESENTATIVES.**—Section 3211 is amended by striking subsection (b).

(b) **REPEAL OF TAX ON EMPLOYERS.**—Section 3221 is amended by striking subsections (c) and (d) and by redesignating subsection (e) as subsection (c).

(c) **EFFECTIVE DATE.**—The amendments made by this section shall apply to calendar years beginning after December 31, 2001.

SEC. 204. EMPLOYER, EMPLOYEE REPRESENTATIVE, AND EMPLOYEE TIER 2 TAX RATE ADJUSTMENTS.

(a) **RATE OF TAX ON EMPLOYERS.**—Subsection (b) of section 3221 is amended to read as follows:

“(b) **TIER 2 TAX.**—
“(1) **IN GENERAL.**—In addition to other taxes, there is hereby imposed on every employer an excise tax, with respect to having individuals in his employ, equal to the applicable percentage of the compensation paid during any calendar year by such employer for services rendered to such employee.
“(2) **APPLICABLE PERCENTAGE.**—For purposes of paragraph (1), the term ‘applicable percentage’ means—
“(A) 15.6 percent in the case of compensation paid during 2002,
“(B) 14.2 percent in the case of compensation paid during 2003, and
“(C) in the case of compensation paid during any calendar year after 2003, the percentage determined under section 3241 for such calendar year.”.

(b) **RATE OF TAX ON EMPLOYEE REPRESENTATIVES.**—Section 3211, as amended by section 203, is amended by striking subsection (a) and inserting the following new subsections:
“(a) **TIER 1 TAX.**—In addition to other taxes, there is hereby imposed on the income of each employee representative a tax equal to the applicable percentage of the compensation received during any calendar year by such employee representative for services rendered by such employee representative. For purposes of the preceding sentence, the term ‘applicable percentage’ means the percentage equal to the sum of the rates of tax in effect under subsections (a) and (b) of section 3101 and subsections (a) and (b) of section 3111 for the calendar year.
“(b) **TIER 2 TAX.**—
“(1) **IN GENERAL.**—In addition to other taxes, there is hereby imposed on the income of each employee representative a tax equal to the applicable percentage of the compensation received during any calendar year by such employee representatives for services rendered by such employee representative.

“(2) **APPLICABLE PERCENTAGE.**—For purposes of paragraph (1), the term ‘applicable percentage’ means—

“(A) 14.75 percent in the case of compensation received during 2002,

“(B) 14.20 percent in the case of compensation received during 2003, and

“(C) in the case of compensation received during any calendar year after 2003, the percentage determined under section 3241 for such calendar year.

“(c) **CROSS REFERENCE.**—
“**For application of different contribution bases with respect to the taxes imposed by subsections (a) and (b), see section 3231(e)(2).**”.

(c) **RATE OF TAX ON EMPLOYEES.**—Subsection (b) of section 3201 is amended to read as follows:

“(b) **TIER 2 TAX.**—
“(1) **IN GENERAL.**—In addition to other taxes, there is hereby imposed on the income of each employee a tax equal to the applicable percentage of the compensation received during any calendar year by such employee for services rendered by such employee.
“(2) **APPLICABLE PERCENTAGE.**—For purposes of paragraph (1), the term ‘applicable percentage’ means—
“(A) 4.90 percent in the case of compensation received during 2002 or 2003, and
“(B) in the case of compensation received during any calendar year after 2003, the percentage determined under section 3241 for such calendar year.”.

(d) **DETERMINATION OF RATE.**—Chapter 22 is amended by adding at the end the following new subchapter:
“**Subchapter E—Tier 2 Tax Rate Determination**
“Sec. 3241. Determination of tier 2 tax rate based on average account benefits ratio.
“**SEC. 3241. DETERMINATION OF TIER 2 TAX RATE BASED ON AVERAGE ACCOUNT BENEFITS RATIO.**
“(a) **IN GENERAL.**—For purposes of sections 3201(b), 3211(b), and 3221(b), the applicable percentage for any calendar year is the percentage determined in accordance with the table in subsection (b).
“(b) **TAX RATE SCHEDULE.**—

Average account benefits ratio		Applicable percentage for sections 3211(b) and 3221(b)	Applicable percentage for section 3201(b)
At least	But less than		
	2.5	22.1	4.9
2.5	3.0	18.1	4.9
3.0	3.5	15.1	4.9
3.5	4.0	14.1	4.9
4.0	6.1	13.1	4.9
6.1	6.5	12.6	4.4
6.5	7.0	12.1	3.9
7.0	7.5	11.6	3.4
7.5	8.0	11.1	2.9
8.0	8.5	10.1	1.9
8.5	9.0	9.1	0.9
9.0		8.2	0

“(c) **DEFINITIONS RELATED TO DETERMINATION OF RATES OF TAX.**—

“(1) **AVERAGE ACCOUNT BENEFITS RATIO.**—For purposes of this section, the term ‘average account benefits ratio’ means, with respect to any calendar year, the average determined by the Secretary of the account benefits ratios for the 10 most recent fiscal years ending before such calendar year. If the amount determined under the preceding sentence is not a multiple of 0.1, such amount shall be increased to the next highest multiple of 0.1.

“(2) ACCOUNT BENEFITS RATIO.—For purposes of this section, the term ‘account benefits ratio’ means, with respect to any fiscal year, the amount determined by the Railroad Retirement Board by dividing the fair market value of the assets in the Railroad Retirement Account and of the National Railroad Retirement Investment Trust (and for years before 2002, the Social Security Equivalent Benefits Account) as of the close of such fiscal year by the total benefits and administrative expenses paid from the Railroad Retirement Account and the National Railroad Retirement Investment Trust during such fiscal year.

“(d) NOTICE.—No later than December 1 of each calendar year, the Secretary shall publish a notice in the Federal Register of the rates of tax determined under this section which are applicable for the following calendar year.”.

(e) CONFORMING AMENDMENTS.—

(1) Section 24(d)(3)(A)(iii) is amended by striking “section 3211(a)(1)” and inserting “section 3211(a)”.

(2) Section 72(r)(2)(B)(i) is amended by striking “3211(a)(2)” and inserting “3211(b)”.

(3) Paragraphs (2)(A)(iii)(II) and (4)(A) of section 3231(e) are amended by striking “3211(a)(1)” and inserting “3211(a)”.

(4) Section 3231(e)(2)(B)(ii)(I) is amended by striking “3211(a)(2)” and inserting “3211(b)”.

(5) The table of subchapters for chapter 22 is amended by adding at the end the following new item:

“Subchapter E. Tier 2 tax rate determination.”.

(f) EFFECTIVE DATE.—The amendments made by this section shall apply to calendar years beginning after December 31, 2001.

Amend the title so as to read: “An Act to modernize the financing of the railroad retirement system and to provide enhanced benefits to employees and beneficiaries.”.

SA 2171. Mr. LOTT (for himself, Mr. MURKOWSKI, and Mr. BROWBACK) proposed an amendment to amendment SA 2170 submitted by Mr. DASCHLE and intended to be proposed to the bill (H.R. 10) to provide for pension reform, and for other purposes; as follows:

At the appropriate place, insert the following and redesignate accordingly:

SECTION 1. SHORT TITLE AND TABLE OF CONTENTS.

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

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

- Sec. 1. Short title and table of contents.
- Sec. 2. Energy policy.

DIVISION A

Sec. 100. Short title.

TITLE I—ENERGY CONSERVATION

Subtitle A—Reauthorization of Federal Energy Conservation Programs

Sec. 101. Authorization of appropriations.

Subtitle B—Federal Leadership in Energy Conservation

Sec. 121. Federal facilities and national energy security.

Sec. 122. Enhancement and extension of authority relating to Federal energy savings performance contracts.

Sec. 123. Clarification and enhancement of authority to enter utility incentive programs for energy savings.

Sec. 124. Federal central air conditioner and heat pump efficiency.

Sec. 125. Advanced building efficiency testbed.

Sec. 126. Use of interval data in Federal buildings.

Sec. 127. Review of Energy Savings Performance Contract program.

Sec. 128. Capitol complex.

Subtitle C—State Programs

Sec. 131. Amendments to State energy programs.

Sec. 132. Reauthorization of energy conservation program for schools and hospitals.

Sec. 133. Amendments to Weatherization Assistance Program.

Sec. 134. LIHEAP.

Sec. 135. High performance public buildings.

Subtitle D—Energy Efficiency for Consumer Products

Sec. 141. Energy Star program.

Sec. 141A. Energy sun renewable and alternative energy program.

Sec. 142. Labeling of energy efficient appliances.

Sec. 143. Appliance standards.

Subtitle E—Energy Efficient Vehicles

Sec. 151. High occupancy vehicle exception.

Sec. 152. Railroad efficiency.

Sec. 153. Biodiesel fuel use credits.

Sec. 154. Mobile to stationary source trading.

Subtitle F—Other Provisions

Sec. 161. Review of regulations to eliminate barriers to emerging energy technology.

Sec. 162. Advanced idle elimination systems.

Sec. 163. Study of benefits and feasibility of oil bypass filtration technology.

Sec. 164. Gas flare study.

Sec. 165. Telecommuting study.

TITLE II—AUTOMOBILE FUEL ECONOMY

Sec. 201. Average fuel economy standards for nonpassenger automobiles.

Sec. 202. Consideration of prescribing different average fuel economy standards for nonpassenger automobiles.

Sec. 203. Dual fueled automobiles.

Sec. 204. Fuel economy of the Federal fleet of automobiles.

Sec. 205. Hybrid vehicles and alternative vehicles.

Sec. 206. Federal fleet petroleum-based non-alternative fuels.

Sec. 207. Study of feasibility and effects of reducing use of fuel for automobiles.

TITLE III—NUCLEAR ENERGY

Sec. 301. License period.

Sec. 302. Cost recovery from Government agencies.

Sec. 303. Depleted uranium hexafluoride.

Sec. 304. Nuclear Regulatory Commission meetings.

Sec. 305. Cooperative research and development and special demonstration projects for the uranium mining industry.

Sec. 306. Maintenance of a viable domestic uranium conversion industry.

Sec. 307. Paducah decontamination and decommissioning plan.

Sec. 308. Study to determine feasibility of developing commercial nuclear energy production facilities at existing department of energy sites.

Sec. 309. Prohibition of commercial sales of uranium by the United States until 2009.

TITLE IV—HYDROELECTRIC ENERGY

Sec. 401. Alternative conditions and fishways.

Sec. 402. FERC data on hydroelectric licensing.

TITLE V—FUELS

Sec. 501. Tank draining during transition to summertime RFG.

Sec. 502. Gasoline blendstock requirements.

Sec. 503. Boutique fuels.

Sec. 504. Funding for MTBE contamination.

TITLE VI—RENEWABLE ENERGY

Sec. 601. Assessment of renewable energy resources.

Sec. 602. Renewable energy production incentive.

Sec. 603. Study of ethanol from solid waste loan guarantee program.

Sec. 604. Study of renewable fuel content.

TITLE VII—PIPELINES

Sec. 701. Prohibition on certain pipeline route.

Sec. 702. Historic pipelines.

TITLE VIII—MISCELLANEOUS PROVISIONS

Sec. 801. Waste reduction and use of alternatives.

Sec. 802. Annual report on United States energy independence.

Sec. 803. Study of aircraft emissions.

DIVISION B

Sec. 2001. Short title.

Sec. 2002. Findings.

Sec. 2003. Purposes.

Sec. 2004. Goals.

Sec. 2005. Definitions.

Sec. 2006. Authorizations.

Sec. 2007. Balance of funding priorities.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle A—Alternative Fuel Vehicles

Sec. 2101. Short title.

Sec. 2102. Definitions.

Sec. 2103. Pilot program.

Sec. 2104. Reports to Congress.

Sec. 2105. Authorization of appropriations.

Subtitle B—Distributed Power Hybrid Energy Systems

Sec. 2121. Findings.

Sec. 2122. Definitions.

Sec. 2123. Strategy.

Sec. 2124. High power density industry program.

Sec. 2125. Micro-cogeneration energy technology.

Sec. 2126. Program plan.

Sec. 2127. Report.

Sec. 2128. Voluntary consensus standards.

Subtitle C—Secondary Electric Vehicle Battery Use

Sec. 2131. Definitions.

Sec. 2132. Establishment of secondary electric vehicle battery use program.

Sec. 2133. Authorization of appropriations.

Subtitle D—Green School Buses

Sec. 2141. Short title.

Sec. 2142. Establishment of pilot program.

Sec. 2143. Fuel cell bus development and demonstration program.

Sec. 2144. Authorization of appropriations.

Subtitle E—Next Generation Lighting Initiative

Sec. 2151. Short title.

Sec. 2152. Definition.

Sec. 2153. Next Generation Lighting Initiative.

Sec. 2154. Study.

Sec. 2155. Grant program.

Subtitle F—Department of Energy
Authorization of Appropriations

- Sec. 2161. Authorization of appropriations.
 Subtitle G—Environmental Protection Agency Office of Air and Radiation Authorization of Appropriations
 Sec. 2171. Short title.
 Sec. 2172. Authorization of appropriations.
 Sec. 2173. Limits on use of funds.
 Sec. 2174. Cost sharing.
 Sec. 2175. Limitation on demonstration and commercial applications of energy technology.
 Sec. 2176. Reprogramming.
 Sec. 2177. Budget request format.
 Sec. 2178. Other provisions.

Subtitle H—National Building Performance Initiative

- Sec. 2181. National Building Performance Initiative.

TITLE II—RENEWABLE ENERGY

Subtitle A—Hydrogen

- Sec. 2201. Short title.
 Sec. 2202. Purposes.
 Sec. 2203. Definitions.
 Sec. 2204. Reports to Congress.
 Sec. 2205. Hydrogen research and development.
 Sec. 2206. Demonstrations.
 Sec. 2207. Technology transfer.
 Sec. 2208. Coordination and consultation.
 Sec. 2209. Advisory Committee.
 Sec. 2210. Authorization of appropriations.
 Sec. 2211. Repeal.

Subtitle B—Bioenergy

- Sec. 2221. Short title.
 Sec. 2222. Findings.
 Sec. 2223. Definitions.
 Sec. 2224. Authorization.
 Sec. 2225. Authorization of appropriations.

Subtitle C—Transmission Infrastructure Systems

- Sec. 2241. Transmission infrastructure systems research, development, demonstration, and commercial application.
 Sec. 2242. Program plan.
 Sec. 2243. Report.

Subtitle D—Department of Energy Authorization of Appropriations

- Sec. 2261. Authorization of appropriations.

TITLE III—NUCLEAR ENERGY

Subtitle A—University Nuclear Science and Engineering

- Sec. 2301. Short title.
 Sec. 2302. Findings.
 Sec. 2303. Department of Energy program.
 Sec. 2304. Authorization of appropriations.
 Subtitle B—Advanced Fuel Recycling Technology Research and Development Program
 Sec. 2321. Program.

Subtitle C—Department of Energy Authorization of Appropriations

- Sec. 2341. Nuclear Energy Research Initiative.
 Sec. 2342. Nuclear Energy Plant Optimization program.
 Sec. 2343. Nuclear energy technologies.
 Sec. 2344. Authorization of appropriations.

TITLE IV—FOSSIL ENERGY

Subtitle A—Coal

- Sec. 2401. Coal and related technologies programs.

Subtitle B—Oil and Gas

- Sec. 2421. Petroleum-oil technology.
 Sec. 2422. Gas.
 Sec. 2423. Natural gas and oil deposits report.
 Sec. 2424. Oil shale research.

Subtitle C—Ultra-Deepwater and Unconventional Drilling

- Sec. 2441. Short title.
 Sec. 2442. Definitions.
 Sec. 2443. Ultra-deepwater program.
 Sec. 2444. National Energy Technology Laboratory.
 Sec. 2445. Advisory Committee.
 Sec. 2446. Research Organization.
 Sec. 2447. Grants.
 Sec. 2448. Plan and funding.
 Sec. 2449. Audit.
 Sec. 2450. Fund.
 Sec. 2451. Sunset.

Subtitle D—Fuel Cells

- Sec. 2461. Fuel cells.

Subtitle E—Department of Energy Authorization of Appropriations

- Sec. 2481. Authorization of appropriations.

TITLE V—SCIENCE

Subtitle A—Fusion Energy Sciences

- Sec. 2501. Short title.
 Sec. 2502. Findings.
 Sec. 2503. Plan for fusion experiment.
 Sec. 2504. Plan for fusion energy sciences program.
 Sec. 2505. Authorization of appropriations.

Subtitle B—Spallation Neutron Source

- Sec. 2521. Definition.
 Sec. 2522. Authorization of appropriations.
 Sec. 2523. Report.
 Sec. 2524. Limitations.

Subtitle C—Facilities, Infrastructure, and User Facilities

- Sec. 2541. Definition.
 Sec. 2542. Facility and infrastructure support for nonmilitary energy laboratories.
 Sec. 2543. User facilities.

Subtitle D—Advisory Panel on Office of Science

- Sec. 2561. Establishment.
 Sec. 2562. Report.

Subtitle E—Department of Energy Authorization of Appropriations

- Sec. 2581. Authorization of appropriations.

TITLE VI—MISCELLANEOUS

Subtitle A—General Provisions for the Department of Energy

- Sec. 2601. Research, development, demonstration, and commercial application of energy technology programs, projects, and activities.
 Sec. 2602. Limits on use of funds.
 Sec. 2603. Cost sharing.
 Sec. 2604. Limitation on demonstration and commercial application of energy technology.
 Sec. 2605. Reprogramming.
 Subtitle B—Other Miscellaneous Provisions
 Sec. 2611. Notice of reorganization.
 Sec. 2612. Limits on general plant projects.
 Sec. 2613. Limits on construction projects.
 Sec. 2614. Authority for conceptual and construction design.
 Sec. 2615. National Energy Policy Development Group mandated reports.
 Sec. 2616. Periodic reviews and assessments.

DIVISION D

- Sec. 4101. Capacity building for energy-efficient, affordable housing.
 Sec. 4102. Increase of CDBG public services cap for energy conservation and efficiency activities.
 Sec. 4103. FHA mortgage insurance incentives for energy efficient housing.
 Sec. 4104. Public housing capital fund.

- Sec. 4105. Grants for energy-conserving improvements for assisted housing.
 Sec. 4106. North American Development Bank.

DIVISION E

- Sec. 5000. Short title.
 Sec. 5001. Findings.
 Sec. 5002. Definitions.
 Sec. 5003. Clean coal power initiative.
 Sec. 5004. Cost and performance goals.
 Sec. 5005. Authorization of appropriations.
 Sec. 5006. Project criteria.
 Sec. 5007. Study.
 Sec. 5008. Clean coal centers of excellence.

DIVISION F

- Sec. 6000. Short title.

TITLE I—GENERAL PROTECTIONS FOR ENERGY SUPPLY AND SECURITY

- Sec. 6101. Study of existing rights-of-way on Federal lands to determine capability to support new pipelines or other transmission facilities.
 Sec. 6102. Inventory of energy production potential of all Federal public lands.
 Sec. 6103. Review of regulations to eliminate barriers to emerging energy technology.
 Sec. 6104. Interagency agreement on environmental review of interstate natural gas pipeline projects.
 Sec. 6105. Enhancing energy efficiency in management of Federal lands.
 Sec. 6106. Efficient infrastructure development.

TITLE II—OIL AND GAS DEVELOPMENT

Subtitle A—Offshore Oil and Gas

- Sec. 6201. Short title.
 Sec. 6202. Lease sales in Western and Central Planning Area of the Gulf of Mexico.
 Sec. 6203. Savings clause.
 Sec. 6204. Analysis of Gulf of Mexico field size distribution, international competitiveness, and incentives for development.

Subtitle B—Improvements to Federal Oil and Gas Management

- Sec. 6221. Short title.
 Sec. 6222. Study of impediments to efficient lease operations.
 Sec. 6223. Elimination of unwarranted denials and stays.
 Sec. 6224. Limitations on cost recovery for applications.
 Sec. 6225. Consultation with Secretary of Agriculture.

Subtitle C—Miscellaneous

- Sec. 6231. Offshore subsalt development.
 Sec. 6232. Program on oil and gas royalties in kind.
 Sec. 6233. Marginal well production incentives.
 Sec. 6234. Reimbursement for costs of NEPA analyses, documentation, and studies.
 Sec. 6235. Encouragement of State and provincial prohibitions on offshore drilling in the Great Lakes.

TITLE III—GEOTHERMAL ENERGY DEVELOPMENT

- Sec. 6301. Royalty reduction and relief.
 Sec. 6302. Exemption from royalties for direct use of low temperature geothermal energy resources.
 Sec. 6303. Amendments relating to leasing on Forest Service lands.
 Sec. 6304. Deadline for determination on pending noncompetitive lease applications.

Sec. 6305. Opening of public lands under military jurisdiction.
 Sec. 6306. Application of amendments.
 Sec. 6307. Review and report to Congress.
 Sec. 6308. Reimbursement for costs of NEPA analyses, documentation, and studies.

TITLE IV—HYDROPOWER

Sec. 6401. Study and report on increasing electric power production capability of existing facilities.
 Sec. 6402. Installation of powerformer at Folsom power plant, California.
 Sec. 6403. Study and implementation of increased operational efficiencies in hydroelectric power projects.
 Sec. 6404. Shift of project loads to off-peak periods.

TITLE V—ARCTIC COASTAL PLAIN DOMESTIC ENERGY

Sec. 6501. Short title.
 Sec. 6502. Definitions.
 Sec. 6503. Leasing program for lands within the Coastal Plain.
 Sec. 6504. Lease sales.
 Sec. 6505. Grant of leases by the Secretary.
 Sec. 6506. Lease terms and conditions.
 Sec. 6507. Coastal Plain environmental protection.
 Sec. 6508. Expedited judicial review.
 Sec. 6509. Rights-of-way across the Coastal Plain.
 Sec. 6510. Conveyance.
 Sec. 6511. Local government impact aid and community service assistance.
 Sec. 6512. Revenue allocation.

TITLE VI—CONSERVATION OF ENERGY BY THE DEPARTMENT OF THE INTERIOR

Sec. 6601. Energy conservation by the Department of the Interior.
 Sec. 6602. Amendment to Buy Indian Act.

TITLE VII—COAL

Sec. 6701. Limitation on fees with respect to coal lease applications and documents.
 Sec. 6702. Mining plans.
 Sec. 6703. Payment of advance royalties under coal leases.
 Sec. 6704. Elimination of deadline for submission of coal lease operation and reclamation plan.

TITLE VIII—INSULAR AREAS ENERGY SECURITY

Sec. 6801. Insular areas energy security.

DIVISION G

Sec. 7101. Buy American.

SEC. 2. ENERGY POLICY.

It shall be the sense of the Congress that the United States should take all actions necessary in the areas of conservation, efficiency, alternative source, technology development, and domestic production to reduce the United States dependence on foreign energy sources from 56 percent to 45 percent by January 1, 2012, and to reduce United States dependence on Iraqi energy sources from 700,000 barrels per day to 250,000 barrels per day by January 1, 2012.

DIVISION A

SEC. 100. SHORT TITLE.

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

TITLE I—ENERGY CONSERVATION

Subtitle A—Reauthorization of Federal Energy Conservation Programs

SEC. 101. AUTHORIZATION OF APPROPRIATIONS.

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

(1) By inserting “(a)” before “Appropriations”.

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

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

“(1) Energy Policy and Conservation Act, including section 256(d)(42 U.S.C. 6276(d)) (promote export of energy efficient products), sections 321 through 346 (42 U.S.C. 6291–6317) (appliances program).

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

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

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

Subtitle B—Federal Leadership in Energy Conservation

SEC. 121. FEDERAL FACILITIES AND NATIONAL ENERGY SECURITY.

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

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

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

“(1) fiscal year 1995 is at least 10 percent;
 “(2) fiscal year 2000 is at least 20 percent;
 “(3) fiscal year 2005 is at least 30 percent;
 “(4) fiscal year 2010 is at least 35 percent;
 “(5) fiscal year 2015 is at least 40 percent;
 and

“(6) fiscal year 2020 is at least 45 percent, less than the energy consumption per gross square foot of its Federal buildings in use during fiscal year 1985. To achieve the reductions required by this paragraph, an agency shall make maximum practicable use of energy efficiency products and services and unconventional and renewable energy resources, using guidelines issued by the Secretary under subsection (d) of this section.”.

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

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

“(e) STUDIES.—To assist in developing the guidelines issued by the Secretary under subsection (d) and in furtherance of the purposes of this section, the Secretary shall conduct studies to identify and encourage the production and marketing of energy efficiency products and services and unconventional and renewable energy resources. To conduct such studies, and to provide grants to accelerate the use of unconventional and renewable energy, there are authorized to be appropriated to the Secretary \$20,000,000 for each of the fiscal years 2003 through 2010.”.

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

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

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

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

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

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

(1) In section 543(a)—

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

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

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

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

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

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

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

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

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

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

(3) In section 548(b)(1)(A)—

(A) by striking “copy of the”; and

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

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

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

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

“(5)(A)(i) Agencies shall select only Energy Star products when available when acquiring energy-using products. For product groups where Energy Star labels are not yet available, agencies shall select products that are in the upper 25 percent of energy efficiency as designated by FEMP. In the case of electric motors of 1 to 500 horsepower, agencies shall select only premium efficiency motors

that meet a standard designated by the Secretary, and shall replace (not rewind) failed motors with motors meeting such standard. The Secretary shall designate such standard within 90 days of the enactment of paragraph, after considering recommendations by the National Electrical Manufacturers Association. The Secretary of Energy shall develop guidelines within 180 days after the enactment of this paragraph for exemptions to this section when equivalent products do not exist, are impractical, or do not meet the agency mission requirements.

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

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

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

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

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

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

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

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

“(A) Cost.

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

“(C) Energy management potential.

“(D) Energy savings.

“(E) Utility contract aggregation.

“(F) Savings from operations and maintenance.

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

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

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

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

(1) In subsection (a)—

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

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

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

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

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

(2) In subsection (b)—

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

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

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

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

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

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

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

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

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

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

“(A) increasing energy and water conservation, and

“(B) using renewable energy sources; and

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

The agency shall implement such measures as soon thereafter as is practicable, con-

sistent with compliance with the requirements of this section.”

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

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

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

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

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

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

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

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

“(3) The terms ‘energy savings contract’ and ‘energy savings performance contract’ mean a contract which provides for the performance of services for the design, acquisition, installation, testing, operation, and, where appropriate, maintenance and repair, of an identified energy or water conservation measure or series of measures at one or more locations.”

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

“(4) The term ‘energy or water conservation measure’ means—

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

“(B) a water conservation measure that improves water efficiency, is life cycle cost effective, and involves water conservation, water recycling or reuse, improvements in operation or maintenance efficiencies, retrofit activities, or other related activities, not at a Federal hydroelectric facility.”

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

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

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

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

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

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

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

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

"(6) Federal agencies are encouraged to participate in State or regional demand side reduction programs, including those operated by wholesale market institutions such as independent system operators, regional transmission organizations and other entities. The availability of such programs, and the savings resulting from such participation, should be included in the evaluation of energy options for Federal facilities."

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

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

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

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

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

(c) **MODIFIED STANDARDS.**—The Secretary of Energy may establish, after appropriate notice and comment, revised standards providing for reduced energy consumption or increased energy efficiency of central air conditioners and heat pumps acquired by the Federal Government, but may not establish standards less rigorous than those established by subsection (b).

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

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

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

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

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

SEC. 125. ADVANCED BUILDING EFFICIENCY TESTBED.

(a) **ESTABLISHMENT.**—The Secretary of Energy shall establish an Advanced Building Efficiency Testbed program for the develop-

ment, testing, and demonstration of advanced engineering systems, components, and materials to enable innovations in building technologies. The program shall evaluate government and industry building efficiency concepts, and demonstrate the ability of next generation buildings to support individual and organizational productivity and health as well as flexibility and technological change to improve environmental sustainability.

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

(c) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to the Secretary of Energy to carry out this section \$18,000,000 for fiscal year 2002, to remain available until expended, of which \$6,000,000 shall be provided to the lead university described in subsection (b), and the remainder shall be provided equally to each of the other participants referred to in subsection (b).

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

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

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

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

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

such changes are consistent with statutory authority.

SEC. 128. CAPITOL COMPLEX.

(a) **ENERGY INFRASTRUCTURE.**—The Architect of the Capitol, building on the Master Plan Study completed in July 2000, shall commission a study to evaluate the energy infrastructure of the Capitol Complex to determine how the infrastructure could be augmented to become more energy efficient, using unconventional and renewable energy resources, in a way that would enable the Complex to have reliable utility service in the event of power fluctuations, shortages, or outages.

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

Subtitle C—State Programs

SEC. 131. AMENDMENTS TO STATE ENERGY PROGRAMS.

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

"(g) The Secretary shall, at least once every 3 years, invite the Governor of each State to review and, if necessary, revise the energy conservation plan of such State submitted under subsection (b) or (e). Such reviews should consider the energy conservation plans of other States within the region, and identify opportunities and actions carried out in pursuit of common energy conservation goals."

(b) **STATE ENERGY EFFICIENCY GOALS.**—Section 364 of the Energy Policy and Conservation Act (42 U.S.C. 6324) is amended by inserting "Each State energy conservation plan with respect to which assistance is made available under this part on or after the date of the enactment of Energy Advancement and Conservation Act of 2001, shall contain a goal, consisting of an improvement of 25 percent or more in the efficiency of use of energy in the State concerned in the calendar year 2010 as compared to the calendar year 1990, and may contain interim goals." after "contain interim goals."

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

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

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

SEC. 133. AMENDMENTS TO WEATHERIZATION ASSISTANCE PROGRAM.

Section 422 of the Energy Conservation and Production Act (42 U.S.C. 6872) is amended by striking "for fiscal years 1999 through 2003 such sums as may be necessary" and inserting "\$273,000,000 for fiscal year 2002, \$325,000,000 for fiscal year 2003, \$400,000,000 for fiscal year 2004, and \$500,000,000 for fiscal year 2005".

SEC. 134. LIHEAP.

(a) **AUTHORIZATION OF APPROPRIATIONS.**—Section 2602(b) of the Low-Income Home Energy Assistance Act of 1981 (42 U.S.C. 8621(b)) is amended by striking the first sentence and inserting the following: "There are authorized to be appropriated to carry out the provisions of this title (other than section

2607A), \$3,400,000,000 for each of fiscal years 2001 through 2005.”

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

(1) the extent to which Low-Income Home Energy Assistance (LIHEAP) and other government energy subsidies paid to consumers discourage or encourage energy conservation and energy efficiency investments when compared to structures of the same physical description and occupancy in compatible geographic locations;

(2) the extent to which education could increase the conservation of low-income households who opt to receive supplemental income instead of Low-Income Home Energy Assistance funds;

(3) the benefit in energy efficiency and energy savings that can be achieved through the annual maintenance of heating and cooling appliances in the homes of those receiving Low-Income Home Energy Assistance funds; and

(4) the loss of energy conservation that results from structural inadequacies in a structure that is unhealthy, not energy efficient, and environmentally unsound and that receives Low-Income Home Energy Assistance funds for weatherization.

SEC. 135. HIGH PERFORMANCE PUBLIC BUILDINGS.

(a) PROGRAM ESTABLISHMENT AND ADMINISTRATION.—

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

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

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

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

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

(3) GRANTS TO ASSIST UNITS OF LOCAL GOVERNMENT.—Grants under paragraph (2)(A) for new public buildings shall be used to achieve energy efficiency performance that reduces energy use at least 30 percent below that of a public building 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 results. Grants under paragraph (2)(A) for existing public buildings shall be used to achieve energy efficiency performance that reduces energy use below the public building baseline consumption, assuming a 3-year, weather-normalized average for calculating such baseline. Grants under paragraph (2)(A) shall be made to units of local government that have—

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

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

(4) OTHER GRANTS.—

(A) GRANTS FOR ADMINISTRATION.—Grants under paragraph (2)(B) shall be used to evalu-

ate compliance by units of local government with the requirements of this section, and in addition may be used for—

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

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

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

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

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

(5) IMPLEMENTATION.—

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

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

(6) ALLOCATION OF FUNDS.—

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

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

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

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

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

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

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

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

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

(1) HIGH PERFORMANCE PUBLIC BUILDING.—The term “high performance public building” means a public building which, in its design, construction, operation, and mainte-

nance, maximizes use of unconventional and renewable energy resources and energy efficiency practices, is cost-effective on a life cycle basis, uses affordable, environmentally preferable, durable materials, enhances indoor environmental quality, protects and conserves water, and optimizes site potential.

