

Calendar No. 259

107TH CONGRESS
1ST SESSION**S. 1766**

To provide for the energy security of the Nation, and for other purposes.

IN THE SENATE OF THE UNITED STATES

DECEMBER 5, 2001

Mr. DASCHLE (for himself and Mr. BINGAMAN) introduced the following bill;
which was read the first time

DECEMBER 6, 2001

Read the second time and placed on the calendar

A BILL

To provide for the energy security of the Nation, and for
other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Energy Policy Act of
5 2002”.

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1 **DIVISION A—RELIABLE AND DI-**
2 **VERSE POWER GENERATION**
3 **AND TRANSMISSION**
4 **TITLE I—REGIONAL**
5 **COORDINATION**

6 **SEC. 101. POLICY ON REGIONAL COORDINATION.**

7 (a) STATEMENT OF POLICY.—It is the policy of the
8 Federal Government to encourage States to coordinate, on
9 a regional basis, State energy policies to provide reliable
10 and affordable energy services to the public while mini-
11 mizing the impact of providing energy services on commu-
12 nities and the environment.

13 (b) DEFINITION OF ENERGY SERVICES.—For pur-
14 poses of this section, the term “energy services” means—

15 (1) the generation or transmission of electric
16 energy,

17 (2) the transportation, storage, and distribution
18 of crude oil, residual fuel oil, refined petroleum prod-
19 uct, or natural gas, or

20 (3) the reduction in load through increased effi-
21 ciency, conservation, or load control measures.

22 **SEC. 102. FEDERAL SUPPORT FOR REGIONAL COORDINA-**
23 **TION.**

24 (a) TECHNICAL ASSISTANCE.—The Secretary of En-
25 ergy shall provide technical assistance to States and re-

1 gional organizations formed by two or more States to as-
2 sist them in coordinating their energy policies on a re-
3 gional basis. Such technical assistance may include assist-
4 ance in—

5 (1) assessing future supply availability and de-
6 mand requirements,

7 (2) planning and siting additional energy infra-
8 structure, including generating facilities, electric
9 transmission facilities, pipelines, refineries, and dis-
10 tributed generation facilities to meet regional needs,

11 (3) identifying and resolving problems in dis-
12 tribution networks,

13 (4) developing plans to respond to surge de-
14 mand or emergency needs, and

15 (5) developing energy efficiency, conservation,
16 and load control programs.

17 (b) ANNUAL CONFERENCE ON REGIONAL ENERGY
18 COORDINATION.—

19 (1) ANNUAL CONFERENCE.—The Secretary of
20 Energy shall convene an annual conference to pro-
21 mote regional coordination on energy policy and in-
22 frastructure issues.

23 (2) PARTICIPATION.—The Secretary of Energy
24 shall invite appropriate representatives of federal,

1 state, and regional energy organizations, and other
2 interested parties.

3 (3) FEDERAL AGENCY COOPERATION.—The
4 Secretary of Energy shall consult and cooperate with
5 the Secretary of the Interior, the Secretary of Agri-
6 culture, the Secretary of Commerce, the Secretary of
7 the Treasury, the Chairman of the Federal Energy
8 Regulatory Commission, the Administrator of the
9 Environmental Protection Agency, and the Chair-
10 man of the Council on Environmental Quality in the
11 planning and conduct of the conference.

12 (4) AGENDA.—The Secretary of Energy, in con-
13 sultation with the officials identified in paragraph
14 (3) and participants identified in paragraph (2),
15 shall establish an agenda for each conference that
16 promotes regional coordination on energy policy and
17 infrastructure issues.

18 (5) RECOMMENDATIONS.—Not later than 60
19 days after the conclusion of each annual conference,
20 the Secretary of Energy shall report to the President
21 and the Congress recommendations arising out of
22 the conference that may improve—

23 (A) regional coordination on energy policy
24 and infrastructure issues, and

1 (B) federal support for regional coordina-
 2 tion.

3 **TITLE II—ELECTRICITY**
 4 **Subtitle A—Amendments to the**
 5 **Federal Power Act**

6 **SEC. 201. DEFINITIONS.**

7 (a) DEFINITION OF ELECTRIC UTILITY.—Section
 8 3(22) of the Federal Power Act (16 U.S.C. 796(22)) is
 9 amended to read as follows:

10 “(22) ‘electric utility’ means any person or Fed-
 11 eral or State agency (including any municipality)
 12 that sells electric energy; such term includes the
 13 Tennessee Valley Authority and each Federal power
 14 marketing agency.