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

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

Subtitle D—Energy Efficiency for Consumer Products

SEC. 141. ENERGY STAR PROGRAM.

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

“SEC. 324A. ENERGY STAR PROGRAM.

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

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

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

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

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

“(b) STUDY OF CERTAIN PRODUCTS AND BUILDINGS.—Within 180 days after the date of the enactment of this section, the Secretary and the Administrator, consistent with the terms of agreements between the two agencies (including existing agreements with respect to which agency shall handle a particular product or building), shall determine whether the Energy Star label should be extended to additional products and buildings, including the following:

“(1) Air cleaners.

“(2) Ceiling fans.

“(3) Light commercial heating and cooling products.

“(4) Reach-in refrigerators and freezers.

“(5) Telephony.

“(6) Vending machines.

“(7) Residential water heaters.

“(8) Refrigerated beverage merchandisers.

“(9) Commercial ice makers.

“(10) School buildings.

“(11) Retail buildings.

“(12) Health care facilities.

“(13) Homes.

“(14) Hotels and other commercial lodging facilities.

“(15) Restaurants and other food service facilities.

“(16) Solar water heaters.

“(17) Building-integrated photovoltaic systems.

“(18) Reflective pigment coatings.

“(19) Windows.

“(20) Boilers.

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

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

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

“Sec. 324A. Energy Star program.”.

SEC. 141A. ENERGY SUN RENEWABLE AND ALTERNATIVE ENERGY PROGRAM.

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

“SEC. 324B. ENERGY SUN RENEWABLE AND ALTERNATIVE ENERGY PROGRAM.

“(a) PROGRAM.—There is established at the Environmental Protection Agency and the Department of Energy a government-industry partnership program to identify and promote the purchase of renewable and alternative energy products, to recognize companies that purchase renewable and alternative energy products for the environmental and energy security benefits of such purchases, and to educate consumers about the environmental and energy security benefits of renewable and alternative energy. Responsibilities under the program shall be divided between the Environmental Protection Agency and the Department of Energy consistent with the terms of agreements between the two agencies. The Administrator of the Environmental Protection Agency and the Secretary of Energy—

“(1) establish an Energy Sun label for renewable and alternative energy products and technologies that the Administrator or the Secretary (consistent with the terms of agreements between the two agencies regarding responsibility for specific product categories) determine to have substantial environmental and energy security benefits and commercial marketability.

“(2) establish an Energy Sun Company program to recognize private companies that draw a substantial portion of their energy from renewable and alternative sources that provide substantial environmental and energy security benefits, as determined by the Administrator or the Secretary.

“(3) promote Energy Sun compliant products and technologies as the preferred products and technologies in the marketplace for reducing pollution and achieving energy security; and

“(4) work to enhance public awareness and preserve the integrity of the Energy Sun label.

For the purposes of carrying out this section, there is authorized to be appropriated \$10,000,000 for each of fiscal years 2002 through 2006.

“(b) STUDY OF CERTAIN PRODUCTS, TECHNOLOGIES, AND BUILDINGS.—Within 18 months after the enactment of this section, the Administrator and the Secretary, consistent with the terms of agreements between the two agencies, shall conduct a study to deter-

mine whether the Energy Sun label should be authorized for products, technologies, and buildings in the following categories:

“(1) Passive solar, solar thermal, concentrating solar energy, solar water heating, and related solar products and building technologies.

“(2) Solar photovoltaics and other solar electric power generation technologies.

“(3) Wind.

“(4) Geothermal.

“(5) Biomass.

“(6) Distributed energy (including, but not limited to, microturbines, combined heat and power, fuel cells, and stirling heat engines).

“(7) Green power or other renewables and alternative based electric power products (including green tag credit programs) sold to retail consumers of electricity.

“(8) Homes.

“(9) School buildings.

“(10) Retail buildings.

“(11) Health care facilities.

“(12) Hotels and other commercial lodging facilities.

“(13) Restaurants and other food service facilities.

“(14) Rest area facilities along interstate highways.

“(15) Sports stadia, arenas, and concert facilities.

“(16) Any other product, technology or building category, the accelerated recognition of which the Administrator or the Secretary determines to be necessary or appropriate for the achievement of the purposes of this section.

Nothing in this subsection shall be construed to limit the discretion of the Administrator or the Secretary under subsection (a)(1) to include in the Energy Sun program additional products, technologies, and buildings not listed in this subsection. Participation by private-sector entities in programs or studies authorized by this section shall be (A) voluntary, and (B) by permission of the Administrator or Secretary, on terms and conditions the Administrator or the Secretary (consistent with agreements between the agencies) deems necessary or appropriate to carry out the purposes and requirements of this section.

“(c) DEFINITION.—For the purposes of this section, the term ‘renewable and alternative energy’ shall have the same meaning as the term ‘unconventional and renewable energy resources’ in Section 551 of the National Energy Conservation Policy Act (42 U.S.C. 8259).”.

(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 324A the following new item:

“Sec. 324B. Energy Sun renewable and alternative energy program.”.

SEC. 142. LABELING OF ENERGY EFFICIENT APPLIANCES.

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

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

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

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

“(2) The Secretary shall make recommendations to the Commission within 180 days of the date of the enactment of this paragraph regarding labeling of consumer products that are not covered products in accordance with this section, where such label-

ing is likely to assist consumers in making purchasing decisions and is technologically and economically feasible.”.

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

“(F) Not later than 1 year after the date of the enactment of this subparagraph, the Commission shall initiate a rulemaking to prescribe labeling rules under this section applicable to consumer products that are not covered products if it determines that labeling of such products is likely to assist consumers in making purchasing decisions and is technologically and economically feasible.

“(G) Not later than 3 months after the date of the 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 label that would improve the effectiveness of the label. Such rulemaking shall be completed within 15 months of the date of the enactment of this subparagraph.”.

SEC. 143. APPLIANCE STANDARDS.

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

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

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

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

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

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

“(B) In the case of analog televisions, the Secretary shall prescribe, on or after the

date that is 2 years after the date of the enactment of this subsection, in accordance with subsections (o) and (p) of section 325, an energy conservation standard that is technologically feasible and economically justified under section 325(o)(2)(A) (in lieu of the 1 watt standard under subparagraph (A)).

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

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

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

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

“(iii) the cost of electricity that a typical consumer would save in operating the household appliance meeting the standard would not equal the increase in the price of the household appliance that would be attributable to the modifications that would be necessary to enable the household appliance to meet the standard by the earlier of—

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

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

“(C) If the Secretary determines that it is not technically feasible to modify a household appliance to meet the standard under paragraph (2), the Secretary shall establish a different standard for the household appliance in accordance with the criteria under subsection (1).

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

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

“(i) international test procedures under development;

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

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

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

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

(2) Section 325(o)(3) of the Energy Policy and Conservation Act (42 U.S.C. 6295(n)(1)) is amended by inserting at the end of the paragraph the following: “Notwithstanding any provision of this part, the Secretary shall not amend a standard established under subsection (u) or (v) of this section.”.

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

(1) Inserting “(1)” before “After”.

(2) Inserting the following at the end:

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

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

“(c) HVAC MAINTENANCE.—For the purpose of ensuring that installed air conditioning and heating systems operate at their maximum rated efficiency levels, the Secretary shall, within 180 days of the date of the enactment of this subsection, develop and implement a public education campaign to educate homeowners and small business owners concerning the energy savings resulting from regularly scheduled maintenance of air conditioning, heating, and ventilating systems. In developing and implementing this campaign, the Secretary shall consider support by the Department of public education programs sponsored by trade and professional and energy efficiency organizations. The public service information shall provide sufficient information to allow consumers to make informed choices from among professional, licensed (where State or local licensing is required) contractors. There are authorized to be appropriated to carry out this subsection \$5,000,000 for fiscal years 2002 and 2003 in addition to amounts otherwise appropriated in this part.”.

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

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

“(32) The term ‘residential furnace fan’ means an electric fan installed as part of a furnace for purposes of circulating air through the system air filters, the heat ex-

changers or heating elements of the furnace, and the duct work.

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

“(34) The term ‘suspended ceiling fan’ means a fan intended to be mounted to a ceiling outlet box, ceiling building structure, or to a vertical rod suspended from the ceiling, and which as blades which rotate below the ceiling and consists of an electric motor, fan blades (which rotate in a direction parallel to the floor), an optional lighting kit, and one or more electrical controls (integral or remote) governing fan speed and lighting operation.

“(35) The term ‘refrigerated bottled or canned beverage vending machine’ means a machine that cools bottled or canned beverages and dispenses them upon payment.”.

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

“(f) ADDITIONAL CONSUMER PRODUCTS.—The Secretary shall within 18 months after the date of the enactment of this subsection prescribe testing requirements for residential furnace fans, residential central air conditioner fans, heat pump circulation fans, suspended ceiling fans, and refrigerated bottled or canned beverage vending machines. Such testing requirements shall be based on existing test procedures used in industry to the extent practical and reasonable. In the case of residential furnace fans, residential central air conditioner fans, heat pump circulation fans, and suspended ceiling fans, such test procedures shall include efficiency at both maximum output and at an output no more than 50 percent of the maximum output.”.

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

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

“(2) The Secretary shall within 24 months after the date on which testing requirements are prescribed by the Secretary pursuant to section 323(f), prescribe, by rule, energy conservation standards for residential furnace fans, residential central air conditioner and heat pump circulation fans, suspended ceiling fans, and refrigerated bottled or canned

beverage vending machines. In establishing these standards, the Secretary shall use the criteria and procedures contained in subsections (l) and (m). Any standard prescribed under this section shall apply to products manufactured 36 months after the date such rule is published."

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

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

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

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

Subtitle E—Energy Efficient Vehicles

SEC. 151. HIGH OCCUPANCY VEHICLE EXCEPTION.

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

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

(1) which draws propulsion energy from on-board sources of stored energy which are both—

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

(B) a rechargeable energy storage system;

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

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

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

(3) which is made by a manufacturer.

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

SEC. 152. RAILROAD EFFICIENCY.

(a) LOCOMOTIVE TECHNOLOGY DEMONSTRATION.—The Secretary of Energy shall establish a public-private research partnership with railroad carriers, locomotive manufacturers, and a world-class research and test center dedicated to the advancement of railroad technology, efficiency, and safety that is owned by the Federal Railroad Administration and operated in the private sector, for the development and demonstration of lo-

comotive technologies that increase fuel economy and reduce emissions.

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

SEC. 153. BIODIESEL FUEL USE CREDITS.

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

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

(2) by striking "not".

SEC. 154. MOBILE TO STATIONARY SOURCE TRADING.

Within 90 days after the enactment of this section, the Administrator of the Environmental Protection Agency is directed to commence a review of the Agency's policies regarding the use of mobile to stationary source trading of emission credits under the Clean Air Act to determine whether such trading can provide both nonattainment and attainment areas with additional flexibility in achieving and maintaining healthy air quality and increasing use of alternative fuel and advanced technology vehicles, thereby reducing United States dependence on foreign oil.

Subtitle F—Other Provisions

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

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

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

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

SEC. 162. ADVANCED IDLE ELIMINATION SYSTEMS.

(a) DEFINITIONS.—

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

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

(b) RECOGNITION OF BENEFITS OF ADVANCED IDLE ELIMINATION SYSTEMS.—Within 90 days after the date of the enactment of this subsection, the Administrator of the Environmental Protection Agency is directed to

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

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

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

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

SEC. 164. GAS FLARE STUDY.

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

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

SEC. 165. TELECOMMUTING STUDY.

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

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

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

(2) Other energy reductions accomplished by telecommuting.

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

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

(c) REPORT REQUIRED.—The Secretary shall submit to the President and the Congress a report on the study required by this section

not later than 6 months after the date of the enactment of this Act. Such report shall include a description of the results of the analysis of each of the subject described in subsection (b).

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

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

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

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

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

TITLE II—AUTOMOBILE FUEL ECONOMY

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

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

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

(2) by adding at the end the following:

“(2) The Secretary shall prescribe under paragraph (1) average fuel economy standards for automobiles (except passenger automobiles) manufactured in model years 2004 through 2010 that are calculated to ensure that the aggregate amount of gasoline projected to be used in those model years by automobiles to which the standards apply is at least 5 billion gallons less than the aggregate amount of gasoline that would be used in those model years by such automobiles if they achieved only the fuel economy required under the average fuel economy standard that applies under this subsection to automobiles (except passenger automobiles) manufactured in model year 2002.”

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

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

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

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

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

(1) shall consider any recommendations made in the National Academy of Sciences study completed pursuant to the Department of Transportation and Related Agencies Appropriations Act, 2000 (Public Law 106-346; 114 Stat. 2763 et seq.); and

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

SEC. 203. DUAL FUELED AUTOMOBILES.

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

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

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

(b) AMENDMENTS.—

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

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

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

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

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

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

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

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

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

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

“§32917. Standards for executive agency automobiles

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

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

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

“(2) not later than September 30, 2005, the average fuel economy of the new automobiles in the agency’s fleet of automobiles is not less than 3 miles per gallon higher than the baseline average fuel economy determined under subsection (a) for that fleet.

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

“(d) DEFINITIONS.—In this section:

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

“(2) The term ‘executive agency’ has the meaning given that term in section 105 of title 5.

“(3) The term ‘new automobile’, with respect to the fleet of automobiles of an execu-

tive agency, means an automobile that is leased for at least 60 consecutive days or bought, by or for the agency, after September 30, 1999.”

SEC. 205. HYBRID VEHICLES AND ALTERNATIVE VEHICLES.

(a) IN GENERAL.—Section 303(b)(1) of the Energy Policy Act of 1992 is amended by adding the following at the end: “Of the total number of vehicles acquired by a Federal fleet in fiscal years 2004 and 2005, at least 5 percent of the vehicles in addition to those covered by the preceding sentence shall be alternative fueled vehicles or hybrid vehicles and in fiscal year 2006 and thereafter at least 10 percent of the vehicles in addition to those covered by the preceding sentence shall be alternative fueled vehicles or hybrid vehicles.”

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

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

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

“(B) a rechargeable energy storage system.”

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

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

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

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

“(a) PURPOSES.—The purposes of this section are to complement and supplement the requirements of section 303 of this Act that Federal fleets, as that term is defined in section 303(b)(3), acquire in the aggregate a minimum percentage of alternative fuel vehicles, to encourage the manufacture and sale or lease of such vehicles nationwide, and to achieve, in the aggregate, a reduction in the amount of the petroleum-based fuels (other than the alternative fuels defined in this title) used by new light-duty motor vehicles acquired by the Federal Government in model years 2004 through 2010 and thereafter.

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

such standards by all such fleets and shall report annually to the Congress, based on reports by the heads of such fleets, on the extent to which the requirements of this section and such standards are being achieved. The report shall include information on annual reductions achieved of petroleum-based fuels and the problems, if any, encountered in acquiring alternative fuels and in requiring their use.”

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

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

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

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

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

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

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

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

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

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

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

(A) gasoline supplies;

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

(C) motor vehicle safety; and

(D) air quality.

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

TITLE III—NUCLEAR ENERGY

SEC. 301. LICENSE PERIOD.

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

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

“c. LICENSE PERIOD.—

“(1) IN GENERAL.—Each such”; and

(2) by adding at the end the following:

“(2) COMBINED LICENSES.—In the case of a combined construction and operating license

issued under section 185 b., the initial duration of the license may not exceed 40 years from the date on which the Commission finds, before operation of the facility, that the acceptance criteria required by section 185 b. are met.”

SEC. 302. COST RECOVERY FROM GOVERNMENT AGENCIES.

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

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

(2) by striking “483a” and inserting “9701”; and

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

SEC. 303. DEPLETED URANIUM HEXAFLUORIDE.

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

SEC. 304. NUCLEAR REGULATORY COMMISSION MEETINGS.

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

SEC. 305. COOPERATIVE RESEARCH AND DEVELOPMENT AND SPECIAL DEMONSTRATION PROJECTS FOR THE URANIUM MINING INDUSTRY.

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

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

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

(A) enhanced production with minimal environmental impacts;

(B) restoration of well fields; and

(C) decommissioning and decontamination activities.

(b) DOMESTIC URANIUM PRODUCER.—For purposes of this section, the term “domestic uranium producer” has the meaning given that term in section 1018(4) of the Energy Policy Act of 1992 (42 U.S.C. 2296b-7(4)), except that the term shall not include any producer that has not produced uranium from domestic reserves on or after July 30, 1998.

SEC. 306. MAINTENANCE OF A VIABLE DOMESTIC URANIUM CONVERSION INDUSTRY.

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

SEC. 307. PADUCAH DECONTAMINATION AND DECOMMISSIONING PLAN.

The Secretary of Energy shall prepare and submit a plan to Congress within 180 days after the date of the enactment of this Act that establishes scope, cost, schedule, se-

quence of activities, and contracting strategy for—

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

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

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

SEC. 308. STUDY TO DETERMINE FEASIBILITY OF DEVELOPING COMMERCIAL NUCLEAR ENERGY PRODUCTION FACILITIES AT EXISTING DEPARTMENT OF ENERGY SITES.

(a) IN GENERAL.—The Secretary of Energy shall conduct a study to determine the feasibility of developing commercial nuclear energy production facilities at Department of Energy sites in existence on the date of the enactment of this Act, including—

(1) options for how and where nuclear power plants can be developed on existing Department of Energy sites;

(2) estimates on cost savings to the Federal Government that may be realized by locating new nuclear power plants on Federal sites;

(3) the feasibility of incorporating new technology into nuclear power plants located on Federal sites;

(4) potential improvements in the licensing and safety oversight procedures of nuclear power plants located on Federal sites;

(5) an assessment of the effects of nuclear waste management policies and projects as a result of locating nuclear power plants located on Federal sites; and

(6) any other factors that the Secretary believes would be relevant in making the determination.

(b) REPORT.—Not later than 90 days after the date of the enactment of this Act, the Secretary shall submit to Congress a report describing the results of the study under subsection (a).

SEC. 309. PROHIBITION OF COMMERCIAL SALES OF URANIUM BY THE UNITED STATES UNTIL 2009.

Section 3112 of the USEC Privatization Act (42 U.S.C. 2297h-10) is amended by adding at the end the following new subsection:

“(g) PROHIBITION ON SALES.—With the exception of sales pursuant to subsection (b)(2) (42 U.S.C. 2297h-10(b)(2)), notwithstanding any other provision of law, the United States Government shall not sell or transfer any uranium (including natural uranium concentrates, natural uranium hexafluoride, enriched uranium, depleted uranium, or uranium in any other form) through March 23, 2009 (except sales or transfers for use by the Tennessee Valley Authority in relation to the Department of Energy’s HEU or Tritium programs, or the Department or Energy research reactor sales program, or any depleted uranium hexafluoride to be transferred to a designated Department of Energy contractor in conjunction with the planned

construction of the Depleted Uranium Hexafluoride conversion plants in Portsmouth, Ohio, and Paducah, Kentucky, to any natural uranium transferred to the U.S. Enrichment Corporation from the Department of Energy to replace contaminated uranium received from the Department of Energy when the U.S. Enrichment Corporation was privatized in July, 1998, or for emergency purposes in the event of a disruption in supply to end users in the United States). The aggregate of sales or transfers of uranium by the United States Government after March 23, 2009, shall not exceed 3,000,000 pounds U₃O₈ per calendar year."

TITLE IV—HYDROELECTRIC ENERGY

SEC. 401. ALTERNATIVE CONDITIONS AND FISHWAYS.

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

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

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

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

"(B) will either—

"(i) cost less to implement, or

"(ii) result in improved operation of the project works for electricity production, as compared to the condition deemed necessary by the Secretary.

"(3) Within 1 year after the enactment of this subsection, each Secretary concerned shall, by rule, establish a process to expeditiously resolve conflicts arising under this subsection."

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

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

(2) adding at the end the following:

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

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

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

"(B) will either—

"(i) cost less to implement, or

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

as compared to the fishway initially prescribed by the Secretary.

"(3) Within 1 year after the enactment of this subsection, the Secretary of the Interior and the Secretary of Commerce shall each, by rule, establish a process to expeditiously resolve conflicts arising under this subsection."

SEC. 402. FERC DATA ON HYDROELECTRIC LICENSING.

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

(b) REPORTS.—Within 6 months after the date of the enactment of this Act, the Commission shall notify the Committee on Energy and Commerce of the United States House of Representatives and the Committee on Energy and Natural Resources of the United States Senate of the progress made by the Commission under subsection (a), and within 1 year after such date of the enactment, the Commission shall submit a report to such Committees specifying the measures taken by the Commission pursuant to subsection (a).

TITLE V—FUELS

SEC. 501. TANK DRAINING DURING TRANSITION TO SUMMERTIME RFG.

Not later than 60 days after the enactment of the Act, the Administrator of the Environmental Protection Agency shall commence a rulemaking to determine whether modifications to the regulations set forth in 40 CFR Section 80.78 and any associated regulations regarding the transition to high ozone season reformulated gasoline are necessary to ensure that the transition to high ozone season reformulated gasoline is conducted in a manner that minimizes disruptions to the general availability and affordability of gasoline, and maximizes flexibility with regard to the draining and inventory management of gasoline storage tanks located at refineries, terminals, wholesale and retail outlets, consistent with the goals of the Clean Air Act. The Administrator shall propose and take final action in such rulemaking to ensure that any modifications are effective and implemented at least 60 days prior to the beginning of the high ozone season for the year 2002.

SEC. 502. GASOLINE BLENDSTOCK REQUIREMENTS.

Not later than 60 days after the enactment of this Act, the Administrator of the Environmental Protection Agency shall commence a rulemaking to determine whether modifications to product transfer documentation, accounting, compliance calculation, and other requirements contained in the regulations of the Administrator set forth in section 80.102 of title 40 of the Code of Federal Regulations relating to gasoline

blendstocks are necessary to facilitate the movement of gasoline and gasoline feedstocks among different regions throughout the country and to improve the ability of petroleum refiners and importers to respond to regional gasoline shortages and prevent unreasonable short-term price increases. The Administrator shall take into consideration the extent to which such requirements have been, or will be, rendered unnecessary or inefficient by reason of subsequent environmental safeguards that were not in effect at the time the regulations in section 80.102 of title 40 of the Code of Federal Regulations were promulgated. The Administrator shall propose and take final action in such rulemaking to ensure that any modifications are effective and implemented at least 60 days prior to the beginning of the high ozone season for the year 2002.

SEC. 503. BOUTIQUE FUELS.

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

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

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

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

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

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

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

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

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

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

(D) provide increased gasoline market liquidity;

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

(8) the feasibility of providing incentives to promote cleaner burning fuel.

(b) REPORT.—By December 31, 2001, the Administrator of the Environmental Protection Agency and the Secretary of Energy shall submit a report to the Congress containing the results of the study conducted under subsection (a). Such report shall contain recommendations for legislative and administrative actions that may be taken to simplify the national distribution system for motor vehicle fuel, make such system more cost-effective, and reduce the costs and increase the availability of motor vehicle fuel to the end user while meeting the requirements of the Clean Air Act. Such recommendations shall take into account the need to provide lead time for refinery and

fuel distribution system modifications necessary to assure adequate fuel supply for all States.

SEC. 504. FUNDING FOR MTBE CONTAMINATION.

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

TITLE VI—RENEWABLE ENERGY

SEC. 601. ASSESSMENT OF RENEWABLE ENERGY RESOURCES.

(a) **RESOURCE ASSESSMENT.**—Not later than 1 year after the date of the enactment of this Act, and each year thereafter, the Secretary of Energy shall publish an assessment by the National Laboratories of all renewable energy resources available within the United States.

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

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

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

SEC. 602. RENEWABLE ENERGY PRODUCTION INCENTIVE.

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

(1) In subsection (a) by striking “and which satisfies” and all that follows through “Secretary shall establish.” and inserting “. The Secretary shall establish other procedures necessary for efficient administration of the program. The Secretary shall not establish any criteria or procedures that have the effect of assigning to proposals a higher or lower priority for eligibility or allocation of appropriated funds on the basis of the energy source proposed.”.

(2) In subsection (b)—

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

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

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

(4) In subsection (d) by inserting “or in which the Secretary finds that all necessary Federal and State authorizations have been obtained to begin construction of the facility” after “eligible for such payments”.

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

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

(7) In subsection (g)—

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

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

SEC. 603. STUDY OF ETHANOL FROM SOLID WASTE LOAN GUARANTEE PROGRAM.

The Secretary of Energy shall conduct a study of the feasibility of providing guarantees for loans by private banking and investment institutions for facilities for the processing and conversion of municipal solid waste and sewage sludge into fuel ethanol and other commercial byproducts, and not later than 90 days after the date of the enactment of this Act shall transmit to the Congress a report on the results of the study.

SEC. 604. STUDY OF RENEWABLE FUEL CONTENT.

(a) **STUDY.**—The Administrator of the Environmental Protection Agency and the Secretary of Energy shall jointly conduct a study of the feasibility of developing a requirement that motor vehicle fuel sold or introduced into commerce in the United States in calendar year 2002 or any calendar year thereafter by a refiner, blender, or importer shall, on a 6-month average basis, be comprised of a quantity of renewable fuel, measured in gasoline-equivalent gallons. As part of this study, the Administrator and Secretary shall evaluate the use of a banking and trading credit system and the feasibility and desirability of requiring an increasing percentage of renewable fuel to be phased in over a 15-year period.

(b) **REPORT TO CONGRESS.**—Not later than 6 months after the date of the enactment of this Act, the Administrator and the Secretary shall transmit to the Congress a report on the results of the study conducted under this section.

TITLE VII—PIPELINES

SEC. 701. PROHIBITION ON CERTAIN PIPELINE ROUTE.

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

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

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

SEC. 702. HISTORIC PIPELINES.

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

“(i) Notwithstanding the National Historic Preservation Act, a transportation facility shall not be eligible for inclusion on the National Register of Historic Places unless—

“(1) the Commission has permitted the abandonment of the transportation facility pursuant to subsection (b) of this section, or

“(2) the owner of the facility has given written consent to such eligibility.

Any transportation facility deemed eligible for inclusion on the National Register of Historic Places prior to the date of the enactment of this subsection shall no longer be eligible unless the owner of the facility gives written consent to such eligibility.”.

TITLE VIII—MISCELLANEOUS PROVISIONS
SEC. 801. WASTE REDUCTION AND USE OF ALTERNATIVES.

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

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

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

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

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

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

SEC. 802. ANNUAL REPORT ON UNITED STATES ENERGY INDEPENDENCE.

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

(b) **ALTERNATIVES.**—The information required under this section to be included in the reports under section 801(c) of the Department of Energy Organization Act shall include a specification of what legislative or administrative actions must be implemented to meet this goal and set forth a range of options and alternatives with a cost/benefit analysis for each option or alternative together with an estimate of the contribution each option or alternative could make to reduce foreign oil imports. The Secretary shall solicit information from the public and request information from the Energy Information Agency and other agencies to develop the information required under this section. The information shall indicate, in detail, options and alternatives to—

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

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

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

SEC. 803. STUDY OF AIRCRAFT EMISSIONS.

The Secretary of Transportation and the Administrator of the Environmental Protection Agency shall jointly commence a study within 60 days after the enactment of this Act to investigate the impact of aircraft emissions on air quality in areas that are considered to be in nonattainment for the national ambient air quality standard for ozone. As part of this study, the Secretary and the Administrator shall focus on the impact of emissions by aircraft idling at airports and on the contribution of such emissions as a percentage of total emissions in the nonattainment area. Within 180 days of

the commencement of the study, the Secretary and the Administrator shall submit a report to the Committees on Energy and Commerce and Transportation and Infrastructure of the United States House of Representatives and to the Committees on Environment and Public Works and Commerce, Science, and Transportation of the United States Senate containing the results of the study and recommendations with respect to a plan to maintain comprehensive data on aircraft emissions and methods by which such emissions may be reduced, without increasing individual aircraft noise, in order to assist in the attainment of the national ambient air quality standards.

DIVISION B

SEC. 2001. SHORT TITLE.

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

SEC. 2002. FINDINGS.

The Congress finds that—

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

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

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

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

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

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

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

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

SEC. 2003. PURPOSES.

The purposes of this division are to—

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

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

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

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

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

(6) foster international cooperation by developing international markets for domestically produced sustainable energy technologies, and by transferring environmentally sound, advanced energy systems and technologies to developing countries to promote sustainable development;

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

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

SEC. 2004. GOALS.

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

(1) ENERGY CONSERVATION AND ENERGY EFFICIENCY.—

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

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

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

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

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

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

(i) develop a microturbine (40 to 300 kilowatt) that is more than 40 percent more efficient by 2006, and more than 50 percent more efficient by 2010, compared to the efficiency as of the date of the enactment of this Act; and

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

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

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

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

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

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

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

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

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

(II) in classes 3 through 6 by 200 percent, compared to the fuel economy as of the date of the enactment of this Act.

(2) RENEWABLE ENERGY.—

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

(B) For bioenergy:

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

(ii) For biopower systems, the program should reduce the cost of such systems to enable commercialization of integrated power-generating technologies that employ gas turbines and fuel cells integrated with bioenergy gasifiers within 5 years after the date of the enactment of this Act.

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

(C) For Geothermal Technology Development, the program should focus on advanced concepts for the long term. The first priority should be high-grade enhanced geothermal systems; the second priority should be lower grade, hot dry rock, and geopressed systems; and the third priority should be support of field demonstrations of enhanced geothermal systems technology, including sites in lower grade areas to demonstrate the benefits of reservoir concepts to different conditions.

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

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

(F) For Photovoltaic Energy Systems, the program should pursue research, development, and demonstration that will, by 2005, increase the efficiency of thin film modules from the current 7 percent to 11 percent in

multi-million watt production; reduce the direct manufacturing cost of photovoltaic modules by 30 percent from the current \$2.50 per watt to \$1.75 per watt by 2005; and establish greater than a 20-year lifetime of photovoltaic systems by improving the reliability and lifetime of balance-of-system components and reducing recurring cost by 40 percent. The program's top priority should be the development of sound manufacturing technologies for thin-film modules, and the program should make a concerted effort to integrate fundamental research and basic engineering research.

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

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

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

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

(3) **NUCLEAR ENERGY.**—

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

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

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

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

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

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

(4) **FOSSIL ENERGY.**—

(A) For core fossil energy research and development, the program should achieve the goals outlined by the Department's Vision 21 Program. This research should address fuel-

flexible gasification and turbines, fuel cells, advanced-combustion systems, advanced fuels and chemicals, advanced modeling and systems analysis, materials and heat exchangers, environmental control technologies, gas-stream purification, gas-separation technology, and sequestration research and development focused on cost-effective novel concepts for capturing, reusing or storing, or otherwise mitigating carbon and other greenhouse gas emissions.

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

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

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

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

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

(A) develop and maintain a robust portfolio of fundamental scientific and energy research, including High Energy and Nuclear Physics, Biological and Environmental Research, Basic Energy Sciences (including Materials Sciences, Chemical Sciences, Engineering and Geosciences, and Energy Biosciences), Advanced Scientific Computing, Energy Research and Analysis, Multiprogram Energy Laboratories-Facilities Support, Fusion Energy Sciences, and Facilities and Infrastructure;

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

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

(b) **REVIEW AND ASSESSMENT.**—The Secretary shall perform an assessment that establishes measurable cost and performance-based goals, or that modifies the goals under subsection (a), as appropriate, for 2005, 2010, 2015, and 2020 for each of the programs authorized by this division that would enable each such program to meet the purposes of this division under section 2003. Such assessment shall be based on the latest scientific and technical knowledge, and shall also take into consideration, as appropriate, the comparative environmental impacts (including emissions of greenhouse gases) of the energy saved or produced by specific programs.

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

(d) **SCHEDULE.**—The Secretary shall—

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

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

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

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

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

SEC. 2005. DEFINITIONS.

For purposes of this division, except as otherwise provided—

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

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

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

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

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

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

SEC. 2006. AUTHORIZATIONS.

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

SEC. 2007. BALANCE OF FUNDING PRIORITIES.

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

(b) **REPORT TO CONGRESS.**—If for fiscal year 2002, 2003, or 2004 the amounts appropriated in general appropriations Acts for the programs authorized in titles I through IV of this division are not in the same proportion to one another as are the authorizations for such programs in this division, the Secretary and the Administrator shall, within 60 days after the date of the enactment of the last general appropriations Act appropriating amounts for such programs, transmit to the appropriate congressional committees a report describing the programs, projects, and activities that would have been funded if the proportions provided for in this division had been maintained in the appropriations. The amount appropriated for the program receiving the highest percentage of its authorized funding for a fiscal year shall be used as the baseline for calculating the proportional deficiencies of appropriations for other programs in that fiscal year.

TITLE I—ENERGY CONSERVATION AND ENERGY EFFICIENCY

Subtitle A—Alternative Fuel Vehicles

SEC. 2101. SHORT TITLE.

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

SEC. 2102. DEFINITIONS.

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

(1) **ALTERNATIVE FUEL VEHICLE.**—
(A) **IN GENERAL.**—Except as provided in subparagraph (B), the term “alternative fuel vehicle” means a motor vehicle that is powered—

- (i) in whole or in part by electricity, including electricity supplied by a fuel cell;
- (ii) by liquefied natural gas;
- (iii) by compressed natural gas;
- (iv) by liquefied petroleum gas;
- (v) by hydrogen;
- (vi) by methanol or ethanol at no less than 85 percent by volume; or
- (vii) by propane.

(B) **EXCLUSIONS.**—The term “alternative fuel vehicle” does not include—

- (i) any vehicle designed to operate solely on gasoline or diesel derived from fossil fuels, regardless of whether it can also be operated on an alternative fuel; or
- (ii) any vehicle that the Secretary determines, by rule, does not yield substantial environmental benefits over a vehicle operating solely on gasoline or diesel derived from fossil fuels.

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

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

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

(B) emits not more than the lesser of—

- (i) for vehicles manufactured in—
 - (I) model years 2001 through 2003, 3.0 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; and
 - (II) model years 2004 through 2006, 2.5 grams per brake horsepower-hour of nonmethane hydrocarbons and oxides of nitrogen and .01 grams per brake horsepower-hour of particulate matter; or
- (ii) the emissions of nonmethane hydrocarbons, oxides of nitrogen, and particulate matter of the best performing technology of ultra-low sulfur diesel vehicles of the same type that are commercially available.

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

SEC. 2103. PILOT PROGRAM.

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

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

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

- (A) passenger vehicles;
- (B) buses used for public transportation or transportation to and from schools;
- (C) delivery vehicles for goods or services;
- (D) ground support vehicles at public airports, including vehicles to carry baggage or push airplanes away from terminal gates; and
- (E) motorized two-wheel bicycles, scooters, or other vehicles for use by law enforcement personnel or other State or local government or metropolitan transportation authority employees.

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

(3) Infrastructure necessary to directly support an alternative fuel vehicle project

funded by the grant, including fueling and other support equipment.

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

(c) **APPLICATIONS.**—

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

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

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

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

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

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

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

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

(H) documentation to the satisfaction of the Secretary that diesel fuel containing sulfur at not more than 15 parts per million is available for carrying out the projects, and a commitment by the applicant to use such fuel in carrying out the projects.

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

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

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

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

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

(e) **PILOT PROJECT REQUIREMENTS.**—

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

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

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

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

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

(f) **SCHEDULE.**—

(1) **PUBLICATION.**—Not later than 3 months after the date of the enactment of this Act, the Secretary shall publish in the Federal Register, Commerce Business Daily, and elsewhere as appropriate, a request for applications to undertake projects under the pilot program. Applications shall be due within 6 months of the publication of the notice.

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

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

SEC. 2104. REPORTS TO CONGRESS.

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

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

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

(3) a description of the mechanisms used by the Secretary to ensure that the information and knowledge gained by participants in the pilot program are transferred among the pilot program participants and to other interested parties, including other applicants that submitted applications.

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

SEC. 2105. AUTHORIZATION OF APPROPRIATIONS.

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

Subtitle B—Distributed Power Hybrid Energy Systems**SEC. 2121. FINDINGS.**

The Congress makes the following findings:

(1) Our ability to take advantage of our renewable, indigenous resources in a cost-effective manner can be greatly advanced through systems that compensate for the intermittent nature of these resources through distributed power hybrid systems.

(2) Distributed power hybrid systems can—

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

(B) increase the reliability of energy supply; and

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

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

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

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

(4) While many of the individual distributed power hybrid systems components are either available or under development in existing private and public sector programs, the capabilities to integrate these components into workable distributed power hybrid systems that maximize benefits to consumers in a safe manner often are not coherently being addressed.

SEC. 2122. DEFINITIONS.

For purposes of this subtitle—

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

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

- (A) reciprocating engines;
- (B) turbines;
- (C) microturbines;
- (D) fuel cells;
- (E) solar electric systems;
- (F) wind energy systems;
- (G) biopower systems;
- (H) geothermal power systems; or
- (I) combined heat and power systems.

SEC. 2123. STRATEGY.

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

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

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

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

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

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

(3) design tools to characterize the benefits of distributed power hybrid systems for consumers, to reduce testing needs, to speed commercialization, and to generate data characterizing grid operations, including interconnection requirements;

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

(5) a comprehensive research, development, demonstration, and commercial application

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

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

(B) energy storage devices;

(C) environmental control technologies;

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

(E) ancillary equipment for dispatch and control.

(c) **IMPLEMENTATION AND INTEGRATION.**—The Secretary shall implement the strategy transmitted under subsection (a) and the research program under subsection (b)(5). Activities pursuant to the strategy shall be integrated with other activities of the Department’s Office of Power Technologies.

SEC. 2124. HIGH POWER DENSITY INDUSTRY PROGRAM.

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

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

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

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

(3) significant advances in peak load reduction; and

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

(c) **IMPLEMENTATION AND INTEGRATION.**—Activities pursuant to this program shall be integrated with other activities of the Department’s Office of Power Technologies.

SEC. 2125. MICRO-COGENERATION ENERGY TECHNOLOGY.

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

SEC. 2126. PROGRAM PLAN.

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

SEC. 2127. REPORT.

Two years after date of the enactment of this Act and at 2-year intervals thereafter,

the Secretary, jointly with other appropriate Federal agencies, shall transmit a report to Congress describing the progress made to achieve the purposes of this subtitle.

SEC. 2128. VOLUNTARY CONSENSUS STANDARDS.

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

Subtitle C—Secondary Electric Vehicle Battery Use

SEC. 2131. DEFINITIONS.

For purposes of this subtitle, the term—

(1) “battery” means an energy storage device that previously has been used to provide motive power in a vehicle powered in whole or in part by electricity; and

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

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

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

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

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

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

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

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

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

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

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

(iv) any other information the Secretary considers appropriate.

(B) If the proposal includes a lease arrangement, the proposal shall indicate the terms

of such lease arrangement for the batteries and associated equipment.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(A) as a part of a demonstration project, the users of the batteries provide to the proposer information regarding the operation, maintenance, performance, and use of the batteries, and the proposer provide such information to the battery manufacturer, for 3 years after the beginning of the demonstration project;

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

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

SEC. 2133. AUTHORIZATION OF APPROPRIATIONS.

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

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

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

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

Such appropriations may remain available until expended.

Subtitle D—Green School Buses

SEC. 2141. SHORT TITLE.

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

SEC. 2142. ESTABLISHMENT OF PILOT PROGRAM.

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

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

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

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

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

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

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

(e) **TYPES OF GRANTS.**—

(1) **IN GENERAL.**—Grants under this section shall be for the demonstration and commercial application of technologies to facilitate the use of alternative fuel school buses and ultra-low sulfur diesel school buses in lieu of buses manufactured before model year 1977 and diesel-powered buses manufactured before model year 1991.

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

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

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

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

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

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

(B) to provide—

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

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

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

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

(g) **BUSES.**—Funding under a grant made under this section may be used to dem-

onstrate the use only of new alternative fuel school buses or ultra-low sulfur diesel school buses—

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SEC. 2144. AUTHORIZATION OF APPROPRIATIONS.

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

- (1) \$40,000,000 for fiscal year 2002;
- (2) \$50,000,000 for fiscal year 2003;
- (3) \$60,000,000 for fiscal year 2004;
- (4) \$70,000,000 for fiscal year 2005; and
- (5) \$80,000,000 for fiscal year 2006.

Subtitle E—Next Generation Lighting Initiative

SEC. 2151. SHORT TITLE.

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

SEC. 2152. DEFINITION.

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

SEC. 2153. NEXT GENERATION LIGHTING INITIATIVE.

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

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

- (1) longer lasting;
- (2) more energy-efficient; and
- (3) cost-competitive.

SEC. 2154. STUDY.

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

(b) REQUIREMENTS.—The study shall—

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

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

(c) IMPLEMENTATION.—As soon as practicable after the review of the study under subsection (a) is transmitted to the Secretary by the National Academies of

Sciences and Engineering, the Secretary shall adapt the implementation of the Lighting Initiative taking into consideration the recommendations of the National Academies of Sciences and Engineering.

SEC. 2155. GRANT PROGRAM.

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

(b) ANNUAL REVIEW.—

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

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

(c) TECHNICAL AND FINANCIAL ASSISTANCE.—The national laboratories and other Federal agencies, as appropriate, shall cooperate with and provide technical and financial assistance to firms and research organizations conducting research, development, and demonstration projects carried out under this subtitle.

Subtitle F—Department of Energy Authorization of Appropriations

SEC. 2161. AUTHORIZATION OF APPROPRIATIONS.

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

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

(1) Building Technology, State and Community Sector—

- (A) Residential Building Energy Codes;
- (B) Commercial Building Energy Codes;
- (C) Lighting and Appliance Standards;
- (D) Weatherization Assistance Program; or
- (E) State Energy Program; or
- (2) Federal Energy Management Program.

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

SEC. 2171. SHORT TITLE.

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

SEC. 2172. AUTHORIZATION OF APPROPRIATIONS.

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

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

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

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

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

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

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

SEC. 2173. LIMITS ON USE OF FUNDS.

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

(b) REQUESTS FOR PROPOSALS.—None of the funds authorized to be appropriated by this subtitle may be used by the Environmental Protection Agency to prepare or initiate Requests for Proposals for a program if the program has not been authorized by Congress.

SEC. 2174. COST SHARING.

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

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

(c) CALCULATION OF AMOUNT.—In calculating the amount of the non-Federal commitment under subsection (a) or (b), the Administrator may include personnel, services, equipment, and other resources.

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

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

SEC. 2176. REPROGRAMMING.

(a) AUTHORITY.—The Administrator may use amounts appropriated under this subtitle

for a program, project, or activity other than the program, project, or activity for which such amounts were appropriated only if—

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

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

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

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

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

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

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

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

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

SEC. 2177. BUDGET REQUEST FORMAT.

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

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

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

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

SEC. 2178. OTHER PROVISIONS.

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

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

(2) any report relating to the environmental research or development, scientific or energy research, development, or demonstration, or commercial application of energy technology programs, projects, or activities of the Environmental Protection Agency,

provided to any committee of Congress.

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

Subtitle H—National Building Performance Initiative

SEC. 2181. NATIONAL BUILDING PERFORMANCE INITIATIVE.

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

(b) PLAN.—Not later than 9 months after the date of the enactment of this Act, the Interagency Group shall transmit to the Congress a multiyear implementation plan describing the Federal role in reducing the costs, including energy costs, of using, owning, and operating commercial, institutional, residential, and industrial buildings by 30 percent by 2020. The plan shall include—

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

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

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

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

TITLE II—RENEWABLE ENERGY

Subtitle A—Hydrogen

SEC. 2201. SHORT TITLE.

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

SEC. 2202. PURPOSES.

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

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

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

"(2) to direct the Secretary to develop a program of technology assessment, informa-

tion dissemination, and education in which Federal, State, and local agencies, members of the energy, transportation, and other industries, and other entities may participate; and

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

SEC. 2203. DEFINITIONS.

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

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

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

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

SEC. 2204. REPORTS TO CONGRESS.

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

"SEC. 103. REPORTS TO CONGRESS.

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

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

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

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

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

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

SEC. 2205. HYDROGEN RESEARCH AND DEVELOPMENT.

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

"SEC. 104. HYDROGEN RESEARCH AND DEVELOPMENT.

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

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

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

"(2) initiate or accelerate existing research and development in critical technical issues

that will contribute to the development of more economical hydrogen production, storage, transportation, and use, including critical technical issues with respect to production (giving priority to those production techniques that use renewable energy resources as their primary source of energy for hydrogen production), liquefaction, transmission, distribution, storage, and use (including use of hydrogen in surface transportation); and

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

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

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

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

“(d) RESEARCH AND DEVELOPMENT SUPPORT.—The Secretary is authorized to arrange for tests and demonstrations and to disseminate to researchers and developers information, data, and other materials necessary to support the research and development activities authorized under this section and other efforts authorized under this Act, consistent with section 106 of this Act.

“(e) COMPETITIVE PEER REVIEW.—The Secretary shall carry out or fund research and development activities under this section only on a competitive basis using peer review.

“(f) COST SHARING.—For research and development programs carried out under this section, the Secretary shall require a commitment from non-Federal sources of at least 20 percent of the cost of the project. The Secretary may reduce or eliminate the non-Federal requirement under this subsection if the Secretary determines that the research and development is of a basic or fundamental nature.”

SEC. 2206. DEMONSTRATIONS.

Section 105 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended—

(1) in subsection (a), by striking “, preferably in self-contained locations,”;

(2) in subsection (b), by striking “at self-contained sites” and inserting “, which shall include a fuel cell bus demonstration program to address hydrogen production, storage, and use in transit bus applications”; and

(3) in subsection (c), by inserting “NON-FEDERAL FUNDING REQUIREMENT.—” after “(c)”.

SEC. 2207. TECHNOLOGY TRANSFER.

Section 106 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

“SEC. 106. TECHNOLOGY ASSESSMENT, INFORMATION DISSEMINATION, AND EDUCATION PROGRAM.

“(a) PROGRAM.—The Secretary shall, in consultation with the advisory committee, conduct a program designed to accelerate wider application of hydrogen production, storage, transportation, and use technologies, including application in foreign countries to increase the global market for the technologies and foster global economic development without harmful environmental effects.

“(b) INFORMATION.—The Secretary, in carrying out the program authorized by subsection (a), shall—

“(1) undertake an update of the inventory and assessment, required under section 106(b)(1) of this Act as in effect before the date of the enactment of the Robert S. Walker and George E. Brown, Jr. Hydrogen Energy Act of 2001, of hydrogen technologies and their commercial capability to economically produce, store, transport, or use hydrogen in industrial, commercial, residential, transportation, and utility sector; and

“(2) develop, with other Federal agencies as appropriate and industry, an information exchange program to improve technology transfer for hydrogen production, storage, transportation, and use, which may consist of workshops, publications, conferences, and a database for the use by the public and private sectors.”

SEC. 2208. COORDINATION AND CONSULTATION.

Section 107 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended—

(1) by amending paragraph (1) of subsection (a) to read as follows:

“(1) shall establish a central point for the coordination of all hydrogen research, development, and demonstration activities of the Department; and”; and

(2) by amending subsection (c) to read as follows:

“(c) CONSULTATION.—The Secretary shall consult with other Federal agencies as appropriate, and the advisory committee, in carrying out the Secretary’s authorities pursuant to this Act.”

SEC. 2209. ADVISORY COMMITTEE.

Section 108 of the Spark M. Matsunaga Hydrogen Research, Development, and Demonstration Act of 1990 is amended to read as follows:

“SEC. 108. ADVISORY COMMITTEE.

“(a) ESTABLISHMENT.—The Secretary shall enter into appropriate arrangements with the National Academies of Sciences and Engineering to establish an advisory committee consisting of experts drawn from domestic industry, academia, Governmental laboratories, and financial, environmental, and other organizations, as appropriate, to review and advise on the progress made through the programs and activities authorized under this Act.

“(b) COOPERATION.—The heads of Federal agencies shall cooperate with the advisory committee in carrying out this section and shall furnish to the advisory committee such information as the advisory committee reasonably deems necessary to carry out this section.

“(c) REVIEW.—The advisory committee shall review and make any necessary recommendations to the Secretary on—

“(1) the implementation and conduct of programs and activities authorized under this Act; and

“(2) the economic, technological, and environmental consequences of the deployment of hydrogen production, storage, transportation, and use systems.

“(d) RESPONSIBILITIES OF THE SECRETARY.—The Secretary shall consider, but need not adopt, any recommendations of the advisory committee under subsection (c). The Secretary shall provide an explanation of the reasons that any such recommendations will not be implemented and include such explanation in the report to Congress under section 103(a) of this Act.”

SEC. 2210. AUTHORIZATION OF APPROPRIATIONS.

Section 109 of the Spark M. Matsunaga Hydrogen Research, Development, and Dem-

onstration Act of 1990 is amended to read as follows:

“SEC. 109. AUTHORIZATION OF APPROPRIATIONS.

“(a) RESEARCH AND DEVELOPMENT; ADVISORY COMMITTEE.—There are authorized to be appropriated to the Secretary to carry out sections 104 and 108—

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

“(2) \$45,000,000 for fiscal year 2003;

“(3) \$50,000,000 for fiscal year 2004;

“(4) \$55,000,000 for fiscal year 2005; and

“(5) \$60,000,000 for fiscal year 2006.

“(b) DEMONSTRATION.—There are authorized to be appropriated to the Secretary to carry out section 105—

“(1) \$20,000,000 for fiscal year 2002;

“(2) \$25,000,000 for fiscal year 2003;

“(3) \$30,000,000 for fiscal year 2004;

“(4) \$35,000,000 for fiscal year 2005; and

“(5) \$40,000,000 for fiscal year 2006.”

SEC. 2211. REPEAL.

(a) REPEAL.—Title II of the Hydrogen Future Act of 1996 is repealed.

(b) CONFORMING AMENDMENT.—Section 2 of the Hydrogen Future Act of 1996 is amended by striking “titles II and III” and inserting “title III”.

Subtitle B—Bioenergy

SEC. 2221. SHORT TITLE.

This subtitle may be cited as the “Bioenergy Act of 2001”.

SEC. 2222. FINDINGS.

Congress finds that bioenergy has potential to help—

(1) meet the Nation’s energy needs;

(2) reduce reliance on imported fuels;

(3) promote rural economic development;

(4) provide for productive utilization of agricultural residues and waste materials, and forestry residues and byproducts; and

(5) protect the environment.

SEC. 2223. DEFINITIONS.

For purposes of this subtitle—

(1) the term “bioenergy” means energy derived from any organic matter that is available on a renewable or recurring basis, including agricultural crops and trees, wood and wood wastes and residues, plants (including aquatic plants), grasses, residues, fibers, and animal and other organic wastes;

(2) the term “biofuels” includes liquid or gaseous fuels, industrial chemicals, or both;

(3) the term “biopower” includes the generation of electricity or process steam or both; and

(4) the term “integrated bioenergy research and development” includes biopower and biofuels applications.

SEC. 2224. AUTHORIZATION.

The Secretary is authorized to conduct environmental research and development, scientific and energy research, development, and demonstration, and commercial application of energy technology programs, projects, and activities related to bioenergy, including biopower energy systems, biofuels energy systems, and integrated bioenergy research and development.

SEC. 2225. AUTHORIZATION OF APPROPRIATIONS.

(a) BIOPOWER ENERGY SYSTEMS.—There are authorized to be appropriated to the Secretary for Biopower Energy Systems programs, projects, and activities—

(1) \$45,700,000 for fiscal year 2002;

(2) \$52,500,000 for fiscal year 2003;

(3) \$60,300,000 for fiscal year 2004;

(4) \$69,300,000 for fiscal year 2005; and

(5) \$79,600,000 for fiscal year 2006.

(b) BIOFUELS ENERGY SYSTEMS.—There are authorized to be appropriated to the Secretary for biofuels energy systems programs, projects, and activities—

- (1) \$53,500,000 for fiscal year 2002;
- (2) \$61,400,000 for fiscal year 2003;
- (3) \$70,600,000 for fiscal year 2004;
- (4) \$81,100,000 for fiscal year 2005; and
- (5) \$93,200,000 for fiscal year 2006.

(c) **INTEGRATED BIOENERGY RESEARCH AND DEVELOPMENT.**—There are authorized to be appropriated to the Secretary for integrated bioenergy research and development programs, projects, and activities, \$49,000,000 for each of the fiscal years 2002 through 2006. Activities funded under this subsection shall be coordinated with ongoing related programs of other Federal agencies, including the Plant Genome Program of the National Science Foundation. Of the funds authorized under this subsection, at least \$5,000,000 for each fiscal year shall be for training and education targeted to minority and social disadvantaged farmers and ranchers.

(d) **INTEGRATED APPLICATIONS.**—Amounts authorized to be appropriated under this subtitle may be used to assist in the planning, design, and implementation of projects to convert rice straw and barley grain into biopower or biofuels.

Subtitle C—Transmission Infrastructure Systems

SEC. 2241. TRANSMISSION INFRASTRUCTURE SYSTEMS RESEARCH, DEVELOPMENT, DEMONSTRATION, AND COMMERCIAL APPLICATION.

(a) **IN GENERAL.**—The Secretary shall develop and implement a comprehensive research, development, demonstration, and commercial application program to ensure the reliability, efficiency, and environmental integrity of electrical transmission systems. Such program shall include advanced energy technologies and systems, high capacity superconducting transmission lines and generators, advanced grid reliability and efficiency technologies development, technologies contributing to significant load reductions, advanced metering, load management and control technologies, and technology transfer and education.

(b) **TECHNOLOGY.**—In carrying out this subtitle, the Secretary may include research, development, and demonstration on and commercial application of improved transmission technologies including the integration of the following technologies into improved transmission systems:

- (1) High temperature superconductivity.
- (2) Advanced transmission materials.
- (3) Self-adjusting equipment, processes, or software for survivability, security, and failure containment.
- (4) Enhancements of energy transfer over existing lines.
- (5) Any other infrastructure technologies, as appropriate.

SEC. 2242. PROGRAM PLAN.

Within 4 months after the date of the enactment of this Act, the Secretary, in consultation with other appropriate Federal agencies, shall prepare and transmit to Congress a 5-year program plan to guide activities under this subtitle. In preparing the program plan, the Secretary shall consult with appropriate representatives of the transmission infrastructure systems industry to select and prioritize appropriate program areas. The Secretary shall also seek the advice of utilities, energy services providers, manufacturers, institutions of higher learning, other appropriate State and local agencies, environmental organizations, professional and technical societies, and any other persons as the Secretary considers appropriate.

SEC. 2243. REPORT.

Two years after the date of the enactment of this Act, and at 2-year intervals there-

after, the Secretary, in consultation with other appropriate Federal agencies, shall transmit a report to Congress describing the progress made to achieve the purposes of this subtitle and identifying any additional resources needed to continue the development and commercial application of transmission infrastructure technologies.

Subtitle D—Department of Energy Authorization of Appropriations

SEC. 2261. AUTHORIZATION OF APPROPRIATIONS.

(a) **OPERATION AND MAINTENANCE.**—There are authorized to be appropriated to the Secretary for Renewable Energy operation and maintenance, including activities under subtitle C, Geothermal Technology Development, Hydropower, Concentrating Solar Power, Photovoltaic Energy Systems, Solar Building Technology Research, Wind Energy Systems, High Temperature Superconducting Research and Development, Energy Storage Systems, Transmission Reliability, International Renewable Energy Program, Renewable Energy Production Incentive Program, Renewable Program Support, National Renewable Energy Laboratory, and Program Direction, and including amounts authorized under the amendment made by section 2210 and amounts authorized under section 2225, \$535,000,000 for fiscal year 2002, \$639,000,000 for fiscal year 2003, and \$683,000,000 for fiscal year 2004, to remain available until expended.

(b) **WAVE POWERED ELECTRIC GENERATION.**—Within the amounts authorized to be appropriated to the Secretary under subsection (a), the Secretary shall carry out a research program, in conjunction with other appropriate Federal agencies, on wave powered electric generation.

(c) **ASSESSMENT OF RENEWABLE ENERGY RESOURCES.**—

(1) **IN GENERAL.**—Using funds authorized in subsection (a), of this section, the Secretary shall transmit to the Congress, within 1 year after the date of the enactment of this Act, an assessment of all renewable energy resources available within the United States.

(2) **RESOURCE ASSESSMENT.**—Such report shall include a detailed inventory describing the available amount and characteristics of solar, wind, biomass, geothermal, hydroelectric, and other renewable energy sources, and an estimate of the costs needed to develop each resource. The report shall also include such other information as the Secretary believes would be useful in siting renewable energy generation, such as appropriate terrain, population and load centers, nearby energy infrastructure, and location of energy resources.

(3) **AVAILABILITY.**—The information and cost estimates in this report shall be updated annually and made available to the public, along with the data used to create the report.

(4) **SUNSET.**—This subsection shall expire at the end of fiscal year 2004.

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

- (1) Departmental Energy Management Program; or
- (2) Renewable Indian Energy Resources.

TITLE III—NUCLEAR ENERGY

Subtitle A—University Nuclear Science and Engineering

SEC. 2301. SHORT TITLE.

This subtitle may be cited as “Department of Energy University Nuclear Science and Engineering Act”.

SEC. 2302. FINDINGS.

The Congress finds the following:

(1) United States university nuclear science and engineering programs are in a state of serious decline, with nuclear engineering enrollment at a 35-year low. Since 1980, the number of nuclear engineering university programs has declined nearly 40 percent, and over two-thirds of the faculty in these programs are 45 years of age or older. Also, since 1980, the number of university research and training reactors in the United States has declined by over 50 percent. Most of these reactors were built in the late 1950s and 1960s with 30-year to 40-year operating licenses, and many will require relicensing in the next several years.

(2) A decline in a competent nuclear workforce, and the lack of adequately trained nuclear scientists and engineers, will affect the ability of the United States to solve future nuclear waste storage issues, operate existing and design future fission reactors in the United States, respond to future nuclear events worldwide, help stem the proliferation of nuclear weapons, and design and operate naval nuclear reactors.

(3) The Department of Energy’s Office of Nuclear Energy, Science and Technology, a principal Federal agency for civilian research in nuclear science and engineering, is well suited to help maintain tomorrow’s human resource and training investment in the nuclear sciences and engineering.

SEC. 2303. DEPARTMENT OF ENERGY PROGRAM.

(a) **ESTABLISHMENT.**—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall support a program to maintain the Nation’s human resource investment and infrastructure in the nuclear sciences and engineering consistent with the Department’s statutory authorities related to civilian nuclear research, development, and demonstration and commercial application of energy technology.

(b) **DUTIES OF THE OFFICE OF NUCLEAR ENERGY, SCIENCE AND TECHNOLOGY.**—In carrying out the program under this subtitle, the Director of the Office of Nuclear Energy, Science and Technology shall—

- (1) develop a robust graduate and undergraduate fellowship program to attract new and talented students;
- (2) assist universities in recruiting and retaining new faculty in the nuclear sciences and engineering through a Junior Faculty Research Initiation Grant Program;
- (3) maintain a robust investment in the fundamental nuclear sciences and engineering through the Nuclear Engineering Education Research Program;
- (4) encourage collaborative nuclear research among industry, national laboratories, and universities through the Nuclear Energy Research Initiative;
- (5) assist universities in maintaining reactor infrastructure; and
- (6) support communication and outreach related to nuclear science and engineering.

(c) **MAINTAINING UNIVERSITY RESEARCH AND TRAINING REACTORS AND ASSOCIATED INFRASTRUCTURE.**—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall provide for the following university research and training reactor infrastructure maintenance and research activities:

- (1) Refueling of university research reactors with low enriched fuels, upgrade of operational instrumentation, and sharing of reactors among universities.

(2) In collaboration with the United States nuclear industry, assistance, where necessary, in relicensing and upgrading university training reactors as part of a student training program.

(3) A university reactor research and training award program that provides for reactor improvements as part of a focused effort that emphasizes research, training, and education.

(d) UNIVERSITY-DOE LABORATORY INTERACTIONS.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall develop—

(1) a sabbatical fellowship program for university faculty to spend extended periods of time at Department of Energy laboratories in the areas of nuclear science and technology; and

(2) a visiting scientist program in which laboratory staff can spend time in academic nuclear science and engineering departments.

The Secretary may under subsection (b)(1) provide for fellowships for students to spend time at Department of Energy laboratories in the areas of nuclear science and technology under the mentorship of laboratory staff.

(e) OPERATIONS AND MAINTENANCE.—To the extent that the use of a university research reactor is funded under this subtitle, funds authorized under this subtitle may be used to supplement operation of the research reactor during the investigator's proposed effort. The host institution shall provide at least 50 percent of the cost of the reactor's operation.

(f) MERIT REVIEW REQUIRED.—All grants, contracts, cooperative agreements, or other financial assistance awards under this subtitle shall be made only after independent merit review.

(g) REPORT.—Not later than 6 months after the date of the enactment of this Act, the Secretary shall prepare and transmit to the appropriate congressional committees a 5-year plan on how the programs authorized in this subtitle will be implemented. The plan shall include a review of the projected personnel needs in the fields of nuclear science and engineering and of the scope of nuclear science and engineering education programs at the Department and other Federal agencies.

SEC. 2304. AUTHORIZATION OF APPROPRIATIONS.

(a) TOTAL AUTHORIZATION.—The following sums are authorized to be appropriated to the Secretary, to remain available until expended, for the purposes of carrying out this subtitle:

- (1) \$30,200,000 for fiscal year 2002.
- (2) \$41,000,000 for fiscal year 2003.
- (3) \$47,900,000 for fiscal year 2004.
- (4) \$55,600,000 for fiscal year 2005.
- (5) \$64,100,000 for fiscal year 2006.

(b) GRADUATE AND UNDERGRADUATE FELLOWSHIPS.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(b)(1):

- (1) \$3,000,000 for fiscal year 2002.
- (2) \$3,100,000 for fiscal year 2003.
- (3) \$3,200,000 for fiscal year 2004.
- (4) \$3,200,000 for fiscal year 2005.
- (5) \$3,200,000 for fiscal year 2006.

(c) JUNIOR FACULTY RESEARCH INITIATION GRANT PROGRAM.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(b)(2):

- (1) \$5,000,000 for fiscal year 2002.
- (2) \$7,000,000 for fiscal year 2003.
- (3) \$8,000,000 for fiscal year 2004.
- (4) \$9,000,000 for fiscal year 2005.
- (5) \$10,000,000 for fiscal year 2006.

(d) NUCLEAR ENGINEERING EDUCATION RESEARCH PROGRAM.—Of the funds authorized by subsection (a), the following sums are au-

thorized to be appropriated to carry out section 2303(b)(3):

- (1) \$8,000,000 for fiscal year 2002.
- (2) \$12,000,000 for fiscal year 2003.
- (3) \$13,000,000 for fiscal year 2004.
- (4) \$15,000,000 for fiscal year 2005.
- (5) \$20,000,000 for fiscal year 2006.

(e) COMMUNICATION AND OUTREACH RELATED TO NUCLEAR SCIENCE AND ENGINEERING.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(b)(5):

- (1) \$200,000 for fiscal year 2002.
- (2) \$200,000 for fiscal year 2003.
- (3) \$300,000 for fiscal year 2004.
- (4) \$300,000 for fiscal year 2005.
- (5) \$300,000 for fiscal year 2006.

(f) REFUELING OF UNIVERSITY RESEARCH REACTORS AND INSTRUMENTATION UPGRADES.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(c)(1):

- (1) \$6,000,000 for fiscal year 2002.
- (2) \$6,500,000 for fiscal year 2003.
- (3) \$7,000,000 for fiscal year 2004.
- (4) \$7,500,000 for fiscal year 2005.
- (5) \$8,000,000 for fiscal year 2006.

(g) RELICENSING ASSISTANCE.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(c)(2):

- (1) \$1,000,000 for fiscal year 2002.
- (2) \$1,100,000 for fiscal year 2003.
- (3) \$1,200,000 for fiscal year 2004.
- (4) \$1,300,000 for fiscal year 2005.
- (5) \$1,300,000 for fiscal year 2006.

(h) REACTOR RESEARCH AND TRAINING AWARD PROGRAM.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(c)(3):

- (1) \$6,000,000 for fiscal year 2002.
- (2) \$10,000,000 for fiscal year 2003.
- (3) \$14,000,000 for fiscal year 2004.
- (4) \$18,000,000 for fiscal year 2005.
- (5) \$20,000,000 for fiscal year 2006.

(i) UNIVERSITY-DOE LABORATORY INTERACTIONS.—Of the funds authorized by subsection (a), the following sums are authorized to be appropriated to carry out section 2303(d):

- (1) \$1,000,000 for fiscal year 2002.
- (2) \$1,100,000 for fiscal year 2003.
- (3) \$1,200,000 for fiscal year 2004.
- (4) \$1,300,000 for fiscal year 2005.
- (5) \$1,300,000 for fiscal year 2006.

Subtitle B—Advanced Fuel Recycling Technology Research and Development Program

SEC. 2321. PROGRAM.

(a) IN GENERAL.—The Secretary, through the Director of the Office of Nuclear Energy, Science and Technology, shall conduct an advanced fuel recycling technology research and development program to further the availability of proliferation-resistant fuel recycling technologies as an alternative to aqueous reprocessing in support of evaluation of alternative national strategies for spent nuclear fuel and the Generation IV advanced reactor concepts, subject to annual review by the Secretary's Nuclear Energy Research Advisory Committee or other independent entity, as appropriate.

(b) REPORTS.—The Secretary shall report on the activities of the advanced fuel recycling technology research and development program, as part of the Department's annual budget submission.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

- (1) \$10,000,000 for fiscal year 2002; and
- (2) such sums as are necessary for fiscal year 2003 and fiscal year 2004.

Subtitle C—Department of Energy Authorization of Appropriations

SEC. 2341. NUCLEAR ENERGY RESEARCH INITIATIVE.

(a) PROGRAM.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall conduct a Nuclear Energy Research Initiative for grants to be competitively awarded and subject to peer review for research relating to nuclear energy.

(b) OBJECTIVES.—The program shall be directed toward accomplishing the objectives of—

(1) developing advanced concepts and scientific breakthroughs in nuclear fission and reactor technology to address and overcome the principal technical and scientific obstacles to the expanded use of nuclear energy in the United States;

(2) advancing the state of nuclear technology to maintain a competitive position in foreign markets and a future domestic market;

(3) promoting and maintaining a United States nuclear science and engineering infrastructure to meet future technical challenges;

(4) providing an effective means to collaborate on a cost-shared basis with international agencies and research organizations to address and influence nuclear technology development worldwide; and

(5) promoting United States leadership and partnerships in bilateral and multilateral nuclear energy research.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

- (1) \$60,000,000 for fiscal year 2002; and
- (2) such sums as are necessary for fiscal year 2003 and fiscal year 2004.

SEC. 2342. NUCLEAR ENERGY PLANT OPTIMIZATION PROGRAM.

(a) PROGRAM.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall conduct a Nuclear Energy Plant Optimization research and development program jointly with industry and cost-shared by industry by at least 50 percent and subject to annual review by the Secretary's Nuclear Energy Research Advisory Committee or other independent entity, as appropriate.

(b) OBJECTIVES.—The program shall be directed toward accomplishing the objectives of—

(1) managing long-term effects of component aging; and

(2) improving the efficiency and productivity of existing nuclear power stations.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section—

- (1) \$15,000,000 for fiscal year 2002; and
- (2) such sums as are necessary for fiscal years 2003 and 2004.

SEC. 2343. NUCLEAR ENERGY TECHNOLOGIES.

(a) IN GENERAL.—The Secretary, through the Office of Nuclear Energy, Science and Technology, shall conduct a study of Generation IV nuclear energy systems, including development of a technology roadmap and performance of research and development necessary to make an informed technical decision regarding the most promising candidates for commercial application.

(b) REACTOR CHARACTERISTICS.—To the extent practicable, in conducting the study under subsection (a), the Secretary shall study nuclear energy systems that offer the highest probability of achieving the goals for Generation IV nuclear energy systems, including—

(1) economics competitive with any other generators;

(2) enhanced safety features, including passive safety features;

(3) substantially reduced production of high-level waste, as compared with the quantity of waste produced by reactors in operation on the date of the enactment of this Act;

(4) highly proliferation-resistant fuel and waste;

(5) sustainable energy generation including optimized fuel utilization; and

(6) substantially improved thermal efficiency, as compared with the thermal efficiency of reactors in operation on the date of the enactment of this Act.

(c) **CONSULTATION.**—In conducting the study under subsection (a), the Secretary shall consult with appropriate representatives of industry, institutions of higher education, Federal agencies, and international, professional, and technical organizations.

(d) **REPORT.**—

(1) **IN GENERAL.**—Not later than December 31, 2002, the Secretary shall transmit to the appropriate congressional committees a report describing the activities of the Secretary under this section, and plans for research and development leading to a public/private cooperative demonstration of one or more Generation IV nuclear energy systems.

(2) **CONTENTS.**—The report shall contain—
(A) an assessment of all available technologies;

(B) a summary of actions needed for the most promising candidates to be considered as viable commercial options within the five to ten years after the date of the report, with consideration of regulatory, economic, and technical issues;

(C) a recommendation of not more than three promising Generation IV nuclear energy system concepts for further development;

(D) an evaluation of opportunities for public/private partnerships;

(E) a recommendation for structure of a public/private partnership to share in development and construction costs;

(F) a plan leading to the selection and conceptual design, by September 30, 2004, of at least one Generation IV nuclear energy system concept recommended under subparagraph (C) for demonstration through a public/private partnership;

(G) an evaluation of opportunities for siting demonstration facilities on Department of Energy land; and

(H) a recommendation for appropriate involvement of other Federal agencies.

(e) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to the Secretary to carry out this section and to carry out the recommendations in the report transmitted under subsection (d)—

(1) \$20,000,000 for fiscal year 2002; and

(2) such sums as are necessary for fiscal year 2003 and fiscal year 2004.

SEC. 2344. AUTHORIZATION OF APPROPRIATIONS.

(a) **OPERATION AND MAINTENANCE.**—There are authorized to be appropriated to the Secretary to carry out activities authorized under this title for nuclear energy operation and maintenance, including amounts authorized under sections 2304(a), 2321(c), 2341(c), 2342(c), and 2343(e), and including Advanced Radioisotope Power Systems, Test Reactor Landlord, and Program Direction, \$191,200,000 for fiscal year 2002, \$199,000,000 for fiscal year 2003, and \$207,000,000 for fiscal year 2004, to remain available until expended.

(b) **CONSTRUCTION.**—There are authorized to be appropriated to the Secretary—

(1) \$950,000 for fiscal year 2002, \$2,200,000 for fiscal year 2003, \$1,246,000 for fiscal year 2004,

and \$1,699,000 for fiscal year 2005 for completion of construction of Project 99-E-200, Test Reactor Area Electric Utility Upgrade, Idaho National Engineering and Environmental Laboratory; and

(2) \$500,000 for fiscal year 2002, \$500,000 for fiscal year 2003, \$500,000 for fiscal year 2004, and \$500,000 for fiscal year 2005, for completion of construction of Project 95-E-201, Test Reactor Area Fire and Life Safety Improvements, Idaho National Engineering and Environmental Laboratory.

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

(1) Nuclear Energy Isotope Support and Production;

(2) Argonne National Laboratory-West Operations;

(3) Fast Flux Test Facility; or

(4) Nuclear Facilities Management.

TITLE IV—FOSSIL ENERGY

Subtitle A—Coal

SEC. 2401. COAL AND RELATED TECHNOLOGIES PROGRAMS.

(a) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to the Secretary \$172,000,000 for fiscal year 2002, \$179,000,000 for fiscal year 2003, and \$186,000,000 for fiscal year 2004, to remain available until expended, for other coal and related technologies research and development programs, which shall include—

(1) Innovations for Existing Plants;

(2) Integrated Gasification Combined Cycle;

(3) advanced combustion systems;

(4) Turbines;

(5) Sequestration Research and Development;

(6) innovative technologies for demonstration;

(7) Transportation Fuels and Chemicals;

(8) Solid Fuels and Feedstocks;

(9) Advanced Fuels Research; and

(10) Advanced Research.

(b) **LIMIT ON USE OF FUNDS.**—Notwithstanding subsection (a), no funds may be used to carry out the activities authorized by this section after September 30, 2002, unless the Secretary has transmitted to the Congress the report required by this subsection and 1 month has elapsed since that transmission. The report shall include a plan containing—

(1) a detailed description of how proposals will be solicited and evaluated, including a list of all activities expected to be undertaken;

(2) a detailed list of technical milestones for each coal and related technology that will be pursued;

(3) a description of how the programs authorized in this section will be carried out so as to complement and not duplicate activities authorized under division E.

(c) **GAZIFICATION.**—The Secretary shall fund at least one gasification project with the funds authorized under this section.

Subtitle B—Oil and Gas

SEC. 2421. PETROLEUM-OIL TECHNOLOGY.

The Secretary shall conduct a program of research, development, demonstration, and commercial application on petroleum-oil technology. The program shall address—

(1) Exploration and Production Supporting Research;

(2) Oil Technology Reservoir Management/Extension; and

(3) Effective Environmental Protection.

SEC. 2422. GAS.

The Secretary shall conduct a program of research, development, demonstration, and

commercial application on natural gas technologies. The program shall address—

(1) Exploration and Production;

(2) Infrastructure; and

(3) Effective Environmental Protection.

SEC. 2423. NATURAL GAS AND OIL DEPOSITS REPORT.

Two years after the date of the enactment of this Act, and at 2-year intervals thereafter, the Secretary of the Interior, in consultation with other appropriate Federal agencies, shall transmit a report to the Congress assessing the contents of natural gas and oil deposits at existing drilling sites off the coast of Louisiana and Texas.

SEC. 2424. OIL SHALE RESEARCH.

There are authorized to be appropriated to the Secretary of Energy for fiscal year 2002 \$10,000,000, to be divided equally between grants for research on Eastern oil shale and grants for research on Western oil shale.

Subtitle C—Ultra-Deepwater and Unconventional Drilling

SEC. 2441. SHORT TITLE.

This subtitle may be cited as the “Natural Gas and Other Petroleum Research, Development, and Demonstration Act of 2001”.

SEC. 2442. DEFINITIONS.

For purposes of this subtitle—

(1) the term “deepwater” means water depths greater than 200 meters but less than 1,500 meters;

(2) the term “Fund” means the Ultra-Deepwater and Unconventional Gas Research Fund established under section 2450;

(3) the term “institution of higher education” has the meaning given that term in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001);

(4) the term “Research Organization” means the Research Organization created pursuant to section 2446(a);

(5) the term “ultra-deepwater” means water depths greater than 1,500 meters; and

(6) the term “unconventional” means located in heretofore inaccessible or uneconomic formations on land.

SEC. 2443. ULTRA-DEEPWATER PROGRAM.

The Secretary shall establish a program of research, development, and demonstration of ultra-deepwater natural gas and other petroleum exploration and production technologies, in areas currently available for Outer Continental Shelf leasing. The program shall be carried out by the Research Organization as provided in this subtitle.

SEC. 2444. NATIONAL ENERGY TECHNOLOGY LABORATORY.

The National Energy Technology Laboratory and the United States Geological Survey, when appropriate, shall carry out programs of long-term research into new natural gas and other petroleum exploration and production technologies and environmental mitigation technologies for production from unconventional and ultra-deepwater resources, including methane hydrates. Such Laboratory shall also conduct a program of research, development, and demonstration of new technologies for the reduction of greenhouse gas emissions from unconventional and ultra-deepwater natural gas or other petroleum exploration and production activities, including sub-sea floor carbon sequestration technologies.

SEC. 2445. ADVISORY COMMITTEE.

(a) **ESTABLISHMENT.**—The Secretary shall, within 3 months after the date of the enactment of this Act, establish an Advisory Committee consisting of 7 members, each having extensive operational knowledge of and experience in the natural gas and other petroleum exploration and production industry

who are not Federal Government employees or contractors. A minimum of 4 members shall have extensive knowledge of ultra-deepwater natural gas or other petroleum exploration and production technologies, a minimum of 2 members shall have extensive knowledge of unconventional natural gas or other petroleum exploration and production technologies, and at least 1 member shall have extensive knowledge of greenhouse gas emission reduction technologies, including carbon sequestration.

(b) **FUNCTION.**—The Advisory Committee shall advise the Secretary on the selection of an organization to create the Research Organization and on the implementation of this subtitle.

(c) **COMPENSATION.**—Members of the Advisory Committee shall serve without compensation but shall receive travel expenses, including per diem in lieu of subsistence, in accordance with applicable provisions under subchapter I of chapter 57 of title 5, United States Code.

(d) **ADMINISTRATIVE COSTS.**—The costs of activities carried out by the Secretary and the Advisory Committee under this subtitle shall be paid or reimbursed from the Fund.

(e) **DURATION OF ADVISORY COMMITTEE.**—Section 14 of the Federal Advisory Committee Act shall not apply to the Advisory Committee.

SEC. 2446. RESEARCH ORGANIZATION.

(a) **SELECTION OF RESEARCH ORGANIZATION.**—The Secretary, within 6 months after the date of the enactment of this Act, shall solicit proposals from eligible entities for the creation of the Research Organization, and within 3 months after such solicitation, shall select an entity to create the Research Organization.

(b) **ELIGIBLE ENTITIES.**—Entities eligible to create the Research Organization shall—

(1) have been in existence as of the date of the enactment of this Act;

(2) be entities exempt from tax under section 501(c)(3) of the Internal Revenue Code of 1986; and

(3) be experienced in planning and managing programs in natural gas or other petroleum exploration and production research, development, and demonstration.

(c) **PROPOSALS.**—A proposal from an entity seeking to create the Research Organization shall include a detailed description of the proposed membership and structure of the Research Organization.

(d) **FUNCTIONS.**—The Research Organization shall—

(1) award grants on a competitive basis to qualified—

(A) research institutions;

(B) institutions of higher education;

(C) companies; and

(D) consortia formed among institutions and companies described in subparagraphs (A) through (C) for the purpose of conducting research, development, and demonstration of unconventional and ultra-deepwater natural gas or other petroleum exploration and production technologies; and

(2) review activities under those grants to ensure that they comply with the requirements of this subtitle and serve the purposes for which the grant was made.

SEC. 2447. GRANTS.

(a) **TYPES OF GRANTS.**—

(1) **UNCONVENTIONAL.**—The Research Organization shall award grants for research, development, and demonstration of technologies to maximize the value of the Government's natural gas and other petroleum resources in unconventional reservoirs, and to develop technologies to increase the sup-

ply of natural gas and other petroleum resources by lowering the cost and improving the efficiency of exploration and production of unconventional reservoirs, while improving safety and minimizing environmental impacts.

(2) **ULTRA-DEEPWATER.**—The Research Organization shall award grants for research, development, and demonstration of natural gas or other petroleum exploration and production technologies to—

(A) maximize the value of the Federal Government's natural gas and other petroleum resources in the ultra-deepwater areas;

(B) increase the supply of natural gas and other petroleum resources by lowering the cost and improving the efficiency of exploration and production of ultra-deepwater reservoirs; and

(C) improve safety and minimize the environmental impacts of ultra-deepwater developments.

(3) **ULTRA-DEEPWATER ARCHITECTURE.**—The Research Organization shall award a grant to one or more consortia described in section 2446(d)(1)(D) for the purpose of developing and demonstrating the next generation architecture for ultra-deepwater production of natural gas and other petroleum in furtherance of the purposes stated in paragraph (2)(A) through (C).

(b) **CONDITIONS FOR GRANTS.**—Grants provided under this section shall contain the following conditions:

(1) If the grant recipient consists of more than one entity, the recipient shall provide a signed contract agreed to by all participating members clearly defining all rights to intellectual property for existing technology and for future inventions conceived and developed using funds provided under the grant, in a manner that is consistent with applicable laws.

(2) There shall be a repayment schedule for Federal dollars provided for demonstration projects under the grant in the event of a successful commercialization of the demonstrated technology. Such repayment schedule shall provide that the payments are made to the Secretary with the express intent that these payments not impede the adoption of the demonstrated technology in the marketplace. In the event that such impedance occurs due to market forces or other factors, the Research Organization shall renegotiate the grant agreement so that the acceptance of the technology in the marketplace is enabled.

(3) Applications for grants for demonstration projects shall clearly state the intended commercial applications of the technology demonstrated.

(4) The total amount of funds made available under a grant provided under subsection (a)(3) shall not exceed 50 percent of the total cost of the activities for which the grant is provided.

(5) The total amount of funds made available under a grant provided under subsection (a)(1) or (2) shall not exceed 50 percent of the total cost of the activities covered by the grant, except that the Research Organization may elect to provide grants covering a higher percentage, not to exceed 90 percent, of total project costs in the case of grants made solely to independent producers.

(6) An appropriate amount of funds provided under a grant shall be used for the broad dissemination of technologies developed under the grant to interested institutions of higher education, industry, and appropriate Federal and State technology entities to ensure the greatest possible benefits for the public and use of government resources.

(7) Demonstrations of ultra-deepwater technologies for which funds are provided under a grant may be conducted in ultra-deepwater or deepwater locations.

(c) **ALLOCATION OF FUNDS.**—Funds available for grants under this subtitle shall be allocated as follows:

(1) 15 percent shall be for grants under subsection (a)(1).

(2) 15 percent shall be for grants under subsection (a)(2).

(3) 60 percent shall be for grants under subsection (a)(3).

(4) 10 percent shall be for carrying out section 2444.

SEC. 2448. PLAN AND FUNDING.

(a) **TRANSMITTAL TO SECRETARY.**—The Research Organization shall transmit to the Secretary an annual plan proposing projects and funding of activities under each paragraph of section 2447(a).

(b) **REVIEW.**—The Secretary shall have 1 month to review the annual plan, and shall approve the plan, if it is consistent with this subtitle. If the Secretary approves the plan, the Secretary shall provide funding as proposed in the plan.

(c) **DISAPPROVAL.**—If the Secretary does not approve the plan, the Secretary shall notify the Research Organization of the reasons for disapproval and shall withhold funding until a new plan is submitted which the Secretary approves. Within 1 month after notifying the Research Organization of a disapproval, the Secretary shall notify the appropriate congressional committees of the disapproval.

SEC. 2449. AUDIT.

The Secretary shall retain an independent, commercial auditor to determine the extent to which the funds authorized by this subtitle have been expended in a manner consistent with the purposes of this subtitle. The auditor shall transmit a report annually to the Secretary, who shall transmit the report to the appropriate congressional committees, along with a plan to remedy any deficiencies cited in the report.

SEC. 2450. FUND.

(a) **ESTABLISHMENT.**—There is established in the Treasury of the United States a fund to be known as the "Ultra-Deepwater and Unconventional Gas Research Fund" which shall be available for obligation to the extent provided in advance in appropriations Acts for allocation under section 2447(c).

(b) **FUNDING SOURCES.**—

(1) **LOANS FROM TREASURY.**—There are authorized to be appropriated to the Secretary \$900,000,000 for the period encompassing fiscal years 2002 through 2009. Such amounts shall be deposited by the Secretary in the Fund, and shall be considered loans from the Treasury. Income received by the United States in connection with any ultra-deepwater oil and gas leases shall be deposited in the Treasury and considered as repayment for the loans under this paragraph.

(2) **ADDITIONAL APPROPRIATIONS.**—There are authorized to be appropriated to the Secretary such sums as may be necessary for the fiscal years 2002 through 2009, to be deposited in the Fund.

(3) **OIL AND GAS LEASE INCOME.**—To the extent provided in advance in appropriations Acts, not more than 7.5 percent of the income of the United States from Federal oil and gas leases may be deposited in the Fund for fiscal years 2002 through 2009.

SEC. 2451. SUNSET.

No funds are authorized to be appropriated for carrying out this subtitle after fiscal year 2009. The Research Organization shall

be terminated when it has expended all funds made available pursuant to this subtitle.

Subtitle D—Fuel Cells

SEC. 2461. FUEL CELLS.

(a) IN GENERAL.—The Secretary shall conduct a program of research, development, demonstration, and commercial application on fuel cells. The program shall address—

- (1) Advanced Research;
- (2) Systems Development;
- (3) Vision 21-Hybrids; and
- (4) Innovative Concepts.

(b) MANUFACTURING PRODUCTION AND PROCESSES.—In addition to the program under subsection (a), the Secretary, in consultation with other Federal agencies, as appropriate, shall establish a program for the demonstration of fuel cell technologies, including fuel cell proton exchange membrane technology, for commercial, residential, and transportation applications. The program shall specifically focus on promoting the application of and improved manufacturing production and processes for fuel cell technologies.

(c) AUTHORIZATION OF APPROPRIATIONS.—Within the amounts authorized to be appropriated under section 2481(a), there are authorized to be appropriated to the Secretary for the purpose of carrying out subsection (b), \$28,000,000 for each of fiscal years 2002 through 2004.

Subtitle E—Department of Energy Authorization of Appropriations

SEC. 2481. AUTHORIZATION OF APPROPRIATIONS.

(a) OPERATION AND MAINTENANCE.—There are authorized to be appropriated to the Secretary for operation and maintenance for subtitle B and subtitle D, and for Fossil Energy Research and Development Headquarters Program Direction, Field Program Direction, Plant and Capital Equipment, Cooperative Research and Development, Import/Export Authorization, and Advanced Metallurgical Processes \$282,000,000 for fiscal year 2002, \$293,000,000 for fiscal year 2003, and \$305,000,000 for fiscal year 2004, to remain available until expended.

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

- (1) Gas Hydrates.
- (2) Fossil Energy Environmental Restoration; or
- (3) research, development, demonstration, and commercial application on coal and related technologies, including activities under subtitle A.

TITLE V—SCIENCE

Subtitle A—Fusion Energy Sciences

SEC. 2501. SHORT TITLE.

This subtitle may be cited as the “Fusion Energy Sciences Act of 2001”.

SEC. 2502. FINDINGS.

The Congress finds that—

- (1) economic prosperity is closely linked to an affordable and ample energy supply;
- (2) environmental quality is closely linked to energy production and use;
- (3) population, worldwide economic development, energy consumption, and stress on the environment are all expected to increase substantially in the coming decades;
- (4) the few energy options with the potential to meet economic and environmental needs for the long-term future should be pursued as part of a balanced national energy plan;
- (5) fusion energy is an attractive long-term energy source because of the virtually inexhaustible supply of fuel, and the promise of minimal adverse environmental impact and inherent safety;

(6) the National Research Council, the President's Committee of Advisers on Science and Technology, and the Secretary of Energy Advisory Board have each recently reviewed the Fusion Energy Sciences Program and each strongly supports the fundamental science and creative innovation of the program, and has confirmed that progress toward the goal of producing practical fusion energy has been excellent, although much scientific and engineering work remains to be done;

(7) each of these reviews stressed the need for a magnetic fusion burning plasma experiment to address key scientific issues and as a necessary step in the development of fusion energy;

(8) the National Research Council has also called for a broadening of the Fusion Energy Sciences Program research base as a means to more fully integrate the fusion science community into the broader scientific community; and

(9) the Fusion Energy Sciences Program budget is inadequate to support the necessary science and innovation for the present generation of experiments, and cannot accommodate the cost of a burning plasma experiment constructed by the United States, or even the cost of key participation by the United States in an international effort.

SEC. 2503. PLAN FOR FUSION EXPERIMENT.

(a) PLAN FOR UNITED STATES FUSION EXPERIMENT.—The Secretary, on the basis of full consultation with the Fusion Energy Sciences Advisory Committee and the Secretary of Energy Advisory Board, as appropriate, shall develop a plan for United States construction of a magnetic fusion burning plasma experiment for the purpose of accelerating scientific understanding of fusion plasmas. The Secretary shall request a review of the plan by the National Academy of Sciences, and shall transmit the plan and the review to the Congress by July 1, 2004.

(b) REQUIREMENTS OF PLAN.—The plan described in subsection (a) shall—

- (1) address key burning plasma physics issues; and
- (2) include specific information on the scientific capabilities of the proposed experiment, the relevance of these capabilities to the goal of practical fusion energy, and the overall design of the experiment including its estimated cost and potential construction sites.

(c) UNITED STATES PARTICIPATION IN AN INTERNATIONAL EXPERIMENT.—In addition to the plan described in subsection (a), the Secretary, on the basis of full consultation with the Fusion Energy Sciences Advisory Committee and the Secretary of Energy Advisory Board, as appropriate, may also develop a plan for United States participation in an international burning plasma experiment for the same purpose, whose construction is found by the Secretary to be highly likely and where United States participation is cost effective relative to the cost and scientific benefits of a domestic experiment described in subsection (a). If the Secretary elects to develop a plan under this subsection, he shall include the information described in subsection (b), and an estimate of the cost of United States participation in such an international experiment. The Secretary shall request a review by the National Academies of Sciences and Engineering of a plan developed under this subsection, and shall transmit the plan and the review to the Congress not later than July 1, 2004.

(d) AUTHORIZATION OF RESEARCH AND DEVELOPMENT.—The Secretary, through the Fusion Energy Sciences Program, may conduct

any research and development necessary to fully develop the plans described in this section.

SEC. 2504. PLAN FOR FUSION ENERGY SCIENCES PROGRAM.

Not later than 6 months after the date of the enactment of this Act, the Secretary, in full consultation with FESAC, shall develop and transmit to the Congress a plan for the purpose of ensuring a strong scientific base for the Fusion Energy Sciences Program and to enable the experiments described in section 2503. Such plan shall include as its objectives—

(1) to ensure that existing fusion research facilities and equipment are more fully utilized with appropriate measurements and control tools;

(2) to ensure a strengthened fusion science theory and computational base;

(3) to ensure that the selection of and funding for new magnetic and inertial fusion research facilities is based on scientific innovation and cost effectiveness;

(4) to improve the communication of scientific results and methods between the fusion science community and the wider scientific community;

(5) to ensure that adequate support is provided to optimize the design of the magnetic fusion burning plasma experiments referred to in section 2503;

(6) to ensure that inertial confinement fusion facilities are utilized to the extent practicable for the purpose of inertial fusion energy research and development;

(7) to develop a roadmap for a fusion-based energy source that shows the important scientific questions, the evolution of confinement configurations, the relation between these two features, and their relation to the fusion energy goal;

(8) to establish several new centers of excellence, selected through a competitive peer-review process and devoted to exploring the frontiers of fusion science;

(9) to ensure that the National Science Foundation, and other agencies, as appropriate, play a role in extending the reach of fusion science and in sponsoring general plasma science; and

(10) to ensure that there be continuing broad assessments of the outlook for fusion energy and periodic external reviews of fusion energy sciences.

SEC. 2505. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary for the development and review, but not for implementation, of the plans described in this subtitle and for activities of the Fusion Energy Sciences Program \$320,000,000 for fiscal year 2002 and \$335,000,000 for fiscal year 2003, of which up to \$15,000,000 for each of fiscal year 2002 and fiscal year 2003 may be used to establish several new centers of excellence, selected through a competitive peer-review process and devoted to exploring the frontiers of fusion science.

Subtitle B—Spallation Neutron Source

SEC. 2521. DEFINITION.

For the purposes of this subtitle, the term “Spallation Neutron Source” means Department Project 99-E-334, Oak Ridge National Laboratory, Oak Ridge, Tennessee.

SEC. 2522. AUTHORIZATION OF APPROPRIATIONS.

(a) AUTHORIZATION OF CONSTRUCTION FUNDING.—There are authorized to be appropriated to the Secretary for construction of the Spallation Neutron Source—

- (1) \$276,300,000 for fiscal year 2002;
- (2) \$210,571,000 for fiscal year 2003;
- (3) \$124,600,000 for fiscal year 2004;
- (4) \$79,800,000 for fiscal year 2005; and

(5) \$41,100,000 for fiscal year 2006 for completion of construction.

(b) **AUTHORIZATION OF OTHER PROJECT FUNDING.**—There are authorized to be appropriated to the Secretary for other project costs (including research and development necessary to complete the project, preoperations costs, and capital equipment not related to construction) of the Spallation Neutron Source \$15,353,000 for fiscal year 2002 and \$103,279,000 for the period encompassing fiscal years 2003 through 2006, to remain available until expended through September 30, 2006.

SEC. 2523. REPORT.

The Secretary shall report on the Spallation Neutron Source as part of the Department's annual budget submission, including a description of the achievement of milestones, a comparison of actual costs to estimated costs, and any changes in estimated project costs or schedule.

SEC. 2524. LIMITATIONS.

The total amount obligated by the Department, including prior year appropriations, for the Spallation Neutron Source may not exceed—

- (1) \$1,192,700,000 for costs of construction;
- (2) \$219,000,000 for other project costs; and
- (3) \$1,411,700,000 for total project cost.

Subtitle C—Facilities, Infrastructure, and User Facilities

SEC. 2541. DEFINITION.

For purposes of this subtitle—

(1) the term “nonmilitary energy laboratory” means—

- (A) Ames Laboratory;
- (B) Argonne National Laboratory;
- (C) Brookhaven National Laboratory;
- (D) Fermi National Accelerator Laboratory;
- (E) Lawrence Berkeley National Laboratory;
- (F) Oak Ridge National Laboratory;
- (G) Pacific Northwest National Laboratory;
- (H) Princeton Plasma Physics Laboratory;
- (I) Stanford Linear Accelerator Center;
- (J) Thomas Jefferson National Accelerator Facility; or

(K) any other facility of the Department that the Secretary, in consultation with the Director, Office of Science and the appropriate congressional committees, determines to be consistent with the mission of the Office of Science; and

(2) the term “user facility” means—

(A) an Office of Science facility at a nonmilitary energy laboratory that provides special scientific and research capabilities, including technical expertise and support as appropriate, to serve the research needs of the Nation's universities, industry, private laboratories, Federal laboratories, and others, including research institutions or individuals from other nations where reciprocal accommodations are provided to United States research institutions and individuals or where the Secretary considers such accommodation to be in the national interest; and

(B) any other Office of Science funded facility designated by the Secretary as a user facility.

SEC. 2542. FACILITY AND INFRASTRUCTURE SUPPORT FOR NONMILITARY ENERGY LABORATORIES.

(a) **FACILITY POLICY.**—The Secretary shall develop and implement a least-cost nonmilitary energy laboratory facility and infrastructure strategy for—

(1) maintaining existing facilities and infrastructure, as needed;

(2) closing unneeded facilities;

(3) making facility modifications; and

(4) building new facilities.

(b) **PLAN.**—The Secretary shall prepare a comprehensive 10-year plan for conducting future facility maintenance, making repairs, modifications, and new additions, and constructing new facilities at each nonmilitary energy laboratory. Such plan shall provide for facilities work in accordance with the following priorities:

(1) Providing for the safety and health of employees, visitors, and the general public with regard to correcting existing structural, mechanical, electrical, and environmental deficiencies.

(2) Providing for the repair and rehabilitation of existing facilities to keep them in use and prevent deterioration, if feasible.

(3) Providing engineering design and construction services for those facilities that require modification or additions in order to meet the needs of new or expanded programs.

(c) **REPORT.**—

(1) **TRANSMITTAL.**—Within 1 year after the date of the enactment of this Act, the Secretary shall prepare and transmit to the appropriate congressional committees a report containing the plan prepared under subsection (b).

(2) **CONTENTS.**—For each nonmilitary energy laboratory, such report shall contain—

(A) the current priority list of proposed facilities and infrastructure projects, including cost and schedule requirements;

(B) a current ten-year plan that demonstrates the reconfiguration of its facilities and infrastructure to meet its missions and to address its long-term operational costs and return on investment;

(C) the total current budget for all facilities and infrastructure funding; and

(D) the current status of each facilities and infrastructure project compared to the original baseline cost, schedule, and scope.

(3) **ADDITIONAL ELEMENTS.**—The report shall also—

(A) include a plan for new facilities and facility modifications at each nonmilitary energy laboratory that will be required to meet the Department's changing missions of the twenty-first century, including schedules and estimates for implementation, and including a section outlining long-term funding requirements consistent with anticipated budgets and annual authorization of appropriations;

(B) address the coordination of modernization and consolidation of facilities among the nonmilitary energy laboratories in order to meet changing mission requirements; and

(C) provide for annual reports to the appropriate congressional committees on accomplishments, conformance to schedules, commitments, and expenditures.

SEC. 2543. USER FACILITIES.

(a) **NOTICE REQUIREMENT.**—When the Department makes a user facility available to universities and other potential users, or seeks input from universities and other potential users regarding significant characteristics or equipment in a user facility or a proposed user facility, the Department shall ensure broad public notice of such availability or such need for input to universities and other potential users.

(b) **COMPETITION REQUIREMENT.**—When the Department considers the participation of a university or other potential user in the establishment or operation of a user facility, the Department shall employ full and open competition in selecting such a participant.

(c) **PROHIBITION.**—The Department may not redesignate a user facility, as defined by sec-

tion 2541(b) as something other than a user facility for avoid the requirements of subsections (a) and (b).

Subtitle D—Advisory Panel on Office of Science

SEC. 2561. ESTABLISHMENT.

The Director of the Office of Science and Technology Policy, in consultation with the Secretary, shall establish an Advisory Panel on the Office of Science comprised of knowledgeable individuals to—

(1) address concerns about the current status and the future of scientific research supported by the Office;

(2) examine alternatives to the current organizational structure of the Office within the Department, taking into consideration existing structures for the support of scientific research in other Federal agencies and the private sector; and

(3) suggest actions to strengthen the scientific research supported by the Office that might be taken jointly by the Department and Congress.

SEC. 2562. REPORT.

Within 6 months after the date of the enactment of this Act, the Advisory Panel shall transmit its findings and recommendations in a report to the Director of the Office of Science and Technology Policy and the Secretary. The Director and the Secretary shall jointly—

(1) consider each of the Panel's findings and recommendations, and comment on each as they consider appropriate; and

(2) transmit the Panel's report and the comments of the Director and the Secretary on the report to the appropriate congressional committees within 9 months after the date of the enactment of this Act.

Subtitle E—Department of Energy Authorization of Appropriations

SEC. 2581. AUTHORIZATION OF APPROPRIATIONS.

(a) **OPERATION AND MAINTENANCE.**—Including the amounts authorized to be appropriated for fiscal year 2002 under section 2505 for Fusion Energy Sciences and under section 2522(b) for the Spallation Neutron Source, there are authorized to be appropriated to the Secretary for the Office of Science (also including subtitle C, High Energy Physics, Nuclear Physics, Biological and Environmental Research, Basic Energy Sciences (except for the Spallation Neutron Source), Advanced Scientific Computing Research, Energy Research Analysis, Multiprogram Energy Laboratories-Facilities Support, Facilities and Infrastructure, Safeguards and Security, and Program Direction) operation and maintenance \$3,299,558,000 for fiscal year 2002, to remain available until expended.

(b) **RESEARCH REGARDING PRECIOUS METAL CATALYSIS.**—Within the amounts authorized to be appropriated to the Secretary under subsection (a), \$5,000,000 for fiscal year 2002 may be used to carry out research in the use of precious metals (excluding platinum, palladium, and rhodium) in catalysis, either directly through national laboratories, or through the award of grants, cooperative agreements, or contracts with public or non-profit entities.

(c) **CONSTRUCTION.**—In addition to the amounts authorized to be appropriated under section 2522(a) for construction of the Spallation Neutron Source, there are authorized to be appropriated to the Secretary for Science—

(1) \$19,400,000 for fiscal year 2002, \$14,800,000 for fiscal year 2003, and \$8,900,000 for fiscal year 2004 for completion of construction of

Project 98-G-304, Neutrinos at the Main Injector, Fermi National Accelerator Laboratory;

(2) \$11,405,000 for fiscal year 2002 for completion of construction of Project 01-E-300, Laboratory for Comparative and Functional Genomics, Oak Ridge National Laboratory;

(3) \$4,000,000 for fiscal year 2002, \$8,000,000 for fiscal year 2003, and \$2,000,000 for fiscal year 2004 for completion of construction of Project 02-SC-002, Project Engineering Design (PED), Various Locations;

(4) \$3,183,000 for fiscal year 2002 for completion of construction of Project 02-SC-002, Multiprogram Energy Laboratories Infrastructure Project Engineering Design (PED), Various Locations; and

(5) \$18,633,000 for fiscal year 2002 and \$13,029,000 for fiscal year 2003 for completion of construction of Project MEL-001, Multiprogram Energy Laboratories, Infrastructure, Various Locations.

(d) LIMITS ON USE OF FUNDS.—None of the funds authorized to be appropriated in subsection (c) may be used for construction at any national security laboratory as defined in section 3281(1) of the National Defense Authorization Act for Fiscal Year 2000 (50 U.S.C. 2471(1)) or at any nuclear weapons production facility as defined in section 3281(2) of the National Defense Authorization Act for Fiscal Year 2000 (50 U.S.C. 2471(2)).

TITLE VI—MISCELLANEOUS

Subtitle A—General Provisions for the Department of Energy

SEC. 2601. RESEARCH, DEVELOPMENT, DEMONSTRATION, AND COMMERCIAL APPLICATION OF ENERGY TECHNOLOGY PROGRAMS, PROJECTS, AND ACTIVITIES.

(a) AUTHORIZED ACTIVITIES.—Except as otherwise provided in this division, research, development, demonstration, and commercial application programs, projects, and activities for which appropriations are authorized under this division may be carried out under the procedures of the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.), the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.), or any other Act under which the Secretary is authorized to carry out such programs, projects, and activities, but only to the extent the Secretary is authorized to carry out such activities under each such Act.

(b) AUTHORIZED AGREEMENTS.—Except as otherwise provided in this division, in carrying out research, development, demonstration, and commercial application programs, projects, and activities for which appropriations are authorized under this division, the Secretary may use, to the extent authorized under applicable provisions of law, contracts, cooperative agreements, cooperative research and development agreements under the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grants, joint ventures, and any other form of agreement available to the Secretary.

(c) DEFINITION.—For purposes of this section, the term “joint venture” has the meaning given that term under section 2 of the National Cooperative Research and Production Act of 1993 (15 U.S.C. 4301), except that such term may apply under this section to research, development, demonstration, and commercial application of energy technology joint ventures.

(d) PROTECTION OF INFORMATION.—Section 12(c)(7) of the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3710a(c)(7)), relating to the protection of information, shall apply to research, development, demonstration, and commercial application of

energy technology programs, projects, and activities for which appropriations are authorized under this division.

(e) INVENTIONS.—An invention conceived and developed by any person using funds provided through a grant under this division shall be considered a subject invention for the purposes of chapter 18 of title 35, United States Code (commonly referred to as the Bayh-Dole Act).

(f) OUTREACH.—The Secretary shall ensure that each program authorized by this division includes an outreach component to provide information, as appropriate, to manufacturers, consumers, engineers, architects, builders, energy service companies, universities, facility planners and managers, State and local governments, and other entities.

(g) GUIDELINES AND PROCEDURES.—The Secretary shall provide guidelines and procedures for the transition, where appropriate, of energy technologies from research through development and demonstration to commercial application of energy technology. Nothing in this section shall preclude the Secretary from—

(1) entering into a contract, cooperative agreement, cooperative research and development agreement under the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grant, joint venture, or any other form of agreement available to the Secretary under this section that relates to research, development, demonstration, and commercial application of energy technology; or

(2) extending a contract, cooperative agreement, cooperative research and development agreement under the Stevenson-Wylder Technology Innovation Act of 1980, grant, joint venture, or any other form of agreement available to the Secretary that relates to research, development, and demonstration to cover commercial application of energy technology.

(h) APPLICATION OF SECTION.—This section shall not apply to any contract, cooperative agreement, cooperative research and development agreement under the Stevenson-Wylder Technology Innovation Act of 1980 (15 U.S.C. 3701 et seq.), grant, joint venture, or any other form of agreement available to the Secretary that is in effect as of the date of the enactment of this Act.

SEC. 2602. LIMITS ON USE OF FUNDS.

(a) MANAGEMENT AND OPERATING CONTRACTS.—

(1) COMPETITIVE PROCEDURE REQUIREMENT.—None of the funds authorized to be appropriated to the Secretary by this division may be used to award a management and operating contract for a federally owned or operated nonmilitary energy laboratory of the Department unless such contract is awarded using competitive procedures or the Secretary grants, on a case-by-case basis, a waiver to allow for such a deviation. The Secretary may not delegate the authority to grant such a waiver.

(2) CONGRESSIONAL NOTICE.—At least 2 months before a contract award, amendment, or modification for which the Secretary intends to grant such a waiver, the Secretary shall submit to the appropriate congressional committees a report notifying the committees of the waiver and setting forth the reasons for the waiver.

(b) PRODUCTION OR PROVISION OF ARTICLES OR SERVICES.—None of the funds authorized to be appropriated to the Secretary by this division may be used to produce or provide articles or services for the purpose of selling the articles or services to a person outside the Federal Government, unless the Sec-

retary determines that comparable articles or services are not available from a commercial source in the United States.

(c) REQUESTS FOR PROPOSALS.—None of the funds authorized to be appropriated to the Secretary by this division may be used by the Department to prepare or initiate Requests for Proposals for a program if the program has not been authorized by Congress.

SEC. 2603. COST SHARING.

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

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

(c) CALCULATION OF AMOUNT.—In calculating the amount of the non-Federal commitment under subsection (a) or (b), the Secretary may include personnel, services, equipment, and other resources.

SEC. 2604. LIMITATION ON DEMONSTRATION AND COMMERCIAL APPLICATION OF ENERGY TECHNOLOGY.

Except as otherwise provided in this division, the Secretary shall provide funding for scientific or energy demonstration and commercial application of energy technology programs, projects, or activities only for technologies or processes that can be reasonably expected to yield new, measurable benefits to the cost, efficiency, or performance of the technology or process.

SEC. 2605. REPROGRAMMING.

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

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

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

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

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

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

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

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

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

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

Subtitle B—Other Miscellaneous Provisions

SEC. 2611. NOTICE OF REORGANIZATION.

The Secretary shall provide notice to the appropriate congressional committees not later than 15 days before any reorganization of any environmental research or development, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity of the Department.

SEC. 2612. LIMITS ON GENERAL PLANT PROJECTS.

If, at any time during the construction of a civilian environmental research and development, scientific or energy research, development, or demonstration, or commercial application of energy technology project of the Department for which no specific funding level is provided by law, the estimated cost (including any revision thereof) of the project exceeds \$5,000,000, the Secretary may not continue such construction unless the Secretary has furnished a complete report to the appropriate congressional committees explaining the project and the reasons for the estimate or revision.

SEC. 2613. LIMITS ON CONSTRUCTION PROJECTS.

(a) LIMITATION.—Except as provided in subsection (b), construction on a civilian environmental research and development, scientific or energy research, development, or demonstration, or commercial application of energy technology project of the Department for which funding has been specifically provided by law may not be started, and additional obligations may not be incurred in connection with the project above the authorized funding amount, whenever the current estimated cost of the construction project exceeds by more than 10 percent the higher of—

(1) the amount authorized for the project, if the entire project has been funded by the Congress; or

(2) the amount of the total estimated cost for the project as shown in the most recent budget justification data submitted to Congress.

(b) NOTICE.—An action described in subsection (a) may be taken if—

(1) the Secretary has submitted to the appropriate congressional committees a report on the proposed actions and the circumstances making such actions necessary; and

(2) a period of 30 days has elapsed after the date on which the report is received by the committees.

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

(d) EXCEPTION.—Subsections (a) and (b) shall not apply to any construction project that has a current estimated cost of less than \$5,000,000.

SEC. 2614. AUTHORITY FOR CONCEPTUAL AND CONSTRUCTION DESIGN.

(a) REQUIREMENT FOR CONCEPTUAL DESIGN.—(1) Subject to paragraph (2) and except as provided in paragraph (3), before submitting to Congress a request for funds for a

construction project that is in support of a civilian environmental research and development, scientific or energy research, development, or demonstration, or commercial application of energy technology program, project, or activity of the Department, the Secretary shall complete a conceptual design for that project.

(2) If the estimated cost of completing a conceptual design for a construction project exceeds \$750,000, the Secretary shall submit to Congress a request for funds for the conceptual design before submitting a request for funds for the construction project.

(3) The requirement in paragraph (1) does not apply to a request for funds for a construction project, the total estimated cost of which is less than \$5,000,000.

(b) AUTHORITY FOR CONSTRUCTION DESIGN.—(1) The Secretary may carry out construction design (including architectural and engineering services) in connection with any proposed construction project that is in support of a civilian environmental research and development, scientific or energy research, development, and demonstration, or commercial application of energy technology program, project, or activity of the Department if the total estimated cost for such design does not exceed \$250,000.

(2) If the total estimated cost for construction design in connection with any construction project described in paragraph (1) exceeds \$250,000, funds for such design must be specifically authorized by law.

SEC. 2615. NATIONAL ENERGY POLICY DEVELOPMENT GROUP MANDATED REPORTS.

(a) THE SECRETARY'S REVIEW OF ENERGY EFFICIENCY RENEWABLE ENERGY, AND ALTERNATIVE ENERGY RESEARCH AND DEVELOPMENT.—Upon completion of the Secretary's review of current funding and historic performance of the Department's energy efficiency, renewable energy, and alternative energy research and development programs in response to the recommendations of the May 16, 2001, Report of the National Energy Policy Development Group, the Secretary shall transmit a report containing the results of such review to the appropriate congressional committees.

(b) REVIEW AND RECOMMENDATIONS ON USING THE NATION'S ENERGY RESOURCES MORE EFFICIENTLY.—Upon completion of the Office of Science and Technology Policy and the President's Council of Advisors on Science and Technology reviewing and making recommendations on using the Nation's energy resources more efficiently, in response to the recommendation of the May 16, 2001, Report of the National Energy Policy Development Group, the Director of the Office of Science and Technology Policy shall transmit a report containing the results of such review and recommendations to the appropriate congressional committees.

SEC. 2616. PERIODIC REVIEWS AND ASSESSMENTS.

The Secretary shall enter into appropriate arrangements with the National Academies of Sciences and Engineering to ensure that there be periodic reviews and assessments of the programs authorized by this division, as well as the measurable cost and performance-based goals for such programs as established under section 2004, and the progress on meeting such goals. Such reviews and assessments shall be conducted at least every 5 years, or more often as the Secretary considers necessary, and the Secretary shall transmit to the appropriate congressional committees reports containing the results of such reviews and assessments.

DIVISION D

SEC. 4101. CAPACITY BUILDING FOR ENERGY-EFFICIENT, AFFORDABLE HOUSING.

Section 4(b) of the HUD Demonstration Act of 1993 (42 U.S.C. 9816 note) is amended—

(1) in paragraph (1), by inserting before the semicolon at the end the following: “, including capabilities regarding the provision of energy efficient, affordable housing and residential energy conservation measures”; and

(2) in paragraph (2), by inserting before the semicolon the following: “, including such activities relating to the provision of energy efficient, affordable housing and residential energy conservation measures that benefit low-income families”.

SEC. 4102. INCREASE OF CDBG PUBLIC SERVICES CAP FOR ENERGY CONSERVATION AND EFFICIENCY ACTIVITIES.

Section 105(a)(8) of the Housing and Community Development Act of 1974 (42 U.S.C. 5305(a)(8)) is amended—

(1) by inserting “or efficiency” after “energy conservation”; and

(2) by striking “, and except that” and inserting “; except that”; and

(3) by inserting before the period at the end the following: “; and except that each percentage limitation under this paragraph on the amount of assistance provided under this title that may be used for the provision of public services is hereby increased by 10 percent, but such percentage increase may be used only for the provision of public services concerning energy conservation or efficiency”.

SEC. 4103. FHA MORTGAGE INSURANCE INCENTIVES FOR ENERGY EFFICIENT HOUSING.

(a) SINGLE FAMILY HOUSING MORTGAGE INSURANCE.—Section 203(b)(2) of the National Housing Act (12 U.S.C. 1709(b)(2)) is amended, in the first undesignated paragraph beginning after subparagraph (B)(iii) (relating to solar energy systems)—

(1) by inserting “or paragraph (10)”; and

(2) by striking “20 percent” and inserting “30 percent”.

(b) MULTIFAMILY HOUSING MORTGAGE INSURANCE.—Section 207(c) of the National Housing Act (12 U.S.C. 1713(c)) is amended, in the second undesignated paragraph beginning after paragraph (3) (relating to solar energy systems and residential energy conservation measures), by striking “20 percent” and inserting “30 percent”.

(c) COOPERATIVE HOUSING MORTGAGE INSURANCE.—Section 213(p) of the National Housing Act (12 U.S.C. 1715e(p)) is amended by striking “20 per centum” and inserting “30 percent”.

(d) REHABILITATION AND NEIGHBORHOOD CONSERVATION HOUSING MORTGAGE INSURANCE.—Section 220(d)(3)(B)(iii) of the National Housing Act (12 U.S.C. 1715k(d)(3)(B)(iii)) is amended by striking “20 per centum” and inserting “30 percent”.

(e) LOW-INCOME MULTIFAMILY HOUSING MORTGAGE INSURANCE.—Section 221(k) of the National Housing Act (12 U.S.C. 1715l(k)) is amended by striking “20 per centum” and inserting “30 percent”.

(f) ELDERLY HOUSING MORTGAGE INSURANCE.—The proviso at the end of section 213(c)(2) of the National Housing Act (12 U.S.C. 1715v(c)(2)) is amended by striking “20 per centum” and inserting “30 percent”.

(g) CONDOMINIUM HOUSING MORTGAGE INSURANCE.—Section 234(j) of the National Housing Act (12 U.S.C. 1715y(j)) is amended by striking “20 per centum” and inserting “30 percent”.

SEC. 4104. PUBLIC HOUSING CAPITAL FUND.

Section 9(d)(1) of the United States Housing Act of 1937 (42 U.S.C. 1437g(d)(1)) is amended—

(1) in subparagraph (I), by striking “and” at the end;

(2) in subparagraph (K), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following new subparagraph:

“(L) improvement of energy and water-use efficiency by installing fixtures and fittings that conform to the American Society of Mechanical Engineers/American National Standards Institute standards A112.19.2-1998 and A112.18.1-2000, or any revision thereto, applicable at the time of installation, and by increasing energy efficiency and water conservation by such other means as the Secretary determines are appropriate.”.

SEC. 4105. GRANTS FOR ENERGY-CONSERVING IMPROVEMENTS FOR ASSISTED HOUSING.

Section 251(b)(1) of the National Energy Conservation Policy Act (42 U.S.C. 8231(1)) is amended—

(1) by striking “financed with loans” and inserting “assisted”;

(2) by inserting after “1959,” the following: “which are eligible multifamily housing projects (as such term is defined in section 512 of the Multifamily Assisted Housing Reform and Affordability Act of 1997 (42 U.S.C. 1437f note)) and are subject to a mortgage restructuring and rental assistance sufficiency plans under such Act.”; and

(3) by inserting after the period at the end of the first sentence the following new sentence: “Such improvements may also include the installation of energy and water conserving fixtures and fittings that conform to the American Society of Mechanical Engineers/American National Standards Institute standards A112.19.2-1998 and A112.18.1-2000, or any revision thereto, applicable at the time of installation.”.

SEC. 4106. NORTH AMERICAN DEVELOPMENT BANK.

Part 2 of subtitle D of title V of the North American Free Trade Agreement Implementation Act (22 U.S.C. 290m-290m-3) is amended by adding at the end the following:

“SEC. 545. SUPPORT FOR CERTAIN ENERGY POLICIES.

“Consistent with the focus of the Bank’s Charter on environmental infrastructure projects, the Board members representing the United States should use their voice and vote to encourage the Bank to finance projects related to clean and efficient energy, including energy conservation, that prevent, control, or reduce environmental pollutants or contaminants.”.

DIVISION E

SEC. 5000. SHORT TITLE.

This division may be cited as the “Clean Coal Power Initiative Act of 2001”.

SEC. 5001. FINDINGS.

Congress finds that—

(1) reliable, affordable, increasingly clean electricity will continue to power the growing United States economy;

(2) an increasing use of electrotechnologies, the desire for continuous environmental improvement, a more competitive electricity market, and concerns about rising energy prices add importance to the need for reliable, affordable, increasingly clean electricity;

(3) coal, which, as of the date of the enactment of this Act, accounts for more than ½ of all electricity generated in the United States, is the most abundant fossil energy resource of the United States;

(4) coal comprises more than 85 percent of all fossil resources in the United States and exists in quantities sufficient to supply the

United States for 250 years at current usage rates;

(5) investments in electricity generating facility emissions control technology over the past 30 years have reduced the aggregate emissions of pollutants from coal-based generating facilities by 21 percent, even as coal use for electricity generation has nearly tripled;

(6) continuous improvement in efficiency and environmental performance from electricity generating facilities would allow continued use of coal and preserve less abundant energy resources for other energy uses;

(7) new ways to convert coal into electricity can effectively eliminate health-threatening emissions and improve efficiency by as much as 50 percent, but initial deployment of new coal generation methods and equipment entails significant risk that generators may be unable to accept in a newly competitive electricity market; and

(8) continued environmental improvement in coal-based generation and increasing the production and supply of power generation facilities with less air emissions, with the ultimate goal of near-zero emissions, is important and desirable.

SEC. 5002. DEFINITIONS.

In this division:

(1) **COST AND PERFORMANCE GOALS.**—The term “cost and performance goals” means the cost and performance goals established under section 5004.

(2) **SECRETARY.**—The term “Secretary” means the Secretary of Energy.

SEC. 5003. CLEAN COAL POWER INITIATIVE.

(a) **IN GENERAL.**—The Secretary shall carry out a program under—

(1) this division;

(2) the Federal Nonnuclear Energy Research and Development Act of 1974 (42 U.S.C. 5901 et seq.);

(3) the Energy Reorganization Act of 1974 (42 U.S.C. 5801 et seq.); and

(4) title XIII of the Energy Policy Act of 1992 (42 U.S.C. 13331 et seq.), to achieve cost and performance goals established by the Secretary under section 5004.

SEC. 5004. COST AND PERFORMANCE GOALS.

(a) **REVIEW AND ASSESSMENT.**—The Secretary shall perform an assessment that establishes measurable cost and performance goals for 2005, 2010, 2015, and 2020 for the programs authorized by this division. Such assessment shall be based on the latest scientific, economic, and technical knowledge.

(b) **CONSULTATION.**—In establishing the cost and performance goals, the Secretary shall consult with representatives of—

(1) the United States coal industry;

(2) State coal development agencies;

(3) the electric utility industry;

(4) railroads and other transportation industries;

(5) manufacturers of advanced coal-based equipment;

(6) institutions of higher learning, national laboratories, and professional and technical societies;

(7) organizations representing workers;

(8) organizations formed to—

(A) promote the use of coal;

(B) further the goals of environmental protection; and

(C) promote the production and generation of coal-based power from advanced facilities; and

(9) other appropriate Federal and State agencies.

(c) **TIMING.**—The Secretary shall—

(1) not later than 120 days after the date of the enactment of this Act, issue a set of draft cost and performance goals for public comment; and

(2) not later than 180 days after the date of the enactment of this Act, after taking into consideration any public comments received, submit to the Committee on Energy and Commerce and the Committee on Science of the House of Representatives, and to the Senate, the final cost and performance goals.

SEC. 5005. AUTHORIZATION OF APPROPRIATIONS.

(a) **CLEAN COAL POWER INITIATIVE.**—Except as provided in subsection (b), there are authorized to be appropriated to the Secretary to carry out the Clean Coal Power Initiative under section 5003 \$200,000,000 for each of the fiscal years 2002 through 2011, to remain available until expended.

(b) **LIMIT ON USE OF FUNDS.**—Notwithstanding subsection (a), no funds may be used to carry out the activities authorized by this Act after September 30, 2002, unless the Secretary has transmitted to the Committee on Energy and Commerce and the Committee on Science of the House of Representatives, and to the Senate, the report required by this subsection and 1 month has elapsed since that transmission. The report shall include, with respect to subsection (a), a 10-year plan containing—

(1) a detailed assessment of whether the aggregate funding levels provided under subsection (a) are the appropriate funding levels for that program;

(2) a detailed description of how proposals will be solicited and evaluated, including a list of all activities expected to be undertaken;

(3) a detailed list of technical milestones for each coal and related technology that will be pursued;

(4) recommendations for a mechanism for recoupment of Federal funding for successful commercial projects; and

(5) a detailed description of how the program will avoid problems enumerated in General Accounting Office reports on the Clean Coal Technology Program, including problems that have resulted in unspent funds and projects that failed either financially or scientifically.

(c) **APPLICABILITY.**—Subsection (b) shall not apply to any project begun before September 30, 2002.

SEC. 5006. PROJECT CRITERIA.

(a) **IN GENERAL.**—The Secretary shall not provide funding under this division for any project that does not advance efficiency, environmental performance, and cost competitiveness well beyond the level of technologies that are in operation or have been demonstrated as of the date of the enactment of this Act.

(b) **TECHNICAL CRITERIA FOR CLEAN COAL POWER INITIATIVE.**—

(1) **GASIFICATION.**—(A) In allocating the funds authorized under section 5005(a), the Secretary shall ensure that at least 80 percent of the funds are used only for projects on coal-based gasification technologies, including gasification combined cycle, gasification fuel cells, gasification coproduction and hybrid gasification/combustion.

(B) The Secretary shall set technical milestones specifying emissions levels that coal gasification projects must be designed to and reasonably expected to achieve. The milestones shall get more restrictive through the life of the program. The milestones shall be designed to achieve by 2020 coal gasification projects able—

(i) to remove 99 percent of sulfur dioxide;

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

(iii) to achieve substantial reductions in mercury emissions; and

(iv) to achieve a thermal efficiency of 60 percent (higher heating value).

(2) OTHER PROJECTS.—For projects not described in paragraph (1), the Secretary shall set technical milestones specifying emissions levels that the projects must be designed to and reasonably expected to achieve. The milestones shall get more restrictive through the life of the program. The milestones shall be designed to achieve by 2010 projects able—

(A) to remove 97 percent of sulfur dioxide;

(B) to emit no more than .08 lbs of NOx per million BTU;

(C) to achieve substantial reductions in mercury emissions; and

(D) to achieve a thermal efficiency of 45 percent (higher heating value).

(c) FINANCIAL CRITERIA.—The Secretary shall not provide a funding award under this division unless the recipient has documented to the satisfaction of the Secretary that—

(1) the award recipient is financially viable without the receipt of additional Federal funding;

(2) the recipient will provide sufficient information to the Secretary for the Secretary to ensure that the award funds are spent efficiently and effectively; and

(3) a market exists for the technology being demonstrated or applied, as evidenced by statements of interest in writing from potential purchasers of the technology.

(d) FINANCIAL ASSISTANCE.—The Secretary shall provide financial assistance to projects that meet the requirements of subsections (a), (b), and (c) 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 in order to maintain a diversity of fuel choices in the United States to meet electricity generation requirements; 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.

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

(f) APPLICABILITY.—Neither the use of any particular technology, nor the achievement of any emission reduction, by any facility receiving assistance under this title shall be taken into account for purposes of making any determination under the Clean Air Act in applying the provisions of that Act to a facility not receiving assistance under this title, including any determination concerning new source performance standards, lowest achievable emission rate, best available control technology, or any other standard, requirement, or limitation.

SEC. 5007. STUDY.

(a) IN GENERAL.—Not later than 1 year after the date of the enactment of this Act, and once every 2 years thereafter through 2016, the Secretary, in cooperation with other appropriate Federal agencies, shall transmit to the Committee on Energy and Commerce and the Committee on Science of the House of Representatives, and to the Senate, a report containing the results of a study to—

(1) identify efforts (and the costs and periods of time associated with those efforts) that, by themselves or in combination with other efforts, may be capable of achieving the cost and performance goals;

(2) develop recommendations for the Department of Energy to promote the efforts identified under paragraph (1); and

(3) develop recommendations for additional authorities required to achieve the cost and performance goals.

(b) EXPERT ADVICE.—In carrying out this section, the Secretary shall give due weight to the expert advice of representatives of the entities described in section 5004(b).

SEC. 5008. CLEAN COAL CENTERS OF EXCELLENCE.

As part of the program authorized in section 5003, 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.

DIVISION F

SEC. 6001. SHORT TITLE.

This division may be cited as the "Energy Security Act".

TITLE I—GENERAL PROTECTIONS FOR ENERGY SUPPLY AND SECURITY

SEC. 6101. STUDY OF EXISTING RIGHTS-OF-WAY ON FEDERAL LANDS TO DETERMINE CAPABILITY TO SUPPORT NEW PIPELINES OR OTHER TRANSMISSION FACILITIES.

(a) IN GENERAL.—Within 1 year after the date of the enactment of this Act, the head of each Federal agency that has authorized a right-of-way across Federal lands for transportation of energy supplies or transmission of electricity shall review each such right-of-way and submit a report to the Secretary of Energy and the Chairman of the Federal Energy Regulatory Commission regarding—

(1) whether the right-of-way can be used to support new or additional capacity; and

(2) what modifications or other changes, if any, would be necessary to accommodate such additional capacity.

(b) CONSULTATIONS AND CONSIDERATIONS.—In performing the review, the head of each agency shall—

(1) consult with agencies of State, tribal, or local units of government as appropriate; and

(2) consider whether safety or other concerns related to current uses might preclude the availability of a right-of-way for additional or new transportation or transmission facilities, and set forth those considerations in the report.

SEC. 6102. INVENTORY OF ENERGY PRODUCTION POTENTIAL OF ALL FEDERAL PUBLIC LANDS.

(a) INVENTORY REQUIREMENT.—The Secretary of the Interior, in consultation with the Secretary of Agriculture and the Secretary of Energy, shall conduct an inventory of the energy production potential of all Federal public lands other than national park lands and lands in any wilderness area, with respect to wind, solar, coal, and geothermal power production.

(b) LIMITATIONS.—

(1) IN GENERAL.—The Secretary shall not include in the inventory under this section the matters to be identified in the inventory under section 604 of the Energy Act of 2000 (43 U.S.C. 6217).

(2) WIND AND SOLAR POWER.—The inventory under this section—

(A) with respect to wind power production shall be limited to sites having a mean average wind speed—

(i) exceeding 12.5 miles per hour at a height of 33 feet; and

(ii) exceeding 15.7 miles per hour at a height of 164 feet; and

(B) with respect to solar power production shall be limited to areas rated as receiving 450 watts per square meter or greater.

(c) EXAMINATION OF RESTRICTIONS AND IMPEDIMENTS.—The inventory shall identify the extent and nature of any restrictions or impediments to the development of such energy production potential.

(d) GEOTHERMAL POWER.—The inventory shall include an update of the 1978 Assessment of Geothermal Resources by the United States Geological Survey.

(e) COMPLETION AND UPDATING.—The Secretary—

(1) shall complete the inventory by not later than 2 years after the date of the enactment of this Act; and

(2) shall update the inventory regularly thereafter.

(f) REPORTS.—The Secretary shall submit to the Committee on Resources of the House of Representatives and to the Committee on Energy and Natural Resources of the Senate and make publicly available—

(1) a report containing the inventory under this section, by not later than 2 years after the effective date of this section; and

(2) each update of such inventory.

SEC. 6103. REVIEW OF REGULATIONS TO ELIMINATE BARRIERS TO EMERGING ENERGY TECHNOLOGY.

(a) IN GENERAL.—Each Federal agency shall carry out a review of its regulations and standards to determine those that act as a barrier to market entry for emerging energy-efficient technologies, including fuel cells, combined heat and power, and distributed generation (including small-scale renewable energy).

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

(c) PERIODIC REVIEW.—Each agency shall subsequently review its regulations and standards in this manner no less frequently than every 5 years, and report their findings to the Congress and the President. Such reviews shall include a detailed analysis of all agency actions taken to remove existing barriers to emerging energy technologies.

SEC. 6104. INTERAGENCY AGREEMENT ON ENVIRONMENTAL REVIEW OF INTERSTATE NATURAL GAS PIPELINE PROJECTS.

(a) IN GENERAL.—The Secretary of Energy, in coordination with the Federal Energy Regulatory Commission, shall establish an administrative interagency task force to develop an interagency agreement to expedite and facilitate the environmental review and permitting of interstate natural gas pipeline projects.

(b) TASK FORCE MEMBERS.—The task force shall include a representative of each of the Bureau of Land Management, the United States Fish and Wildlife Service, the Army Corps of Engineers, the Forest Service, the Environmental Protection Agency, the Advisory Council on Historic Preservation, and such other agencies as the Secretary of Energy and the Federal Energy Regulatory Commission consider appropriate.

(c) TERMS OF AGREEMENT.—The interagency agreement shall require that agencies complete their review of interstate pipeline projects within a specific period of time after referral of the matter by the Federal Energy Regulatory Commission.

(d) SUBMITTAL OF AGREEMENT.—The Secretary of Energy shall submit a final interagency agreement under this section to the Congress by not later than 6 months after the effective date of this section.

SEC. 6105. ENHANCING ENERGY EFFICIENCY IN MANAGEMENT OF FEDERAL LANDS.

(a) **SENSE OF THE CONGRESS.**—It is the sense of Congress that Federal land managing agencies should enhance the use of energy efficient technologies in the management of natural resources.

(b) **ENERGY EFFICIENT BUILDINGS.**—To the extent economically practicable, the Secretary of the Interior and the Secretary of Agriculture shall seek to incorporate energy efficient technologies in public and administrative buildings associated with management of the National Park System, National Wildlife Refuge System, National Forest System, and other public lands and resources managed by such Secretaries.

(c) **ENERGY EFFICIENT VEHICLES.**—To the extent economically practicable, the Secretary of the Interior and the Secretary of Agriculture shall seek to use energy efficient motor vehicles, including vehicles equipped with biodiesel or hybrid engine technologies, in the management of the National Park System, National Wildlife Refuge System, and other public lands and managed by the Secretaries.

SEC. 6106. EFFICIENT INFRASTRUCTURE DEVELOPMENT.

(a) **IN GENERAL.**—The Secretary of Energy and the Chairman of the Federal Energy Regulatory Commission shall jointly undertake a study of the location and extent of anticipated demand growth for natural gas consumption in the Western States, herein defined as the area covered by the Western System Coordinating Council.

(b) **CONTENTS.**—The study under subsection (a) shall include the following:

(1) A review of natural gas demand forecasts by Western State officials, such as the California Energy Commission and the California Public Utilities Commission, which indicate the forecasted levels of demand for natural gas and the geographic distribution of that forecasted demand.

(2) A review of the locations of proposed new natural gas-fired electric generation facilities currently in the approval process in the Western States, and their forecasted impact on natural gas demand.

(3) A review of the locations of existing interstate natural gas transmission pipelines, and interstate natural gas pipelines currently in the planning stage or approval process, throughout the Western States.

(4) A review of the locations and capacity of intrastate natural gas pipelines in the Western States.

(5) Recommendations for the coordination of the development of the natural gas infrastructure indicated in paragraphs (1) through (4).

(c) **REPORT.**—The Secretary shall report the findings and recommendations resulting from the study required by this section to the Committee on Energy and Commerce of the House of Representatives and to the Committee on Energy and Natural Resources of the Senate no later than 6 months after the date of the enactment of this Act. The Chairman of the Federal Energy Regulatory Commission shall report on how the Commission will factor these results into its review of applications of interstate pipelines within the Western States to the Committee on Energy and Commerce of the House of Representatives and to the Committee on Energy and Natural Resources of the Senate no later than 6 months after the date of the enactment of this Act.

TITLE II—OIL AND GAS DEVELOPMENT**Subtitle A—Offshore Oil and Gas****SEC. 6201. SHORT TITLE.**

This subtitle may be referred to as the “Royalty Relief Extension Act of 2001”.

SEC. 6202. LEASE SALES IN WESTERN AND CENTRAL PLANNING AREA OF THE GULF OF MEXICO.

(a) **IN GENERAL.**—For all tracts located in water depths of greater than 200 meters in the Western and Central Planning Area of the Gulf of Mexico, including that portion of the Eastern Planning Area of the Gulf of Mexico encompassing whole lease blocks lying west of 87 degrees, 30 minutes West longitude, any oil or gas lease sale under the Outer Continental Shelf Lands Act occurring within 2 years after the date of the enactment of this Act shall use the bidding system authorized in section 8(a)(1)(H) of the Outer Continental Shelf Lands Act (30 U.S.C. 1337(a)(1)(H)), except that the suspension of royalties shall be set at a volume of not less than the following:

(1) 5 million barrels of oil equivalent for each lease in water depths of 400 to 800 meters.

(2) 9 million barrels of oil equivalent for each lease in water depths of 800 to 1,600 meters.

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

(b) **RELATIONSHIP TO EXISTING AUTHORITY.**—Except as expressly provided in this section, nothing in this section is intended to limit the authority of the Secretary of the Interior under the Outer Continental Shelf Lands Act (43 U.S.C. 1301 et seq.) to provide royalty suspension.

SEC. 6203. SAVINGS CLAUSE.

Nothing in this subtitle shall be construed to affect any offshore pre-leasing, leasing, or development moratorium, including any moratorium applicable to the Eastern Planning Area of the Gulf of Mexico located off the Gulf Coast of Florida.

SEC. 6204. ANALYSIS OF GULF OF MEXICO FIELD SIZE DISTRIBUTION, INTERNATIONAL COMPETITIVENESS, AND INCENTIVES FOR DEVELOPMENT.

(a) **IN GENERAL.**—The Secretary of the Interior and the Secretary of Energy shall enter into appropriate arrangements with the National Academy of Sciences to commission the Academy to perform the following:

(1) Conduct an analysis and review of existing Gulf of Mexico oil and natural gas resource assessments, including—

(A) analysis and review of assessments recently performed by the Minerals Management Service, the 1999 National Petroleum Council Gas Study, the Department of Energy’s Offshore Marginal Property Study, and the Advanced Resources International, Inc. Deepwater Gulf of Mexico model; and

(B) evaluation and comparison of the accuracy of assumptions of the existing assessments with respect to resource field size distribution, hydrocarbon potential, and scenarios for leasing, exploration, and development.

(2) Evaluate the lease terms and conditions offered by the Minerals Management Service for Lease Sale 178, and compare the financial incentives offered by such terms and conditions to financial incentives offered by the terms and conditions that apply under leases for other offshore areas that are competing for the same limited offshore oil and gas exploration and development capital, including offshore areas of West Africa and Brazil.

(3) Recommend what level of incentives for all water depths are appropriate in order to

ensure that the United States optimizes the domestic supply of oil and natural gas from the offshore areas of the Gulf of Mexico that are not subject to current leasing moratoria. Recommendations under this paragraph should be made in the context of the importance of the oil and natural gas resources of the Gulf of Mexico to the future energy and economic needs of the United States.

(b) **REPORT.**—Not later than 180 days after the date of the enactment of this Act, the Secretary of the Interior shall submit a report to the Committee on Resources in the House of Representatives and the Committee on Energy and Natural Resources in the Senate, summarizing the findings of the National Academy of Sciences pursuant to subsection (a) and providing recommendations of the Secretary for new policies or other actions that could help to further increase oil and natural gas production from the Gulf of Mexico.

Subtitle B—Improvements to Federal Oil and Gas Management**SEC. 6221. SHORT TITLE.**

This subtitle may be cited as the “Federal Oil and Gas Lease Management Improvement Demonstration Program Act of 2001”.

SEC. 6222. STUDY OF IMPEDIMENTS TO EFFICIENT LEASE OPERATIONS.

(a) **IN GENERAL.**—The Secretary of the Interior and the Secretary of Agriculture shall jointly undertake a study of the impediments to efficient oil and gas leasing and operations on Federal onshore lands in order to identify means by which unnecessary impediments to the expeditious exploration and production of oil and natural gas on such lands can be removed.

(b) **CONTENTS.**—The study under subsection (a) shall include the following:

(1) A review of the process by which Federal land managers accept or reject an offer to lease, including the timeframes in which such offers are acted upon, the reasons for any delays in acting upon such offers, and any recommendations for expediting the response to such offers.

(2) A review of the approval process for applications for permits to drill, including the timeframes in which such applications are approved, the impact of compliance with other Federal laws on such timeframes, any other reasons for delays in making such approvals, and any recommendations for expediting such approvals.

(3) A review of the approval process for surface use plans of operation, including the timeframes in which such applications are approved, the impact of compliance with other Federal laws on such timeframes, any other reasons for delays in making such approvals, and any recommendations for expediting such approvals.

(4) A review of the process for administrative appeal of decisions or orders of officers or employees of the Bureau of Land Management with respect to a Federal oil or gas lease, including the timeframes in which such appeals are heard and decided, any reasons for delays in hearing or deciding such appeals, and any recommendations for expediting the appeals process.

(c) **REPORT.**—The Secretaries shall report the findings and recommendations resulting from the study required by this section to the Committee on Resources of the House of Representatives and to the Committee on Energy and Natural Resources of the Senate no later than 6 months after the date of the enactment of this Act.

SEC. 6223. ELIMINATION OF UNWARRANTED DENIALS AND STAYS.

(a) **IN GENERAL.**—The Secretary shall ensure that unwarranted denials and stays of

lease issuance and unwarranted restrictions on lease operations are eliminated from the administration of oil and natural gas leasing on Federal land.

(b) **PREPARATION OF LEASING PLAN OR ANALYSIS.**—In preparing a management plan or leasing analysis for oil or natural gas leasing on Federal lands administered by the Bureau of Land Management or the Forest Service, the Secretary concerned shall—

(1) identify and review the restrictions on surface use and operations imposed under the laws (including regulations) of the State in which the lands are located;

(2) consult with the appropriate State agency regarding the reasons for the State restrictions identified under paragraph (1);

(3) identify any differences between the State restrictions identified under paragraph (1) and any restrictions on surface use and operations that would apply under the lease; and

(4) prepare and provide upon request a written explanation of such differences.

(c) **REJECTION OF OFFER TO LEASE.**—

(1) **IN GENERAL.**—If the Secretary rejects an offer to lease Federal lands for oil or natural gas development on the ground that the land is unavailable for oil and natural gas leasing, the Secretary shall provide a written, detailed explanation of the reasons the land is unavailable for leasing.

(2) **PREVIOUS RESOURCE MANAGEMENT DECISION.**—If the determination of unavailability is based on a previous resource management decision, the explanation shall include a careful assessment of whether the reasons underlying the previous decision are still persuasive.

(3) **SEGREGATION OF AVAILABLE LAND FROM UNAVAILABLE LAND.**—The Secretary may not reject an offer to lease Federal land for oil and natural gas development that is available for such leasing on the ground that the offer includes land unavailable for leasing. The Secretary shall segregate available land from unavailable land, on the offeror's request following notice by the Secretary, before acting on the offer to lease.

(d) **DISAPPROVAL OR REQUIRED MODIFICATION OF SURFACE USE PLANS OF OPERATIONS AND APPLICATION FOR PERMIT TO DRILL.**—The Secretary shall provide a written, detailed explanation of the reasons for disapproving or requiring modifications of any surface use plan of operations or application for permit to drill with respect to oil or natural gas development on Federal lands.

(e) **PRESERVATION OF FEDERAL AUTHORITY.**—Nothing in this section or in any identification, review, or explanation prepared under this section shall be construed—

(1) to limit the authority of the Federal Government to impose lease stipulations, restrictions, requirements, or other terms that are different than those that apply under State law; or

(2) to affect the procedures that apply to judicial review of actions taken under this subsection.

SEC. 6224. LIMITATION ON COST RECOVERY FOR APPLICATIONS.

Notwithstanding sections 304 and 504 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1734, 1764) and section 9701 of title 31, United States Code, the Secretary shall not recover the Secretary's costs with respect to applications and other documents relating to oil and gas leases.

SEC. 6225. CONSULTATION WITH SECRETARY OF AGRICULTURE.

Section 17(h) of the Mineral Leasing Act (30 U.S.C. 226(h)) is amended to read as follows:

“(h)(1) In issuing any lease on National Forest System lands reserved from the public domain, the Secretary of the Interior shall consult with the Secretary of Agriculture in determining stipulations on surface use under the lease.

“(2)(A) A lease on lands referred to in paragraph (1) may not be issued if the Secretary of Agriculture determines, after consultation under paragraph (1) and consultation with the Regional Forester having administrative jurisdiction over the National Forest System Lands concerned, that the terms and conditions of the lease, including any prohibition on surface occupancy for lease operations, will not be sufficient to adequately protect such lands under the National Forest Management Act of 1976 (16 U.S.C. 1600 et seq.).

“(B) The authority of the Secretary of Agriculture under this paragraph may be delegated only to the Undersecretary of Agriculture for Natural Resources and Environment.

“(3) The Secretary of Agriculture shall include in the record of decision for a determination under paragraph (2)(A)—

“(A) any written statement regarding the determination that is prepared by a Regional Forester consulted by the Secretary under paragraph (2)(A) regarding the determination; or

“(B) an explanation why such a statement by the Regional Forester is not included.

Subtitle C—Miscellaneous

SEC. 6231. OFFSHORE SUBSALT DEVELOPMENT.

Section 5 of the Outer Continental Shelf Lands Act of 1953 (43 U.S.C. 1334) is amended by adding at the end the following:

“(k) **SUSPENSION OF OPERATIONS FOR SUBSALT EXPLORATION.**—Notwithstanding any other provision of law or regulation, to prevent waste caused by the drilling of unnecessary wells and to facilitate the discovery of additional hydrocarbon reserves, the Secretary may grant a request for a suspension of operations under any lease to allow the reprocessing and reinterpretation of geophysical data to identify and define drilling objectives beneath allocthonous salt sheets.”.

SEC. 6232. PROGRAM ON OIL AND GAS ROYALTIES IN KIND.

(a) **APPLICABILITY OF SECTION.**—Notwithstanding any other provision of law, the provisions of this section shall apply to all royalty in kind accepted by the Secretary of the Interior under any Federal oil or gas lease or permit under section 36 of the Mineral Leasing Act (30 U.S.C. 192), section 27 of the Outer Continental Shelf Lands Act (43 U.S.C. 1353), or any other mineral leasing law, in the period beginning on the date of the enactment of this Act through September 30, 2006.

(b) **TERMS AND CONDITIONS.**—All royalty accruing to the United States under any Federal oil or gas lease or permit under the Mineral Leasing Act (30 U.S.C. 181 et seq.) or the Outer Continental Shelf Lands Act (43 U.S.C. 1331 et seq.) shall, on the demand of the Secretary of the Interior, be paid in oil or gas. If the Secretary of the Interior makes such a demand, the following provisions apply to such payment:

(1) Delivery by, or on behalf of, the lessee of the royalty amount and quality due under the lease satisfies the lessee's royalty obligation for the amount delivered, except that transportation and processing reimbursements paid to, or deductions claimed by, the lessee shall be subject to review and audit.

(2) Royalty production shall be placed in marketable condition by the lessee at no cost to the United States.

(3) The Secretary of the Interior may—

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

(B) transport or process any oil or gas royalty taken in kind.

(4) The Secretary of the Interior may, notwithstanding section 3302 of title 31, United States Code, retain and use a portion of the revenues from the sale of oil and gas royalties taken in kind that otherwise would be deposited to miscellaneous receipts, without regard to fiscal year limitation, or may use royalty production, to pay the cost of—

(A) transporting the oil or gas,

(B) processing the gas, or

(C) disposing of the oil or gas.

(5) The Secretary may not use revenues from the sale of oil and gas royalties taken in kind to pay for personnel, travel, or other administrative costs of the Federal Government.

(c) **REIMBURSEMENT OF COST.**—If the lessee, pursuant to an agreement with the United States or as provided in the lease, processes the royalty gas or delivers the royalty oil or gas at a point not on or adjacent to the lease area, the Secretary of the Interior shall—

(1) reimburse the lessee for the reasonable costs of transportation (not including gathering) from the lease to the point of delivery or for processing costs; or

(2) at the discretion of the Secretary of the Interior, allow the lessee to deduct such transportation or processing costs in reporting and paying royalties in value for other Federal oil and gas leases.

(d) **BENEFIT TO THE UNITED STATES REQUIRED.**—The Secretary may receive oil or gas royalties in kind only if the Secretary determines that receiving such royalties provides benefits to the United States greater than or equal to those that would be realized under a comparable royalty in value program.

(e) **REPORT TO CONGRESS.**—For each of the fiscal years 2002 through 2006 in which the United States takes oil or gas royalties in kind from production in any State or from the Outer Continental Shelf, excluding royalties taken in kind and sold to refineries under subsection (h), the Secretary of the Interior shall provide a report to the Congress describing—

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

(2) an explanation of the evaluation that led the Secretary to take royalties in kind from a lease or group of leases, including the expected revenue effect of taking royalties in kind;

(3) actual amounts received by the United States derived from taking royalties in kind, and costs and savings incurred by the United States associated with taking royalties in kind; and

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

(f) **DEDUCTION OF EXPENSES.**—

(1) **IN GENERAL.**—Before making payments under section 35 of the Mineral Leasing Act (30 U.S.C. 191) or section 8(g) of the Outer Continental Shelf Lands Act (30 U.S.C. 1337(g)) of revenues derived from the sale of royalty production taken in kind from a

lease, the Secretary of the Interior shall deduct amounts paid or deducted under subsections (b)(4) and (c), and shall deposit such amounts to miscellaneous receipts.

(2) ACCOUNTING FOR DEDUCTIONS.—If the Secretary of the Interior allows the lessee to deduct transportation or processing costs under subsection (c), the Secretary may not reduce any payments to recipients of revenues derived from any other Federal oil and gas lease as a consequence of that deduction.

(g) CONSULTATION WITH STATES.—The Secretary of the Interior—

(1) shall consult with a State before conducting a royalty in kind program under this title within the State, and may delegate management of any portion of the Federal royalty in kind program to such State except as otherwise prohibited by Federal law; and

(2) shall consult annually with any State from which Federal oil or gas royalty is being taken in kind to ensure to the maximum extent practicable that the royalty in kind program provides revenues to the State greater than or equal to those which would be realized under a comparable royalty in value program.

(h) PROVISIONS FOR SMALL REFINERIES.—

(1) PREFERENCE.—If the Secretary of the Interior determines that sufficient supplies of crude oil are not available in the open market to refineries not having their own source of supply for crude oil, the Secretary may grant preference to such refineries in the sale of any royalty oil accruing or reserved to the United States under Federal oil and gas leases issued under any mineral leasing law, for processing or use in such refineries at private sale at not less than the market price.

(2) PRORATION AMONG REFINERIES IN PRODUCTION AREA.—In disposing of oil under this subsection, the Secretary of the Interior may, at the discretion of the Secretary, prorate such oil among such refineries in the area in which the oil is produced.

(i) DISPOSITION TO FEDERAL AGENCIES.—

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

(2) OFFSHORE ROYALTY.—Any royalty oil or gas taken in kind from Federal oil and gas leases on the Outer Continental Shelf may be disposed of only under section 27 of the Outer Continental Shelf Lands Act (43 U.S.C. 1353).

(j) PREFERENCE FOR FEDERAL LOW-INCOME ENERGY ASSISTANCE PROGRAMS.—In disposing of royalty oil or gas taken in kind under this section, the Secretary may grant a preference to any person, including any State or Federal agency, for the purpose of providing additional resources to any Federal low-income energy assistance program.

SEC. 6233. MARGINAL WELL PRODUCTION INCENTIVES.

To enhance the economics of marginal oil and gas production by increasing the ultimate recovery from marginal wells when the cash price of West Texas Intermediate crude oil, as posted on the Dow Jones Commodities Index chart, is less than \$15 per barrel for 180 consecutive pricing days or when the price of natural gas delivered at Henry Hub, Louisiana, is less than \$2.00 per million British thermal units for 180 consecutive days, the Secretary shall reduce the royalty rate as production declines for—

(1) onshore oil wells producing less than 30 barrels per day;

(2) onshore gas wells producing less than 120 million British thermal units per day;

(3) offshore oil wells producing less than 300 barrels of oil per day; and

(4) offshore gas wells producing less than 1,200 million British thermal units per day.

SEC. 6234. REIMBURSEMENT FOR COSTS OF NEPA ANALYSES, DOCUMENTATION, AND STUDIES.

(a) IN GENERAL.—The Mineral Leasing Act (30 U.S.C. 181 et seq.) is amended by inserting after section 37 the following:

“REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES, DOCUMENTATION, AND STUDIES

“SEC. 38. (a) IN GENERAL.—The Secretary of the Interior may, through royalty credits, reimburse a person who is a lessee, operator, operating rights owner, or applicant for an oil or gas lease under this Act for amounts paid by the person for preparation by the Secretary (or a contractor or other person selected by the Secretary) of any project-level analysis, documentation, or related study required under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect to the lease.

“(b) CONDITIONS.—The Secretary may provide reimbursement under subsection (b) only if—

“(1) adequate funding to enable the Secretary to timely prepare the analysis, documentation, or related study is not appropriated;

“(2) the person paid the costs voluntarily; and

“(3) the person maintains records of its costs in accordance with regulations prescribed by the Secretary.”

(b) APPLICATION.—The amendments made by this section shall apply with respect to any lease entered into before, on, or after the date of the enactment of this Act.

(c) DEADLINE FOR REGULATIONS.—The Secretary shall issue regulations implementing the amendments made by this section by not later than 90 days after the date of the enactment of this Act.

SEC. 6235. ENCOURAGEMENT OF STATE AND PROVINCIAL PROHIBITIONS ON OFFSHORE DRILLING IN THE GREAT LAKES.

(a) FINDINGS.—The Congress finds the following:

(1) The water resources of the Great Lakes Basin are precious public natural resources, shared and held in trust by the States of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin, and the Canadian Province of Ontario.

(2) The environmental dangers associated with off-shore drilling in the Great Lakes for oil and gas outweigh the potential benefits of such drilling.

(3) In accordance with the Submerged Lands Act (43 U.S.C. 1301 et seq.), each State that borders any of the Great Lakes has authority over the area between that State's coastline and the boundary of Canada or another State.

(4) The States of Illinois, Michigan, New York, Pennsylvania, and Wisconsin each have a statutory prohibition of off-shore drilling in the Great Lakes for oil and gas.

(5) The States of Indiana, Minnesota, and Ohio do not have such a prohibition.

(6) The Canadian Province of Ontario does not have such a prohibition, and drilling for and production of gas occurs in the Canadian portion of Lake Erie.

(b) ENCOURAGEMENT OF STATE AND PROVINCIAL PROHIBITIONS.—The Congress encourages—

(1) the States of Illinois, Michigan, New York, Pennsylvania, and Wisconsin to continue to prohibit off-shore drilling in the Great Lakes for oil and gas;

(2) the States of Indiana, Minnesota, and Ohio and the Canadian Province of Ontario to enact a prohibition of such drilling; and

(3) the Canadian Province of Ontario to require the cessation of any such drilling and any production resulting from such drilling.

TITLE III—GEOTHERMAL ENERGY DEVELOPMENT

SEC. 6301. ROYALTY REDUCTION AND RELIEF.

(a) ROYALTY REDUCTION.—Section 5(a) of the Geothermal Steam Act of 1970 (30 U.S.C. 1004(a)) is amended by striking “not less than 10 per centum or more than 15 per centum” and inserting “not more than 8 per centum”.

(b) ROYALTY RELIEF.—

(1) IN GENERAL.—Notwithstanding section 5 of the Geothermal Steam Act of 1970 (30 U.S.C. 1004(a)) and any provision of any lease under that Act, no royalty is required to be paid—

(A) under any qualified geothermal energy lease with respect to commercial production of heat or energy from a facility that begins such production in the 5-year period beginning on the date of the enactment of this Act; or

(B) on qualified expansion geothermal energy.

(2) 3-YEAR APPLICATION.—Paragraph (1) applies only to commercial production of heat or energy from a facility in the first 3 years of such production.

(c) DEFINITIONS.—In this section:

(1) QUALIFIED EXPANSION GEOTHERMAL ENERGY.—The term “qualified expansion geothermal energy”—

(A) subject to subparagraph (B), means geothermal energy produced from a generation facility for which the rated capacity is increased by more than 10 percent as a result of expansion of the facility carried out in the 5-year period beginning on the date of the enactment of this Act; and

(B) does not include the rated capacity of the generation facility on the date of the enactment of this Act.

(2) QUALIFIED GEOTHERMAL ENERGY LEASE.—The term “qualified geothermal energy lease” means a lease under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.)—

(A) that was executed before the end of the 5-year period beginning on the date of the enactment of this Act; and

(B) under which no commercial production of any form of heat or energy occurred before the date of the enactment of this Act.

SEC. 6302. EXEMPTION FROM ROYALTIES FOR DIRECT USE OF LOW TEMPERATURE GEOTHERMAL ENERGY RESOURCES.

(a) IN GENERAL.—Section 5 of the Geothermal Steam Act of 1970 (30 U.S.C. 1004) is amended—

(1) in paragraph (c) by redesignating subparagraphs (1) and (2) as subparagraphs (A) and (B);

(2) by redesignating paragraphs (a) through (d) in order as paragraphs (1) through (4);

(3) by inserting “(a) IN GENERAL.—” after “SEC. 5.”; and

(4) by adding at the end the following new subsection:

“(b) EXEMPTION FOR USE OF LOW TEMPERATURE RESOURCES.—

“(1) IN GENERAL.—In lieu of any royalty or rental under subsection (a), a lease for qualified development and direct utilization of low temperature geothermal resources shall provide for payment by the lessee of an annual fee of not less than \$100, and not more than \$1,000, in accordance with the schedule issued under paragraph (2).

“(2) SCHEDULE.—The Secretary shall issue a schedule of fees under this section under

which a fee is based on the scale of development and utilization to which the fee applies.

“(3) DEFINITIONS.—In this subsection:

“(A) LOW TEMPERATURE GEOTHERMAL RESOURCES.—The term ‘low temperature geothermal resources’ means geothermal steam and associated geothermal resources having a temperature of less than 195 degrees Fahrenheit.

“(B) QUALIFIED DEVELOPMENT AND DIRECT UTILIZATION.—The term ‘qualified development and direct utilization’ means development and utilization in which all products of geothermal resources, other than any heat utilized, are returned to the geothermal formation from which they are produced.”

(b) EFFECTIVE DATE.—The provisions of this section shall take effect on October 1, 2003.

SEC. 6303. AMENDMENTS RELATING TO LEASING ON FOREST SERVICE LANDS.

The Geothermal Steam Act of 1970 is amended—

(1) in section 15(b) (30 U.S.C. 1014(b))—

(A) by inserting “(1)” after “(b)”; and

(B) in paragraph (1) (as designated by subparagraph (A) of this paragraph) in the first sentence—

(i) by striking “with the consent of, and” and inserting “after consultation with the Secretary of Agriculture and”; and

(ii) by striking “the head of that Department” and inserting “the Secretary of Agriculture”; and

(2) by adding at the end the following:

“(2)(A) A geothermal lease for lands withdrawn or acquired in aid of functions of the Department of Agriculture may not be issued if the Secretary of Agriculture, after the consultation required by paragraph (1) and consultation with any Regional Forester having administrative jurisdiction over the lands concerned, determines that no terms or conditions, including a prohibition on surface occupancy for lease operations, would be sufficient to adequately protect such lands under the National Forest Management Act of 1976 (16 U.S.C. 1600 et seq.).

“(B) The authority of the Secretary of Agriculture under this paragraph may be delegated only to the Undersecretary of Agriculture for Natural Resources and Environment.

“(3) The Secretary of Agriculture shall include in the record of decision for a determination under paragraph (2)(A)—

“(A) any written statement regarding the determination that is prepared by a Regional Forester consulted by the Secretary under paragraph (2)(A) regarding the determination; or

“(B) an explanation why such a statement by the Regional Forester is not included.

SEC. 6304. DEADLINE FOR DETERMINATION ON PENDING NONCOMPETITIVE LEASE APPLICATIONS.

Not later than 90 days after the date of the enactment of this Act, the Secretary of the Interior shall, with respect to each application pending on the date of the enactment of this Act for a lease under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.), issue a final determination of—

(1) whether or not to conduct a lease sale by competitive bidding; and

(2) whether or not to award a lease without competitive bidding.

SEC. 6305. OPENING OF PUBLIC LANDS UNDER MILITARY JURISDICTION.

(a) IN GENERAL.—Except as otherwise provided in the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) and other provisions of Federal law applicable to development of

geothermal energy resources within public lands, all public lands under the jurisdiction of a Secretary of a military department shall be open to the operation of such laws and development and utilization of geothermal steam and associated geothermal resources, as that term is defined in section 2 of the Geothermal Steam Act of 1970 (30 U.S.C. 1001), without the necessity for further action by the Secretary or the Congress.

(b) CONFORMING AMENDMENT.—Section 2689 of title 10, United States Code, is amended by striking “including public lands,” and inserting “other than public lands.”

(c) TREATMENT OF EXISTING LEASES.—Upon the expiration of any lease in effect on the date of the enactment of this Act of public lands under the jurisdiction of a military department for the development of any geothermal resource, such lease may, at the option of the lessee—

(1) be treated as a lease under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.), and be renewed in accordance with such Act; or

(2) be renewed in accordance with the terms of the lease, if such renewal is authorized by such terms.

(d) REGULATIONS.—The Secretary of the Interior, with the advice and concurrence of the Secretary of the military department concerned, shall prescribe such regulations to carry out this section as may be necessary. Such regulations shall contain guidelines to assist in determining how much, if any, of the surface of any lands opened pursuant to this section may be used for purposes incident to geothermal energy resources development and utilization.

(e) CLOSURE FOR PURPOSES OF NATIONAL DEFENSE OR SECURITY.—In the event of a national emergency or for purposes of national defense or security, the Secretary of the Interior, at the request of the Secretary of the military department concerned, shall close any lands that have been opened to geothermal energy resources leasing pursuant to this section.

SEC. 6306. APPLICATION OF AMENDMENTS.

The amendments made by this title apply with respect to any lease executed before, on, or after the date of the enactment of this Act.

SEC. 6307. REVIEW AND REPORT TO CONGRESS.

The Secretary of the Interior shall promptly review and report to the Congress regarding the status of all moratoria on and withdrawals from leasing under the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) of known geothermal resources areas (as that term is defined in section 2 of that Act (30 U.S.C. 1001), specifying for each such area whether the basis for such moratoria or withdrawal still applies.

SEC. 6308. REIMBURSEMENT FOR COSTS OF NEPA ANALYSES, DOCUMENTATION, AND STUDIES.

(a) IN GENERAL.—The Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.) is amended by adding at the end the following:

“REIMBURSEMENT FOR COSTS OF CERTAIN ANALYSES, DOCUMENTATION, AND STUDIES

“SEC. 38. (a) IN GENERAL.—The Secretary of the Interior may, through royalty credits, reimburse a person who is a lessee, operator, operating rights owner, or applicant for a lease under this Act for amounts paid by the person for preparation by the Secretary (or a contractor or other person selected by the Secretary) of any project-level analysis, documentation, or related study required under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) with respect to the lease.

“(b) CONDITIONS.—The Secretary shall may provide reimbursement under subsection (a) only if—

“(1) adequate funding to enable the Secretary to timely prepare the analysis, documentation, or related study is not appropriated;

“(2) the person paid the costs voluntarily; and

“(3) the person maintains records of its costs in accordance with regulations prescribed by the Secretary.”

(b) APPLICATION.—The amendments made by this section shall apply with respect to any lease entered into before, on, or after the date of the enactment of this Act.

(c) DEADLINE FOR REGULATIONS.—The Secretary shall issue regulations implementing the amendments made by this section by not later than 90 days after the date of the enactment of this Act.

TITLE IV—HYDROPOWER

SEC. 6401. STUDY AND REPORT ON INCREASING ELECTRIC POWER PRODUCTION CAPABILITY OF EXISTING FACILITIES.

(a) IN GENERAL.—The Secretary of the Interior shall conduct a study of the potential for increasing electric power production capability at existing facilities under the administrative jurisdiction of the Secretary.

(b) CONTENT.—The study under this section shall include identification and description in detail of each facility that is capable, with or without modification, of producing additional hydroelectric power, including estimation of the existing potential for the facility to generate hydroelectric power.

(c) REPORT.—The Secretary shall submit to the Congress a report on the findings, conclusions, and recommendations of the study under this section by not later than 12 months after the date of the enactment of this Act. The Secretary shall include in the report the following:

(1) The identifications, descriptions, and estimations referred to in subsection (b).

(2) A description of activities the Secretary is currently conducting or considering, or that could be considered, to produce additional hydroelectric power from each identified facility.

(3) A summary of action that has already been taken by the Secretary to produce additional hydroelectric power from each identified facility.

(4) The costs to install, upgrade, or modify equipment or take other actions to produce additional hydroelectric power from each identified facility.

(5) The benefits that would be achieved by such installation, upgrade, modification, or other action, including quantified estimates of any additional energy or capacity from each facility identified under subsection (b).

(6) A description of actions that are planned, underway, or might reasonably be considered to increase hydroelectric power production by replacing turbine runners.

(7) A description of actions that are planned, underway, or might reasonably be considered to increase hydroelectric power production by performing generator uprates and rewinds.

(8) The impact of increased hydroelectric power production on irrigation, fish, wildlife, Indian tribes, river health, water quality, navigation, recreation, fishing, and flood control.

(9) Any additional recommendations the Secretary considers advisable to increase hydroelectric power production from, and reduce costs and improve efficiency at, facilities under the jurisdiction of the Secretary.

SEC. 6402. INSTALLATION OF POWERFORMER AT FOLSOM POWER PLANT, CALIFORNIA.

(a) IN GENERAL.—The Secretary of the Interior may install a powerformer at the Bureau of Reclamation Folsom power plant in Folsom, California, to replace a generator and transformer that are due for replacement due to age.

(b) REIMBURSABLE COSTS.—Costs incurred by the United States for installation of a powerformer under this section shall be treated as reimbursable costs and shall bear interest at current long-term borrowing rates of the United States Treasury at the time of acquisition.

(c) LOCAL COST SHARING.—In addition to reimbursable costs under subsection (b), the Secretary shall seek contributions from power users toward the costs of the powerformer and its installation.

SEC. 6403. STUDY AND IMPLEMENTATION OF INCREASED OPERATIONAL EFFICIENCIES IN HYDROELECTRIC POWER PROJECTS.

(a) IN GENERAL.—The Secretary of Interior shall conduct a study of operational methods and water scheduling techniques at all hydroelectric power plants under the administrative jurisdiction of the Secretary that have an electric power production capacity greater than 50 megawatts, to—

(1) determine whether such power plants and associated river systems are operated so as to maximize energy and capacity capabilities; and

(2) identify measures that can be taken to improve operational flexibility at such plants to achieve such maximization.

(b) REPORT.—The Secretary shall submit a report on the findings, conclusions, and recommendations of the study under this section by not later than 18 months after the date of the enactment of this Act, including a summary of the determinations and identifications under paragraphs (1) and (2) of subsection (a).

(c) COOPERATION BY FEDERAL POWER MARKETING ADMINISTRATIONS.—The Secretary shall coordinate with the Administrator of each Federal power marketing administration in—

(1) determining how the value of electric power produced by each hydroelectric power facility that produces power marketed by the administration can be maximized; and

(2) implementing measures identified under subsection (a)(2).

(d) LIMITATION ON IMPLEMENTATION OF MEASURES.—Implementation under subsections (a)(2) and (b)(2) shall be limited to those measures that can be implemented within the constraints imposed on Department of the Interior facilities by other uses required by law.

SEC. 6404. SHIFT OF PROJECT LOADS TO OFF-PEAK PERIODS.

(a) IN GENERAL.—The Secretary of the Interior shall—

(1) review electric power consumption by Bureau of Reclamation facilities for water pumping purposes; and

(2) make such adjustments in such pumping as possible to minimize the amount of electric power consumed for such pumping during periods of peak electric power consumption, including by performing as much of such pumping as possible during off-peak hours at night.

(b) CONSENT OF AFFECTED IRRIGATION CUSTOMERS REQUIRED.—The Secretary may not under this section make any adjustment in pumping at a facility without the consent of each person that has contracted with the United States for delivery of water from the

facility for use for irrigation and that would be affected by such adjustment.

(c) EXISTING OBLIGATIONS NOT AFFECTED.—This section shall not be construed to affect any existing obligation of the Secretary to provide electric power, water, or other benefits from Bureau of Reclamation facilities.

TITLE V—ARCTIC COASTAL PLAIN DOMESTIC ENERGY

SEC. 6501. SHORT TITLE.

This title may be cited as the “Arctic Coastal Plain Domestic Energy Security Act of 2001”.

SEC. 6502. DEFINITIONS.

In this title:

(1) COASTAL PLAIN.—The term “Coastal Plain” means that area identified as such in the map entitled “Arctic National Wildlife Refuge”, dated August 1980, as referenced in section 1002(b) of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3142(b)(1)), comprising approximately 1,549,000 acres.

(2) SECRETARY.—The term “Secretary”, except as otherwise provided, means the Secretary of the Interior or the Secretary’s designee.

SEC. 6503. LEASING PROGRAM FOR LANDS WITHIN THE COASTAL PLAIN.

(a) IN GENERAL.—The Secretary shall take such actions as are necessary—

(1) to establish and implement in accordance with this title a competitive oil and gas leasing program under the Mineral Leasing Act (30 U.S.C. 181 et seq.) that will result in an environmentally sound program for the exploration, development, and production of the oil and gas resources of the Coastal Plain; and

(2) to administer the provisions of this title through regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other provisions that ensure the oil and gas exploration, development, and production activities on the Coastal Plain will result in no significant adverse effect on fish and wildlife, their habitat, subsistence resources, and the environment, and including, in furtherance of this goal, by requiring the application of the best commercially available technology for oil and gas exploration, development, and production to all exploration, development, and production operations under this title in a manner that ensures the receipt of fair market value by the public for the mineral resources to be leased.

(b) REPEAL.—Section 1003 of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3143) is repealed.

(c) COMPLIANCE WITH REQUIREMENTS UNDER CERTAIN OTHER LAWS.—

(1) COMPATIBILITY.—For purposes of the National Wildlife Refuge System Administration Act of 1966, the oil and gas leasing program and activities authorized by this section in the Coastal Plain are deemed to be compatible with the purposes for which the Arctic National Wildlife Refuge was established, and that no further findings or decisions are required to implement this determination.

(2) ADEQUACY OF THE DEPARTMENT OF THE INTERIOR’S LEGISLATIVE ENVIRONMENTAL IMPACT STATEMENT.—The “Final Legislative Environmental Impact Statement” (April 1987) on the Coastal Plain prepared pursuant to section 1002 of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3142) and section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)) is deemed to satisfy the requirements under the National Environmental

Policy Act of 1969 that apply with respect to actions authorized to be taken by the Secretary to develop and promulgate the regulations for the establishment of a leasing program authorized by this title before the conduct of the first lease sale.

(3) COMPLIANCE WITH NEPA FOR OTHER ACTIONS.—Before conducting the first lease sale under this title, the Secretary shall prepare an environmental impact statement under the National Environmental Policy Act of 1969 with respect to the actions authorized by this title that are not referred to in paragraph (2). Notwithstanding any other law, the Secretary is not required to identify non-leasing alternative courses of action or to analyze the environmental effects of such courses of action. The Secretary shall only identify a preferred action for such leasing and a single leasing alternative, and analyze the environmental effects and potential mitigation measures for those two alternatives. The identification of the preferred action and related analysis for the first lease sale under this title shall be completed within 18 months after the date of the enactment of this Act. The Secretary shall only consider public comments that specifically address the Secretary’s preferred action and that are filed within 20 days after publication of an environmental analysis. Notwithstanding any other law, compliance with this paragraph is deemed to satisfy all requirements for the analysis and consideration of the environmental effects of proposed leasing under this title.

(d) RELATIONSHIP TO STATE AND LOCAL AUTHORITY.—Nothing in this title shall be considered to expand or limit State and local regulatory authority.

(e) SPECIAL AREAS.—

(1) IN GENERAL.—The Secretary, after consultation with the State of Alaska, the city of Kaktovik, and the North Slope Borough, may designate up to a total of 45,000 acres of the Coastal Plain as a Special Area if the Secretary determines that the Special Area is of such unique character and interest so as to require special management and regulatory protection. The Secretary shall designate as such a Special Area the Sadlerochit Spring area, comprising approximately 4,000 acres as depicted on the map referred to in section 6502(1).

(2) MANAGEMENT.—Each such Special Area shall be managed so as to protect and preserve the area’s unique and diverse character including its fish, wildlife, and subsistence resource values.

(3) EXCLUSION FROM LEASING OR SURFACE OCCUPANCY.—The Secretary may exclude any Special Area from leasing. If the Secretary leases a Special Area, or any part thereof, for purposes of oil and gas exploration, development, production, and related activities, there shall be no surface occupancy of the lands comprising the Special Area.

(4) DIRECTIONAL DRILLING.—Notwithstanding the other provisions of this subsection, the Secretary may lease all or a portion of a Special Area under terms that permit the use of horizontal drilling technology from sites on leases located outside the area.

(f) LIMITATION ON CLOSED AREAS.—The Secretary’s sole authority to close lands within the Coastal Plain to oil and gas leasing and to exploration, development, and production is that set forth in this title.

(g) REGULATIONS.—

(1) IN GENERAL.—The Secretary shall prescribe such regulations as may be necessary to carry out this title, including rules and regulations relating to protection of the fish and wildlife, their habitat, subsistence resources, and environment of the Coastal

Plain, by no later than 15 months after the date of the enactment of this Act.

(2) REVISION OF REGULATIONS.—The Secretary shall periodically review and, if appropriate, revise the rules and regulations issued under subsection (a) to reflect any significant biological, environmental, or engineering data that come to the Secretary's attention.

SEC. 6504. LEASE SALES.

(a) IN GENERAL.—Lands may be leased pursuant to this title to any person qualified to obtain a lease for deposits of oil and gas under the Mineral Leasing Act (30 U.S.C. 181 et seq.).

(b) PROCEDURES.—The Secretary shall, by regulation, establish procedures for—

(1) receipt and consideration of sealed nominations for any area in the Coastal Plain for inclusion in, or exclusion (as provided in subsection (c)) from, a lease sale;

(2) the holding of lease sales after such nomination process; and

(3) public notice of and comment on designation of areas to be included in, or excluded from, a lease sale.

(c) LEASE SALE BIDS.—Bidding for leases under this title shall be by sealed competitive cash bonus bids.

(d) ACREAGE MINIMUM IN FIRST SALE.—In the first lease sale under this title, the Secretary shall offer for lease those tracts the Secretary considers to have the greatest potential for the discovery of hydrocarbons, taking into consideration nominations received pursuant to subsection (b)(1), but in no case less than 200,000 acres.

(e) TIMING OF LEASE SALES.—The Secretary shall—

(1) conduct the first lease sale under this title within 22 months after the date of the enactment of this title; and

(2) conduct additional sales so long as sufficient interest in development exists to warrant, in the Secretary's judgment, the conduct of such sales.

SEC. 6505. GRANT OF LEASES BY THE SECRETARY.

(a) IN GENERAL.—The Secretary may grant to the highest responsible qualified bidder in a lease sale conducted pursuant to section 6504 any lands to be leased on the Coastal Plain upon payment by the lessee of such bonus as may be accepted by the Secretary.

(b) SUBSEQUENT TRANSFERS.—No lease issued under this title may be sold, exchanged, assigned, sublet, or otherwise transferred except with the approval of the Secretary. Prior to any such approval the Secretary shall consult with, and give due consideration to the views of, the Attorney General.

SEC. 6506. LEASE TERMS AND CONDITIONS.

(a) IN GENERAL.—An oil or gas lease issued pursuant to this title shall—

(1) provide for the payment of a royalty of not less than 12½ percent in amount or value of the production removed or sold from the lease, as determined by the Secretary under the regulations applicable to other Federal oil and gas leases;

(2) provide that the Secretary may close, on a seasonal basis, portions of the Coastal Plain to exploratory drilling activities as necessary to protect caribou calving areas and other species of fish and wildlife;

(3) require that the lessee of lands within the Coastal Plain shall be fully responsible and liable for the reclamation of lands within the Coastal Plain and any other Federal lands that are adversely affected in connection with exploration, development, production, or transportation activities conducted under the lease and within the Coastal Plain

by the lessee or by any of the subcontractors or agents of the lessee;

(4) provide that the lessee may not delegate or convey, by contract or otherwise, the reclamation responsibility and liability to another person without the express written approval of the Secretary;

(5) provide that the standard of reclamation for lands required to be reclaimed under this title shall be, as nearly as practicable, a condition capable of supporting the uses which the lands were capable of supporting prior to any exploration, development, or production activities, or upon application by the lessee, to a higher or better use as approved by the Secretary;

(6) contain terms and conditions relating to protection of fish and wildlife, their habitat, and the environment as required pursuant to section 6503(a)(2);

(7) provide that the lessee, its agents, and its contractors use best efforts to provide a fair share, as determined by the level of obligation previously agreed to in the 1974 agreement implementing section 29 of the Federal Agreement and Grant of Right of Way for the Operation of the Trans-Alaska Pipeline, of employment and contracting for Alaska Natives and Alaska Native Corporations from throughout the State;

(8) prohibit the export of oil produced under the lease; and

(9) contain such other provisions as the Secretary determines necessary to ensure compliance with the provisions of this title and the regulations issued under this title.

(b) PROJECT LABOR AGREEMENTS.—The Secretary, as a term and condition of each lease under this title and in recognizing the Government's proprietary interest in labor stability and in the ability of construction labor and management to meet the particular needs and conditions of projects to be developed under the leases issued pursuant to this title and the special concerns of the parties to such leases, shall require that the lessee and its agents and contractors negotiate to obtain a project labor agreement for the employment of laborers and mechanics on production, maintenance, and construction under the lease.

SEC. 6507. COASTAL PLAIN ENVIRONMENTAL PROTECTION.

(a) NO SIGNIFICANT ADVERSE EFFECT STANDARD TO GOVERN AUTHORIZED COASTAL PLAIN ACTIVITIES.—The Secretary shall, consistent with the requirements of section 6503, administer the provisions of this title through regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other provisions that—

(1) ensure the oil and gas exploration, development, and production activities on the Coastal Plain will result in no significant adverse effect on fish and wildlife, their habitat, and the environment;

(2) require the application of the best commercially available technology for oil and gas exploration, development, and production on all new exploration, development, and production operations; and

(3) ensure that the maximum amount of surface acreage covered by production and support facilities, including airstrips and any areas covered by gravel berms or piers for support of pipelines, does not exceed 2,000 acres on the Coastal Plain.

(b) SITE-SPECIFIC ASSESSMENT AND MITIGATION.—The Secretary shall also require, with respect to any proposed drilling and related activities, that—

(1) a site-specific analysis be made of the probable effects, if any, that the drilling or related activities will have on fish and wildlife, their habitat, and the environment;

(2) a plan be implemented to avoid, minimize, and mitigate (in that order and to the extent practicable) any significant adverse effect identified under paragraph (1); and

(3) the development of the plan shall occur after consultation with the agency or agencies having jurisdiction over matters mitigated by the plan.

(c) REGULATIONS TO PROTECT COASTAL PLAIN FISH AND WILDLIFE RESOURCES, SUBSISTENCE USERS, AND THE ENVIRONMENT.—Before implementing the leasing program authorized by this title, the Secretary shall prepare and promulgate regulations, lease terms, conditions, restrictions, prohibitions, stipulations, and other measures designed to ensure that the activities undertaken on the Coastal Plain under this title are conducted in a manner consistent with the purposes and environmental requirements of this title.

(d) COMPLIANCE WITH FEDERAL AND STATE ENVIRONMENTAL LAWS AND OTHER REQUIREMENTS.—The proposed regulations, lease terms, conditions, restrictions, prohibitions, and stipulations for the leasing program under this title shall require compliance with all applicable provisions of Federal and State environmental law and shall also require the following:

(1) Standards at least as effective as the safety and environmental mitigation measures set forth in items 1 through 29 at pages 167 through 169 of the "Final Legislative Environmental Impact Statement" (April 1987) on the Coastal Plain.

(2) Seasonal limitations on exploration, development, and related activities, where necessary, to avoid significant adverse effects during periods of concentrated fish and wildlife breeding, denning, nesting, spawning, and migration.

(3) That exploration activities, except for surface geological studies, be limited to the period between approximately November 1 and May 1 each year and that exploration activities shall be supported by ice roads, winter trails with adequate snow cover, ice pads, ice airstrips, and air transport methods, except that such exploration activities may occur at other times, if—

(A) the Secretary determines, after affording an opportunity for public comment and review, that special circumstances exist necessitating that exploration activities be conducted at other times of the year; and

(B) the Secretary finds that such exploration will have no significant adverse effect on the fish and wildlife, their habitat, and the environment of the Coastal Plain.

(4) Design safety and construction standards for all pipelines and any access and service roads, that—

(A) minimize, to the maximum extent possible, adverse effects upon the passage of migratory species such as caribou; and

(B) minimize adverse effects upon the flow of surface water by requiring the use of culverts, bridges, and other structural devices.

(5) Prohibitions on public access and use on all pipeline access and service roads.

(6) Stringent reclamation and rehabilitation requirements, consistent with the standards set forth in this title, requiring the removal from the Coastal Plain of all oil and gas development and production facilities, structures, and equipment upon completion of oil and gas production operations, except that the Secretary may exempt from the requirements of this paragraph those facilities, structures, or equipment that the Secretary determines would assist in the management of the Arctic National Wildlife Refuge and that are donated to the United States for that purpose.

(7) Appropriate prohibitions or restrictions on access by all modes of transportation.

(8) Appropriate prohibitions or restrictions on sand and gravel extraction.

(9) Consolidation of facility siting.

(10) Appropriate prohibitions or restrictions on use of explosives.

(11) Avoidance, to the extent practicable, of springs, streams, and river system; the protection of natural surface drainage patterns, wetlands, and riparian habitats; and the regulation of methods or techniques for developing or transporting adequate supplies of water for exploratory drilling.

(12) Avoidance or reduction of air traffic-related disturbance to fish and wildlife.

(13) Treatment and disposal of hazardous and toxic wastes, solid wastes, reserve pit fluids, drilling muds and cuttings, and domestic wastewater, including an annual waste management report, a hazardous materials tracking system, and a prohibition on chlorinated solvents, in accordance with applicable Federal and State environmental law.

(14) Fuel storage and oil spill contingency planning.

(15) Research, monitoring, and reporting requirements.

(16) Field crew environmental briefings.

(17) Avoidance of significant adverse effects upon subsistence hunting, fishing, and trapping by subsistence users.

(18) Compliance with applicable air and water quality standards.

(19) Appropriate seasonal and safety zone designations around well sites, within which subsistence hunting and trapping shall be limited.

(20) Reasonable stipulations for protection of cultural and archeological resources.

(21) All other protective environmental stipulations, restrictions, terms, and conditions deemed necessary by the Secretary.

(e) **CONSIDERATIONS.**—In preparing and promulgating regulations, lease terms, conditions, restrictions, prohibitions, and stipulations under this section, the Secretary shall consider the following:

(1) The stipulations and conditions that govern the National Petroleum Reserve-Alaska leasing program, as set forth in the 1999 Northeast National Petroleum Reserve-Alaska Final Integrated Activity Plan/Environmental Impact Statement.

(2) The environmental protection standards that governed the initial Coastal Plain seismic exploration program under parts 37.31 to 37.33 of title 50, Code of Federal Regulations.

(3) The land use stipulations for exploratory drilling on the KIC-ASRC private lands that are set forth in Appendix 2 of the August 9, 1983, agreement between Arctic Slope Regional Corporation and the United States.

(f) **FACILITY CONSOLIDATION PLANNING.**—

(1) **IN GENERAL.**—The Secretary shall, after providing for public notice and comment, prepare and update periodically a plan to govern, guide, and direct the siting and construction of facilities for the exploration, development, production, and transportation of Coastal Plain oil and gas resources.

(2) **OBJECTIVES.**—The plan shall have the following objectives:

(A) Avoiding unnecessary duplication of facilities and activities.

(B) Encouraging consolidation of common facilities and activities.

(C) Locating or confining facilities and activities to areas that will minimize impact on fish and wildlife, their habitat, and the environment.

(D) Utilizing existing facilities wherever practicable.

(E) Enhancing compatibility between wildlife values and development activities.

SEC. 6508. EXPEDITED JUDICIAL REVIEW.

(a) **FILING OF COMPLAINT.**—

(1) **DEADLINE.**—Subject to paragraph (2), any complaint seeking judicial review of any provision of this title or any action of the Secretary under this title shall be filed in any appropriate district court of the United States—

(A) except as provided in subparagraph (B), within the 90-day period beginning on the date of the action being challenged; or

(B) in the case of a complaint based solely on grounds arising after such period, within 90 days after the complainant knew or reasonably should have known of the grounds for the complaint.

(2) **VENUE.**—Any complaint seeking judicial review of an action of the Secretary under this title may be filed only in the United States Court of Appeals for the District of Columbia.

(3) **LIMITATION ON SCOPE OF CERTAIN REVIEW.**—Judicial review of a Secretarial decision to conduct a lease sale under this title, including the environmental analysis thereof, shall be limited to whether the Secretary has complied with the terms of this division and shall be based upon the administrative record of that decision. The Secretary's identification of a preferred course of action to enable leasing to proceed and the Secretary's analysis of environmental effects under this division shall be presumed to be correct unless shown otherwise by clear and convincing evidence to the contrary.

(b) **LIMITATION ON OTHER REVIEW.**—Actions of the Secretary with respect to which review could have been obtained under this section shall not be subject to judicial review in any civil or criminal proceeding for enforcement.

SEC. 6509. RIGHTS-OF-WAY ACROSS THE COASTAL PLAIN.

(a) **EXEMPTION.**—Title XI of the Alaska National Interest Lands Conservation Act of 1980 (16 U.S.C. 3161 et seq.) shall not apply to the issuance by the Secretary under section 28 of the Mineral Leasing Act (30 U.S.C. 185) of rights-of-way and easements across the Coastal Plain for the transportation of oil and gas.

(b) **TERMS AND CONDITIONS.**—The Secretary shall include in any right-of-way or easement referred to in subsection (a) such terms and conditions as may be necessary to ensure that transportation of oil and gas does not result in a significant adverse effect on the fish and wildlife, subsistence resources, their habitat, and the environment of the Coastal Plain, including requirements that facilities be sited or designed so as to avoid unnecessary duplication of roads and pipelines.

(c) **REGULATIONS.**—The Secretary shall include in regulations under section 6503(g) provisions granting rights-of-way and easements described in subsection (a) of this section.

SEC. 6510. CONVEYANCE.

In order to maximize Federal revenues by removing clouds on title to lands and clarifying land ownership patterns within the Coastal Plain, the Secretary, notwithstanding the provisions of section 1302(h)(2) of the Alaska National Interest Lands Conservation Act (16 U.S.C. 3192(h)(2)), shall convey—

(1) to the Kaktovik Inupiat Corporation the surface estate of the lands described in paragraph 2 of Public Land Order 6959, to the

extent necessary to fulfill the Corporation's entitlement under section 12 of the Alaska Native Claims Settlement Act (43 U.S.C. 1611); and

(2) to the Arctic Slope Regional Corporation the subsurface estate beneath such surface estate pursuant to the August 9, 1983, agreement between the Arctic Slope Regional Corporation and the United States of America.

SEC. 6511. LOCAL GOVERNMENT IMPACT AID AND COMMUNITY SERVICE ASSISTANCE.

(a) **FINANCIAL ASSISTANCE AUTHORIZED.**—

(1) **IN GENERAL.**—The Secretary may use amounts available from the Coastal Plain Local Government Impact Aid Assistance Fund established by subsection (d) to provide timely financial assistance to entities that are eligible under paragraph (2) and that are directly impacted by the exploration for or production of oil and gas on the Coastal Plain under this title.

(2) **ELIGIBLE ENTITIES.**—The North Slope Borough, Kaktovik, and other boroughs, municipal subdivisions, villages, and any other community organized under Alaska State law shall be eligible for financial assistance under this section.

(b) **USE OF ASSISTANCE.**—Financial assistance under this section may be used only for—

(1) planning for mitigation of the potential effects of oil and gas exploration and development on environmental, social, cultural, recreational and subsistence values;

(2) implementing mitigation plans and maintaining mitigation projects; and

(3) developing, carrying out, and maintaining projects and programs that provide new or expanded public facilities and services to address needs and problems associated with such effects, including firefighting, police, water, waste treatment, medivac, and medical services.

(c) **APPLICATION.**—

(1) **IN GENERAL.**—Any community that is eligible for assistance under this section may submit an application for such assistance to the Secretary, in such form and under such procedures as the Secretary may prescribe by regulation.

(2) **NORTH SLOPE BOROUGH COMMUNITIES.**—A community located in the North Slope Borough may apply for assistance under this section either directly to the Secretary or through the North Slope Borough.

(3) **APPLICATION ASSISTANCE.**—The Secretary shall work closely with and assist the North Slope Borough and other communities eligible for assistance under this section in developing and submitting applications for assistance under this section.

(d) **ESTABLISHMENT OF FUND.**—

(1) **IN GENERAL.**—There is established in the Treasury the Coastal Plain Local Government Impact Aid Assistance Fund.

(2) **USE.**—Amounts in the fund may be used only for providing financial assistance under this section.

(3) **DEPOSITS.**—Subject to paragraph (4), there shall be deposited into the fund amounts received by the United States as revenues derived from rents, bonuses, and royalties under on leases and lease sales authorized under this title.

(4) **LIMITATION ON DEPOSITS.**—The total amount in the fund may not exceed \$10,000,000.

(5) **INVESTMENT OF BALANCES.**—The Secretary of the Treasury shall invest amounts in the fund in interest bearing government securities.

(e) **AUTHORIZATION OF APPROPRIATIONS.**—To provide financial assistance under this section there is authorized to be appropriated to

the Secretary from the Coastal Plain Local Government Impact Aid Assistance Fund \$5,000,000 for each fiscal year.

SEC. 6512. REVENUE ALLOCATION.

(a) FEDERAL AND STATE DISTRIBUTION.—

(1) IN GENERAL.—Notwithstanding section 6504 of this Act, the Mineral Leasing Act (30 U.S.C. 181 et. seq.), or any other law, of the amount of adjusted bonus, rental, and royalty revenues from oil and gas leasing and operations authorized under this title—

(A) 50 percent shall be paid to the State of Alaska; and

(B) the balance shall be deposited into the Renewable Energy Technology Investment Fund and the Royalties Conservation Fund as provided in this section.

(2) ADJUSTMENTS.—Adjustments to bonus, rental, and royalty amounts from oil and gas leasing and operations authorized under this title shall be made as necessary for overpayments and refunds from lease revenues received in current or subsequent periods before distribution of such revenues pursuant to this section.

(3) TIMING OF PAYMENTS TO STATE.—Payments to the State of Alaska under this section shall be made semiannually.

(b) RENEWABLE ENERGY TECHNOLOGY INVESTMENT FUND.—

(1) ESTABLISHMENT AND AVAILABILITY.—There is hereby established in the Treasury of the United States a separate account which shall be known as the “Renewable Energy Technology Investment Fund”.

(2) DEPOSITS.—Fifty percent of adjusted revenues from bonus payments for leases issued under this title shall be deposited into the Renewable Energy Technology Investment Fund.

(3) USE, GENERALLY.—Subject to paragraph (4), funds deposited into the Renewable Energy Technology Investment Fund shall be used by the Secretary of Energy to finance research grants, contracts, and cooperative agreements and expenses of direct research by Federal agencies, including the costs of administering and reporting on such a program of research, to improve and demonstrate technology and develop basic science information for development and use of renewable and alternative fuels including wind energy, solar energy, geothermal energy, and energy from biomass. Such research may include studies on deployment of such technology including research on how to lower the costs of introduction of such technology and of barriers to entry into the market of such technology.

(4) USE FOR ADJUSTMENTS AND REFUNDS.—If for any circumstances, adjustments or refunds of bonus amounts deposited pursuant to this title become warranted, 50 percent of the amount necessary for the sum of such adjustments and refunds may be paid by the Secretary from the Renewable Energy Technology Investment Fund.

(5) CONSULTATION AND COORDINATION.—Any specific use of the Renewable Energy Technology Investment Fund shall be determined only after the Secretary of Energy consults and coordinates with the heads of other appropriate Federal agencies.

(6) REPORTS.—Not later than 1 year after the date of the enactment of this Act and on an annual basis thereafter, the Secretary of Energy shall transmit to the Committee on Science of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report on the use of funds under this subsection and the impact of and efforts to integrate such uses with other energy research efforts.

(c) ROYALTIES CONSERVATION FUND.—

(1) ESTABLISHMENT AND AVAILABILITY.—There is hereby established in the Treasury of the United States a separate account which shall be known as the “Royalties Conservation Fund”.

(2) DEPOSITS.—Fifty percent of revenues from rents and royalty payments for leases issued under this title shall be deposited into the Royalties Conservation Fund.

(3) USE, GENERALLY.—Subject to paragraph (4), funds deposited into the Royalties Conservation Fund—

(A) may be used by the Secretary of the Interior and the Secretary of Agriculture to finance grants, contracts, cooperative agreements, and expenses for direct activities of the Department of the Interior and the Forest Service to restore and otherwise conserve lands and habitat and to eliminate maintenance and improvements backlogs on Federal lands, including the costs of administering and reporting on such a program; and

(B) may be used by the Secretary of the Interior to finance grants, contracts, cooperative agreements, and expenses—

(i) to preserve historic Federal properties;

(ii) to assist States and Indian Tribes in preserving their historic properties;

(iii) to foster the development of urban parks; and

(iv) to conduct research to improve the effectiveness and lower the costs of habitat restoration.

(4) USE FOR ADJUSTMENTS AND REFUNDS.—If for any circumstances, refunds or adjustments of royalty and rental amounts deposited pursuant to this title become warranted, 50 percent of the amount necessary for the sum of such adjustments and refunds may be paid from the Royalties Conservation Fund.

(d) AVAILABILITY.—Moneys covered into the accounts established by this section—

(1) shall be available for expenditure only to the extent appropriated therefor;

(2) may be appropriated without fiscal-year limitation; and

(3) may be obligated or expended only as provided in this section.

TITLE VI—CONSERVATION OF ENERGY BY THE DEPARTMENT OF THE INTERIOR

SEC. 6601. ENERGY CONSERVATION BY THE DEPARTMENT OF THE INTERIOR.

(a) IN GENERAL.—The Secretary of the Interior shall—

(1) conduct a study to identify, evaluate, and recommend opportunities for conserving energy by reducing the amount of energy used by facilities of the Department of the Interior; and

(2) wherever feasible and appropriate, reduce the use of energy from traditional sources by encouraging use of alternative energy sources, including solar power and power from fuel cells, throughout such facilities and the public lands of the United States.

(b) REPORTS.—The Secretary shall submit to the Congress—

(1) by not later than 90 days after the date of the enactment of this Act, a report containing the findings, conclusions, and recommendations of the study under subsection (a)(1); and

(2) by not later than December 31 each year, an annual report describing progress made in—

(A) conserving energy through opportunities recommended in the report under paragraph (1); and

(B) encouraging use of alternative energy sources under subsection (a)(2).

SEC. 6602. AMENDMENT TO BUY INDIAN ACT.

Section 23 of the Act of June 25, 1910 (25 U.S.C. 47; commonly known as the “Buy Indian Act”) is amended by inserting “energy products, and energy by-products,” after “printing;”.

TITLE VII—COAL

SEC. 6701. LIMITATION ON FEES WITH RESPECT TO COAL LEASE APPLICATIONS AND DOCUMENTS.

Notwithstanding sections 304 and 504 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1734, 1764) and section 9701 of title 31, United States Code, the Secretary shall not recover the Secretary’s costs with respect to applications and other documents relating coal leases.

SEC. 6702. MINING PLANS.

Section 2(d)(2) of the Mineral Leasing Act (30 U.S.C. 202a(2)) is amended—

(1) by inserting “(A)” after “(2)”; and

(2) by adding at the end the following:

“(B) The Secretary may establish a period of more than 40 years if the Secretary determines that the longer period—

“(i) will ensure the maximum economic recovery of a coal deposit; or

“(ii) the longer period is in the interest of the orderly, efficient, or economic development of a coal resources.”.

SEC. 6703. PAYMENT OF ADVANCE ROYALTIES UNDER COAL LEASES.

(a) IN GENERAL.—Section 7(b) of the Mineral Leasing Act of 1920 (30 U.S.C. 207(b)) is amended to read as follows:

“(b)(1) Each lease shall be subjected to the condition of diligent development and continued operation of the mine or mines, except where operations under the lease are interrupted by strikes, the elements, or casualties not attributable to the lessee.

“(2)(A) The Secretary of the Interior, upon determining that the public interest will be served thereby, may suspend the condition of continued operation upon the payment of advance royalties.

“(B) Such advance royalties shall be computed based on the average price for coal sold in the spot market from the same region during the last month of each applicable continued operation year.

“(C) The aggregate number of years during the initial and any extended term of any lease for which advance royalties may be accepted in lieu of the condition of continued operation shall not exceed 20.

“(3) The amount of any production royalty paid for any year shall be reduced (but not below zero) by the amount of any advance royalties paid under such lease to the extent that such advance royalties have not been used to reduce production royalties for a prior year.

“(4) This subsection shall be applicable to any lease or logical mining unit in existence on the date of the enactment of this paragraph or issued or approved after such date.

“(5) Nothing in this subsection shall be construed to affect the requirement contained in the second sentence of subsection (a) relating to commencement of production at the end of 10 years.”.

(b) AUTHORITY TO WAIVE, SUSPEND, OR REDUCE ADVANCE ROYALTIES.—Section 39 of the Mineral Leasing Act (30 U.S.C. 209) is amended by striking the last sentence.

SEC. 6704. ELIMINATION OF DEADLINE FOR SUBMISSION OF COAL LEASE OPERATION AND RECLAMATION PLAN.

Section 7(c) of the Mineral Leasing Act (30 U.S.C. 207(c)) is amended by striking “and not later than three years after a lease is issued;”.

TITLE VIII—INSULAR AREAS ENERGY SECURITY

SEC. 6801. INSULAR AREAS ENERGY SECURITY.

Section 604 of the Act entitled "An Act to authorize appropriations for certain insular areas of the United States, and for other purposes", approved December 24, 1980 (Public Law 96-597; 94 Stat. 3480-3481), is amended—

(1) in subsection (a)(4) by striking the period and inserting a semicolon;

(2) by adding at the end of subsection (a) the following new paragraphs:

"(5) electric power transmission and distribution lines in insular areas are inadequate to withstand damage caused by the hurricanes and typhoons which frequently occur in insular areas and such damage often costs millions of dollars to repair; and

"(6) the refinement of renewable energy technologies since the publication of the 1982 Territorial Energy Assessment prepared pursuant to subsection (c) reveals the need to reassess the state of energy production, consumption, infrastructure, reliance on imported energy, and indigenous sources in regard to the insular areas."

(3) by amending subsection (e) to read as follows:

"(e)(1) The Secretary of the Interior, in consultation with the Secretary of Energy and the chief executive officer of each insular area, shall update the plans required under subsection (c) by—

"(A) updating the contents required by subsection (c);

"(B) drafting long-term energy plans for such insular areas with the objective of reducing, to the extent feasible, their reliance on energy imports by the year 2010 and maximizing, to the extent feasible, use of indigenous energy sources; and

"(C) drafting long-term energy transmission line plans for such insular areas with the objective that the maximum percentage feasible of electric power transmission and distribution lines in each insular area be protected from damage caused by hurricanes and typhoons.

"(2) Not later than May 31, 2003, the Secretary of the Interior shall submit to Congress the updated plans for each insular area required by this subsection."; and

(4) by amending subsection (g)(4) to read as follows:

"(4) **POWER LINE GRANTS FOR TERRITORIES.**—

"(A) **IN GENERAL.**—The Secretary of the Interior is authorized to make grants to governments of territories of the United States to carry out eligible projects to protect electric power transmission and distribution lines in such territories from damage caused by hurricanes and typhoons.

"(B) **ELIGIBLE PROJECTS.**—The Secretary may award grants under subparagraph (A) only to governments of territories of the United States that submit written project plans to the Secretary for projects that meet the following criteria:

"(i) The project is designed to protect electric power transmission and distribution lines located in one or more of the territories of the United States from damage caused by hurricanes and typhoons.

"(ii) The project is likely to substantially reduce the risk of future damage, hardship, loss, or suffering.

"(iii) The project addresses one or more problems that have been repetitive or that pose a significant risk to public health and safety.

"(iv) The project is not likely to cost more than the value of the reduction in direct damage and other negative impacts that the project is designed to prevent or mitigate.

"(v) The project design has taken into consideration long-term changes to the areas and persons it is designed to protect and has manageable future maintenance and modification requirements.

"(vi) The project plan includes an analysis of a range of options to address the problem it is designed to prevent or mitigate and a justification for the selection of the project in light of that analysis.

"(vii) The applicant has demonstrated to the Secretary that the matching funds required by subparagraph (D) are available.

"(C) **PRIORITY.**—When making grants under this paragraph, the Secretary shall give priority to grants for projects which are likely to—

"(i) have the greatest impact on reducing future disaster losses; and

"(ii) best conform with plans that have been approved by the Federal Government or the government of the territory where the project is to be carried out for development or hazard mitigation for that territory.

"(D) **MATCHING REQUIREMENT.**—The Federal share of the cost for a project for which a grant is provided under this paragraph shall not exceed 75 percent of the total cost of that project. The non-Federal share of the cost may be provided in the form of cash or services.

"(E) **TREATMENT OF FUNDS FOR CERTAIN PURPOSES.**—Grants provided under this paragraph shall not be considered as income, a resource, or a duplicative program when determining eligibility or benefit levels for Federal major disaster and emergency assistance.

"(F) **AUTHORIZATION OF APPROPRIATIONS.**—There is authorized to be appropriated to carry out this paragraph \$5,000,000 for each fiscal year beginning after the date of the enactment of this paragraph."

DIVISION G

SEC. 7101. BUY AMERICAN.

No funds authorized under this Act shall be available to any person or entity that has been convicted of violating the Buy American Act (41 U.S.C. 10a-10c).

DIVISION H

Sec. 8101. PROHIBITION ON HUMAN CLONING.

(a) **IN GENERAL.**—Title 18, United States Code, is amended by inserting after chapter 15, the following:

"CHAPTER 16—HUMAN CLONING

"Sec.

"301. Definitions.

"302. Prohibition on human cloning.

"§ 301. Definitions

"In this chapter:

"(1) **HUMAN CLONING.**—The term 'human cloning' means human asexual reproduction, accomplished by introducing nuclear material from one or more human somatic cells into a fertilized or unfertilized oocyte whose nuclear material has been removed or inactivated so as to produce a living organism (at any stage of development) that is genetically virtually identical to an existing or previously existing human organism.

"(2) **ASEXUAL REPRODUCTION.**—The term 'asexual reproduction' means reproduction not initiated by the union of oocyte and sperm.

"(3) **SOMATIC CELL.**—The term 'somatic cell' means a diploid cell (having a complete set of chromosomes) obtained or derived from a living or deceased human body at any stage of development.

"(4) **CLONING.**—The term 'cloning' means the production of a genetically identical copy of an organism or cell, or the production of a genetically identical copy of a cell or tissue for transplantation into another individual.

"(5) **GENETICALLY VIRTUALLY IDENTICAL.**—The term 'genetically virtually identical' means a copy of an organism or cell that is genetically identical to the original organism or cell, except for mutations that occur during the cloning process.

"§ 302. Prohibition on human cloning

"(a) **IN GENERAL.**—It shall be unlawful for any person or entity, public or private, in or affecting interstate commerce, knowingly—

"(1) to perform or attempt to perform human cloning;

"(2) to participate in an attempt to perform human cloning; or

"(3) to ship or receive for any purpose an embryo produced by human cloning or any product derived from such embryo.

"(b) **IMPORTATION.**—It shall be unlawful for any person or entity, public or private, knowingly to import for any purpose an embryo produced by human cloning, or any product derived from such embryo.

"(c) **PENALTIES.**—

"(1) **CRIMINAL PENALTY.**—Any person or entity that violates this section shall be fined under this title or imprisoned not more than 10 years, or both.

"(2) **CIVIL PENALTY.**—Any person or entity that violates any provision of this section shall be subject to, in the case of a violation that involves the derivation of a pecuniary gain, a civil penalty of not less than \$1,000,000 and not more than an amount equal to the amount of the gross gain multiplied by 2, if that amount is greater than \$1,000,000.

"(d) **SCIENTIFIC RESEARCH.**—Nothing in this section restricts areas of scientific research not specifically prohibited by this section, including research in the use of nuclear transfer or other cloning techniques to produce molecules, DNA, cells other than human embryos, tissues, organs, plants, or animals other than humans."

(b) **STUDY AND REPORT.**—

(1) **IN GENERAL.**—The General Accounting Office shall conduct a study to assess the need (if any) for amendment of the prohibition on human cloning, as defined in section 301 of title 18, United States Code, as added by this section, which study shall include—

(A) a discussion of new developments in medical technology concerning human cloning and somatic cell nuclear transfer, the need (if any) for somatic cell nuclear transfer to produce medical advances, current public attitudes and prevailing ethical views concerning the use of somatic cell nuclear transfer, and potential legal implications of research in somatic cell nuclear transfer; and

(B) a review of any technological developments that may require that technical changes be made to chapter 16 of title 18, United States Code, as added by this section.

(2) **REPORT.**—The General Accounting Office shall transmit to Congress, within 4 years after the date of enactment of this Act, a report containing the findings and conclusions of its study, together with recommendations for any legislation or administrative actions which it considers appropriate.

(c) **CLERICAL AMENDMENT.**—The table of chapters for part I of title 18, United States Code, is amended by inserting after the item relating to chapter 15 the following:

"16. Human Cloning 301".

(d) **EFFECTIVE DATE.**—This section, and the amendments made by this section, shall take effect the day after the date of enactment of this Act, and shall expire on the date that is 180 days after the date of enactment of this Act.

SA 2172. Mr. HOLLINGS submitted an amendment intended to be proposed by him to the bill S. 1743, to create a temporary reinsurance mechanism to enhance the availability of terrorism

insurance; which was referred to the Committee on Commerce, Science, and Transportation, as follows:

At the appropriate place, insert the following:

SEC. . TAX-EXEMPT STATUS OF TERRORISM RISK-RELATED INCREASED PREMIUM PASSTHROUGH ACCOUNTS.

Amounts received by participating insurers as increased premiums under section 9(a) and deposited in the separate segregated account required by section 9(b), and amounts earned as interest, dividends, or other income on funds deposited in such account, shall be exempt from all Federal, State, and local income and excise taxes, and may not be taken into account for the purpose of determining any other tax liability of the participating insurer.

SA 2173. Mr. BURNS submitted an amendment intended to be proposed by him to the bill H.R. 10, to provide for pension reform, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

TITLE IX—CAPITAL GRANTS FOR RAILROAD TRACK

SEC. 901. ESTABLISHMENT OF PROGRAM.

(a) **AUTHORITY.**—Chapter 223 of title 49, United States Code, is amended to read as follows:

“CHAPTER 223—CAPITAL GRANTS FOR RAILROAD TRACK

“Sec.

“22301. Capital grants for railroad track.

“§ 22301. Capital grants for railroad track

“(a) **ESTABLISHMENT OF PROGRAM.**—

“(1) **ESTABLISHMENT.**—The Secretary of Transportation shall establish a program of capital grants for the rehabilitation, preservation, or improvement of railroad track (including roadbed, bridges, and related track structures) of class II and class III railroads. Such grants shall be for rehabilitating, preserving, or improving track used primarily for freight transportation to a standard ensuring that the track can be operated safely and efficiently, including grants for rehabilitating, preserving, or improving track to handle 286,000 pound rail cars. Grants may be provided under this chapter—

“(A) directly to the class II or class III railroad; or

“(B) with the concurrence of the class II or class III railroad, to a State or local government.

“(2) **STATE COOPERATION.**—Class II and class III railroad applicants for a grant under this chapter are encouraged to utilize the expertise and assistance of State transportation agencies in applying for and administering such grants. State transportation agencies are encouraged to provide such expertise and assistance to such railroads.

“(3) **INTERIM REGULATIONS.**—Not later than December 31, 2001, the Secretary shall issue temporary regulations to implement the program under this section. Subchapter II of chapter 5 of title 5 does not apply to a temporary regulation issued under this paragraph or to an amendment to such a temporary regulation.

“(4) **FINAL REGULATIONS.**—Not later than October 1, 2002, the Secretary shall issue final regulations to implement the program under this section.

“(b) **MAXIMUM FEDERAL SHARE.**—The maximum Federal share for carrying out a project under this section shall be 80 percent

of the project cost. The non-Federal share may be provided by any non-Federal source in cash, equipment, or supplies. Other in-kind contributions may be approved by the Secretary on a case by case basis consistent with this chapter.

“(c) **PROJECT ELIGIBILITY.**—For a project to be eligible for assistance under this section the track must have been operated or owned by a class II or class III railroad as of the date of the enactment of the Railroad Track Modernization Act of 2001.

“(d) **USE OF FUNDS.**—Grants provided under this section shall be used to implement track capital projects as soon as possible. In no event shall grant funds be contractually obligated for a project later than the end of the third Federal fiscal year following the year in which the grant was awarded. Any funds not so obligated by the end of such fiscal year shall be returned to the Secretary for reallocation.

“(e) **ADDITIONAL PURPOSE.**—In addition to making grants for projects as provided in subsection (a), the Secretary may also make grants to supplement direct loans or loan guarantees made under title V of the Railroad Revitalization and Regulatory Reform Act of 1976 (45 U.S.C. 822(d)), for projects described in the last sentence of section 502(d) of such title. Grants made under this subsection may be used, in whole or in part, for paying credit risk premiums, lowering rates of interest, or providing for a holiday on principal payments.

“(f) **EMPLOYEE PROTECTION.**—The Secretary shall require as a condition of any grant made under this section that the recipient railroad provide a fair arrangement at least as protective of the interests of employees who are affected by the project to be funded with the grant as the terms imposed under section 11326(a), as in effect on the date of the enactment of the Railroad Track Modernization Act of 2001.

“(g) **LABOR STANDARDS.**—

“(1) **PREVAILING WAGES.**—The Secretary shall ensure that laborers and mechanics employed by contractors and subcontractors in construction work financed by a grant made under this section will be paid wages not less than those prevailing on similar construction in the locality, as determined by the Secretary of Labor under the Act of March 3, 1931 (known as the Davis-Bacon Act; 40 U.S.C. 276a et seq.). The Secretary shall make a grant under this section only after being assured that required labor standards will be maintained on the construction work.

“(2) **WAGE RATES.**—Wage rates in a collective bargaining agreement negotiated under the Railway Labor Act (45 U.S.C. 151 et seq.) are deemed for purposes of this subsection to comply with the Act of March 3, 1931 (known as the Davis-Bacon Act; 40 U.S.C. 276a et seq.).

“(h) **STUDY.**—The Secretary shall conduct a study of the projects carried out with grant assistance under this section to determine the public interest benefits associated with the light density railroad networks in the States and their contribution to a multimodal transportation system. Not later than March 31, 2003, the Secretary shall report to Congress any recommendations the Secretary considers appropriate regarding the eligibility of light density rail networks for Federal infrastructure financing.

“(i) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to the Secretary of Transportation \$350,000,000 for each of the fiscal years 2002 through 2004 for carrying out this section.”.

(b) **CONFORMING AMENDMENT.**—The item relating to chapter 223 in the table of chapters

of subtitle V of title 49, United States Code, is amended to read as follows:

“223. CAPITAL GRANTS FOR RAILROAD TRACK 22301”.

SA 2174. Mr. BURNS submitted an amendment intended to be proposed by him to the bill H.R. 10, to provide for pension reform, and for other purposes; which was ordered to lie on the table; as follows:

At the end, add the following:

TITLE IX—RAILROAD COMPETITION, ARBITRATION, AND SERVICE

SEC. 901. SHORT TITLE; AMENDMENT OF TITLE 49, UNITED STATES CODE.

(a) **SHORT TITLE.**—This title may be cited as the “Railroad Competition, Arbitration, and Service Act of 2001”.

(b) **AMENDMENT OF TITLE 49, UNITED STATES CODE.**—Except as otherwise expressly provided, whenever in this title an amendment or repeal is expressed in terms of an amendment to, or a repeal of, a section or other provision, the reference shall be considered to be made to a section or other provision of title 49, United States Code.

SEC. 902. PURPOSES.

The purposes of this title are as follows:

(1) To eliminate unreasonable barriers to competition among rail carriers.

(2) To provide for use of expedited, private means for the resolution of disputes between shippers and carriers.

SEC. 903. CLARIFICATION OF RAIL TRANSPORTATION POLICY.

Section 10101 is amended—

(1) by inserting “(a) IN GENERAL.—” before “In regulating”; and

(2) by adding at the end the following:

“(b) **PRIMARY OBJECTIVES.**—The primary objectives of the rail transportation policy of the United States are as follows:

“(1) To ensure effective competition among rail carriers at origins and destinations.

“(2) To maintain reasonable rates for rail transportation where effective competition among rail carriers has not been achieved.

“(3) To maintain consistent and efficient rail transportation service for shippers.”.

SEC. 904. ARBITRATION OF CERTAIN RAIL RATE, SERVICE, AND OTHER DISPUTES.

(a) **IN GENERAL.**—

(1) **AUTHORITY.**—Chapter 117 of title 49 is amended by adding the following section after section 11707:

“§ 11708. Arbitration of certain rail rate, service, and other disputes

“(a) **ELECTION OF ARBITRATION.**—A dispute described in subsection (b) shall be submitted for resolution by arbitration upon the election of any party to the dispute that is not a rail carrier.

“(b) **COVERED DISPUTES.**—(1) Except as provided in paragraph (2), subsection (a) applies to any dispute between a party described in subsection (a) and a rail carrier that—

“(A) arises under section 10701(c), 10701(d), 10702, 10704(a)(1), 10707, 10741, 10745, 10746, 11101(a), 11102, 11121, 11122, or 11706 of this title; and

“(B) involves—

“(i) the payment of money;

“(ii) a rate charged by the rail carrier; or

“(iii) transportation by the rail carrier.

“(2) Subsection (a) does not apply to a dispute if the resolution of the dispute would necessarily involve the promulgation of regulations generally applicable to all rail carriers.

“(c) **ARBITRATION PROCEDURES.**—The Secretary of Transportation shall prescribe in

regulations the procedures for the resolution of disputes submitted for arbitration under subsection (a). The regulations shall include the following:

“(1) Procedures, including time limits, for the selection of an arbitrator or panel of arbitrators for a dispute from among arbitrators listed on the roster of arbitrators established and maintained by the Secretary under subsection (d)(1).

“(2) Policies, requirements, and procedures for the compensation of each arbitrator for a dispute to be paid by the parties to the dispute.

“(3) Procedures for expedited arbitration of a dispute, including procedures for discovery authorized in the exercise of discretion by the arbitrator or panel of arbitrators.

“(d) SELECTION OF ARBITRATORS.—(1) The Secretary of Transportation shall establish, maintain, and revise as necessary a roster of arbitrators who—

“(A) are experienced in transportation or economic issues within the jurisdiction of the Board or issues similar to those issues;

“(B) satisfy requirements for neutrality and other qualification requirements prescribed by the Secretary;

“(C) consent to serve as arbitrators under this section; and

“(D) are not officers or employees of the United States.

(2) For a dispute involving an amount not in excess of \$1,000,000, the regulations under subsection (c) shall provide for arbitration by a single arbitrator selected by—

“(A) the parties to the dispute; or

“(B) if the parties cannot agree, the Secretary of Transportation, from the roster of arbitrators prescribed under paragraph (1).

“(3)(A) For a dispute involving an amount in excess of \$1,000,000, the regulations under subsection (c) shall provide for arbitration by a panel of three arbitrators selected as follows:

“(i) One arbitrator selected by the party electing the arbitration.

“(ii) One arbitrator selected by the rail carrier or all of the rail carriers who are parties to the dispute, as the case may be.

“(iii) One arbitrator selected by the two arbitrators selected under clauses (i) and (ii).

“(B) If a selection of an arbitrator is not made under clause (ii) or (iii) of subparagraph (A) within the time limits prescribed in the regulations, then the Secretary shall select the arbitrator from the roster of arbitrators prescribed under paragraph (1).

“(e) DISPUTES ON RATES OR CHARGES.—(1) The requirements of this subsection apply to a dispute submitted under this section for resolution of an issue of the reasonableness of a rate or charge imposed by a rail carrier.

“(2)(A) Subject to subparagraph (B), the decision of an arbitrator or panel of arbitrators in a dispute on an issue described in paragraph (1) shall be one of the final offers of the parties to the dispute.

“(B) A decision under subparagraph (A) may not provide for a rate for transportation by a rail carrier that would result in a revenue-variable cost percentage for such transportation that is less than 180 percent, as determined under standards applied in the administration of section 10707(d) of this title.

“(3) If the party electing arbitration of a dispute described in paragraph (1) seeks compensation for damages incurred by the party as a result of a specific rate or charge imposed by a rail carrier for the transportation of items for the party and the party alleges an amount of damages that does not exceed \$500,000 for any year as a result of the imposition of the specific rate or charge, the arbi-

trator, in making a decision on the dispute, shall consider the rates or charges, respectively, that are imposed by rail carriers for the transportation of similar items under similar circumstances in rail transportation markets where there is effective competition, as determined under standards applied by the Board in the administration of section 10707(a) of this title.

“(f) TIME FOR ISSUANCE OF ARBITRATION DECISION.—Notwithstanding any other provision of this subtitle limiting the time for the taking of an action under this subtitle, the arbitrator or panel of arbitrators for a dispute submitted for resolution under this section shall issue a final decision on the dispute within the maximum period after the date on which the arbitrator or panel is selected to resolve the dispute under this section, as follows:

“(1) In the case of a dispute involving \$1,000,000 or less, 120 days.

“(2) In the case of a dispute involving more than \$1,000,000, 180 days.

“(g) AUTHORIZED RELIEF.—A decision of an arbitrator or panel of arbitrators under this section may grant relief in either or both of the following forms:

“(1) Monetary damages, to the extent authorized to be provided by the Board in such a dispute under this subtitle.

“(2) An order that requires specific performance of any obligation under a statute determined to be applicable, including any limitation of rates to reasonable rates, for any period not in excess of two years beginning on the date of the decision.

“(h) JUDICIAL CONFIRMATION AND REVIEW.—The following provisions of title 9 shall apply to an arbitration decision issued in a dispute under this section:

“(1) Section 9 (relating to confirmation of an award in an arbitration decision), which shall be applied as if the parties had entered into an agreement under title 9 to submit the dispute to the arbitration and had provided in that agreement for a judgment of an unspecified court to be entered on the award made pursuant to the arbitration.

“(2) Section 10 (relating to judicial vacation of an award in an arbitration decision).”

(2) CLERICAL AMENDMENT.—The table of sections at the beginning of such chapter is amended by inserting after the item relating to section 11707 the following:

“11708. Arbitration of certain rail rate, service, and other disputes.”

(b) TIME FOR IMPLEMENTING CERTAIN REQUIREMENTS.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Transportation shall promulgate regulations, prescribe a roster of arbitrators, and complete any other action that is necessary for the implementation of section 11708 of title 49, United States Code (as added by subsection (a)).

SEC. 905. ELIMINATION OF BARRIERS TO COMPETITION BETWEEN CLASS I CARRIERS AND CLASS II AND CLASS III CARRIERS.

(a) RESTRICTION ON APPROVAL OR EXEMPTION OF CARRIERS' ACTIVITIES BY SURFACE TRANSPORTATION BOARD.—Section 10901 is amended by adding at the end the following new subsection:

“(e)(1) The Board may not issue under this section a certificate authorizing an activity described in subsection (a), or exempt from the applicability of this section under section 10502 of this title such an activity that involves a transfer of interest in a line of railroad, by a Class I rail carrier to a Class II or III rail carrier if the activity directly or indirectly would result in—

“(A) a restriction of the ability of the Class II or Class III rail carrier to interchange traffic with other carriers; or

“(B) a restriction of competition between or among rail carriers in the region affected by the activity in a manner or to an extent that would violate antitrust laws of the United States (notwithstanding any exemption from the applicability of antitrust laws that is provided under section 10706 of this title or any other provision of law).

“(2) Any party to an activity referred to in paragraph (1) that has been carried out, or any rail shipper affected by such an activity, may request the Board to review the activity to determine whether the activity has resulted in a restriction described in that paragraph. If, upon review of the activity, the Board determines that the activity resulted in such a restriction and the restriction has been in effect for at least 10 years, the Board shall declare the restriction to be unlawful and terminate the restriction unless the Board finds that the termination of the restriction would materially impair the ability of an affected rail carrier to provide service to the public or would otherwise be inconsistent with the public interest.

“(3) In this subsection:

“(A) The term ‘antitrust laws’ has the meaning given that term in subsection (a) of the first section of the Clayton Act (15 U.S.C. 12(a)), except that such term also means section 5 of the Federal Trade Commission Act (15 U.S.C. 45) to the extent that such section 5 applies to unfair methods of competition.

“(B) The terms ‘class I rail carrier’, ‘class II rail carrier’, and ‘class III rail carrier’ mean, respectively, a rail carrier classified under regulations of the Board as a Class I rail carrier, Class II rail carrier, and Class III rail carrier.”

(b) APPLICABILITY TO PREVIOUSLY APPROVED OR EXEMPTED ACTIVITIES.—Paragraph (2) of section 10901(e) of title 49, United States Code (as added by subsection (a)), shall apply with respect to any activity referred to in that paragraph for which the Surface Transportation Board issued a certificate authorizing the activity under section 10901 of such title, or exempted the activity from the necessity for such a certificate under section 10502 of such title, before, on, or after the date of the enactment of this Act.

SEC. 906. SYSTEM WIDE COMPETITION.

(a) TRACKAGE RIGHTS.—Chapter 111 is amended by inserting after section 11102 the following new section:

“§ 11102a. Trackage rights

“(a) ALTERNATIVE RAIL CARRIER SERVICE.—(1) A person who uses or seeks to use rail service for major train load shipments to or from a facility (whether located in a terminal area or served by terminal facilities) that has physical access solely to one rail carrier may request, as provided in this subsection, that rail service for such shipments be provided to or from that facility by—

“(A) an existing Class I rail carrier; or

“(B) an existing Class II rail carrier, existing Class III rail carrier, or new rail service provider that, as determined by the Federal Railroad Administration before the person makes the request—

“(i) is or is likely to be capable of transporting the major train load shipments over the facilities of the one rail carrier to or from the facility with the physical access solely to that rail carrier;

“(ii) is or is likely to be capable of doing so in compliance with applicable Federal Railroad Administration regulations and with

the operating and safety rules of the rail carrier responsible for dispatching for the use of the facilities; and

“(iii) has or is likely to have the financial ability (or insurance coverage with limits customary in the railroad industry) to satisfy liability claims arising from its operations.

“(2) For the purposes of this section a major train load shipment is any train load shipment that consists of 50 or more rail cars and is tendered all at one time on a single bill of lading.

“(b) PROCEDURE FOR REQUESTING SERVICE.—(1) A person seeking under subsection (a) to obtain from an alternative rail service provider transportation for major train load shipments to or from a facility described in paragraph (1) of that subsection shall file with the Board a notice of intent to request that service. The notice shall include the following:

“(A) A description of the facilities to be used by the alternative service provider.

“(B) A statement that the person has attempted without success, through negotiations with the rail carrier that has been providing the person with rail service to or from the facility, to obtain the proposed service from that rail carrier on terms similar to those available from the alternative rail service provider.

“(C) Any other details of the proposed service.

“(D) If the alternative rail service provider is a provider described in subparagraph (B) of subsection (a)(1), a certification by the Federal Railroad Administration of the determinations required for eligibility under that subparagraph.

“(2)(A) Subject to subparagraph (D), rail service described in a notice filed with the Board under paragraph (1) may be provided by the alternative rail service provider referred to in the notice beginning 60 days after the notice is so filed unless, before the expiration of that 60-day period, the Board determines that the alternative rail service provider's use of the facilities involved—

“(i) will be unsafe;

“(ii) is not operationally feasible; or

“(iii) will substantially impair the ability of the other rail carrier or rail carriers using the facilities to provide transportation over those facilities in accordance with the reasonable requirements of the customers served by the other carrier or carriers as of the date of the Board's determination.

“(B) The rail carrier or carriers that own or provide transportation over the facilities to be used by an alternative rail service provider in rail service covered by a notice filed with the Board under paragraph (1) shall have the burden of proving the matters described in clauses (i), (ii), and (iii) of subparagraph (A).

“(C) The Board shall consult with the Federal Railroad Administration in determining the facts regarding any allegation by a rail carrier or rail carriers that an alternative rail service provider's use of facilities would be unsafe.

“(D) An alternative rail service provider may not begin to provide any rail service under subparagraph (A) before the provider's train crews are qualified to operate over the facilities to be used to provide the service, as determined under rules applicable to such operations.

“(c) DISPATCHING AND OTHER RESPONSIBILITIES.—(1) The rail carrier responsible for controlling rail operations on, or for dispatching for the use of, facilities used by any alternative rail service provider pursuant to

a notice filed with the Board under subsection (b) shall—

“(A) continue to perform those functions for all rail carriers using the facilities, including the alternative rail service provider; and

“(B) dispatch trains for the alternative rail service provider, without discrimination, on the same basis that the rail carrier would apply if it were providing the transportation for the traffic transported by the alternative rail service provider.

“(2) The Board shall have jurisdiction over, and shall promptly resolve, any disputes arising under paragraph (1)(B).

“(d) COMPENSATION FOR USE OF FACILITIES.—(1) An alternative rail service provider that, pursuant to a notice filed with the Board under subsection (b), is providing transportation over facilities owned by another rail carrier shall compensate the owner of the facilities on such terms as the alternative rail service provider and the owner may agree. The terms of compensation shall be adjusted annually, as the parties may agree, effective as of the anniversary of the date on which the alternative rail service provider began to use the facilities.

“(2)(A) The terms of compensation for an owner of facilities for the use of facilities by an alternative rail service provider shall be established on a basis that provides for the alternative rail service provider to compensate the owner at a level that—

“(i) defrays the relevant costs incurred by the owner for transportation over those facilities to the extent of a share that is proportionate to the use of those facilities by the alternative rail service provider in relation to the use of those facilities by all users of the facilities; and

“(ii) provides the owner with a reasonable return on and of the owner's net book investment in road property for the facilities (exclusive of write-ups or write-downs resulting from mergers and consolidations of any of the facilities that were acquired from another rail carrier on or after July 1, 1995).

“(B) For the purposes of subparagraph (A), an alternative rail service provider's proportionate share of the total relevant costs incurred by the owner of facilities for the use of facilities during the first 12 months of the provider's use of the facilities pursuant to a notice filed with the Board under subsection (b) shall be the ratio of—

“(i) the extent to which the alternative rail service provider is reasonably expected to use the facilities during that 12-month period, measured in gross ton-miles, to

“(ii) the total volume of the use of the facilities by all users of the facilities during the 12 calendar months preceding the month in which the notice was filed with the Board, measured in gross ton-miles.

“(C) For the purpose of calculating an annual adjustment of the terms of compensation for an owner of facilities for the use of those facilities for rail service by an alternative rail service provider, the ratio applied under subparagraph (A) for determining the alternative rail service provider's proportionate share of the total relevant costs incurred by the owner of facilities for the use of facilities shall be the ratio of—

“(i) the total volume of the use of the facilities by the alternative rail service provider during the 12 calendar months preceding the month in which the adjustment takes effect, measured in gross ton-miles, to

“(ii) the total volume of the use of the facilities by all users of the facilities during those 12 months, measured in gross ton-miles.

“(D) For the purposes of subparagraph (A), the total relevant costs for use of facilities shall include the following:

“(i) Roadway maintenance expenses.

“(ii) Costs reasonably related to the dispatching or control of the operation of users' trains.

“(iii) Any ad valorem taxes.

“(3)(A) If the owner of facilities to be used by an alternative rail service provider pursuant to a notice filed with the Board under subsection (b) and the alternative rail service provider do not agree on the terms of compensation for the initial use of the facilities before the expiration of the 60-day period applicable to the notice under paragraph (2) of that subsection (b), either party (or the person requesting the rail service from the alternative rail service provider) may request the Board to establish the terms of compensation. The Board shall establish those terms of compensation, in accordance with the standards applicable under this subsection, within 60 days after receiving such a request. The terms so established shall be effective retroactively as of the date on which the 60-day period applicable under subsection (b)(2) expires.

“(B) If the owner of facilities and an alternative rail service provider do not agree on an annual adjustment to terms of compensation under paragraph (1) before the anniversary of the date on which the alternative rail service provider began to use the facilities, either party may submit the dispute to the Board. The Board shall resolve the dispute within 60 days after the dispute is submitted. Any adjustment pursuant to a resolution of the dispute shall take effect retroactively as of that anniversary date.

“(e) NEW AND ENHANCED FACILITIES.—(1) If it is necessary for an owner of facilities to construct a new connecting track or interlocker or any other new facility or to improve a connecting track, interlocker, or other facility of that owner solely to accommodate the commencement of rail service by an alternative rail service provider under this section, the person requesting the rail service by the alternative rail service provider over those facilities shall pay the entire reasonable cost of the construction or improvement. The owner constructing the new facility or facilities shall own the newly constructed or improved facility or facilities, as the case may be.

“(2) If, at any time during the period of use of facilities by one or more alternative rail service providers pursuant to this section, it is necessary to construct or improve facilities to ensure the safe or efficient operation of rail service by the alternative rail service providers and all other rail carriers using the facilities to provide rail service, the reasonable cost of the construction or improvement shall be shared by the owner and each of the users of the facilities on such terms as those parties may agree. Any dispute concerning such terms shall be promptly resolved by the Board upon the request of any such user.

“(f) RELATIONSHIP TO OTHER AUTHORITIES.—This section may not be construed to provide an exclusive remedy, nor to limit the availability of any other remedy under this part, to users of rail transportation for the enhancement of intramodal rail competition.”.

(b) CLERICAL AMENDMENT.—The table of contents at the beginning of such chapter is amended by inserting after section 11102 the following new item:

“11102a. Trackage rights.”.

SEC. 907. EFFECTIVE DATES.

(a) IN GENERAL.—Except as provided in subsection (b), this title and the amendments made by this title shall take effect on January 1, 2002.