15 (b) DEFINITION OF TRANSMITTING UTILITY.—Sec-
 16 tion 3(23) of the Federal Power Act (16 U.S.C. 796(23)) is
 17 amended to read as follows:

18 “(23) TRANSMITTING UTILITY.—The term
 19 ‘transmitting utility’ means an entity (including any
 20 entity described in section 201(f)) that owns or oper-
 21 ates facilities used for the transmission of electric
 22 energy in—

23 “(A) interstate commerce; or

24 “(B) for the sale of electric energy at whole-
 25 sale.”.

1 **SEC. 202. ELECTRIC UTILITY MERGERS.**

2 Section 203(a) of the Federal Power Act (16 U.S.C.
3 824b) is amended to read as follows:

4 “(a)(1) No public utility shall, without first having
5 secured an order of the Commission authorizing it to do
6 so—

7 “(A) sell, lease, or otherwise dispose of the
8 whole of its facilities subject to the jurisdiction of
9 the Commission, or any part thereof of a value in
10 excess of \$1,000,000,

11 “(B) merge or consolidate, directly or indi-
12 rectly, such facilities or any part thereof with the fa-
13 cilities of any other person, by any means whatso-
14 ever,

15 “(C) purchase, acquire, or take any security of
16 any other public utility, or

17 “(D) purchase, lease, or otherwise acquire exist-
18 ing facilities for the generation of electric energy or
19 for the production or transportation of natural gas.

20 “(2) No holding company in a holding company sys-
21 tem that includes a transmitting utility or an electric util-
22 ity company shall purchase, acquire, or take any security
23 of, or, by any means whatsoever, directly or indirectly,
24 merge or consolidate with a transmitting utility, an elec-
25 tric utility company, a gas utility company, or a holding
26 company in a holding company system that includes a

1 transmitting utility, an electric utility company, or a gas
2 utility company, without first having secured an order of
3 the Commission authorizing it to do so.

4 “(3) Upon application for such approval the Commis-
5 sion shall give reasonable notice in writing to the Governor
6 and State commission of each of the States in which the
7 physical property affected, or any part thereof, is situated,
8 and to such other persons as it may deem advisable.

9 “(4) After notice and opportunity for hearing, if the
10 Commission finds that the proposed disposition, consolida-
11 tion, acquisition, or control will be consistent with the pub-
12 lic interest, it shall approve the same.

13 “(5) For purposes of this subsection, the terms ‘elec-
14 tric utility company’, ‘gas utility company’, ‘holding com-
15 pany’, and ‘holding company system’ have the meaning
16 given those terms in the Public Utility Holding Company
17 Act of 2002.

18 “(6) Notwithstanding section 201(b)(1), facilities
19 used for the generation of electric energy shall be subject
20 to the jurisdiction of the Commission for purposes of this
21 section.”.

22 **SEC. 203. MARKET-BASED RATES.**

23 (a) APPROVAL OF MARKET-BASED RATES.—Section
24 205 of the Federal Power Act (16 U.S.C. 824d) is amend-
25 ed by adding at the end the following:

1 “(h) The Commission may determine whether a mar-
2 ket-based rate for the sale of electric energy subject to
3 the jurisdiction of the Commission is just and reasonable
4 and not unduly discriminatory or preferential. In making
5 such determination, the Commission shall consider—

6 “(1) whether the seller and its affiliates have,
7 or have adequately mitigated, market power in the
8 generation and transmission of electric energy;

9 “(2) whether the sale is made in a competitive mar-
10 ket;

11 “(3) whether market mechanisms, such as power ex-
12 changes and bid auctions, function adequately;

13 “(4) the effect of demand response mechanisms;

14 “(5) the effect of mechanisms or requirements in-
15 tended to ensure adequate reserve margins; and

16 “(6) other such considerations as the Commission
17 may deem to be appropriate and in the public inter-
18 est.”.

19 (b) REVOCATION OF MARKET-BASED RATES.—Sec-
20 tion 206 of the Federal Power Act (16 U.S.C. 824e) is
21 amended by adding at the end the following:

22 “(f) Whenever the Commission, after a hearing had
23 upon its own motion or upon complaint, finds that a rate
24 charged by a public utility authorized to charge a market-
25 based rate under section 205 is unjust, unreasonable, un-

1 duly discriminatory or preferential, the Commission shall
 2 determine the just and reasonable rate and fix the same
 3 by order in accordance with this section, or order such
 4 other action as will, in the judgment of the Commission,
 5 adequately ensure a just and reasonable market-based
 6 rate.”.

7 **SEC. 204. REFUND EFFECTIVE DATE.**

8 Section 206(b) of the Federal Power Act (16 U.S.C.
 9 824e(b)) is amended by—

10 (1) striking “60 days after the filing of such
 11 complaint nor later than 5 months after the expira-
 12 tion of such 60-day period” in the second sentence
 13 and inserting “on which the complaint is filed”; and

14 (2) striking “60 days after the publication by
 15 the Commission of notice of its intention to initiate
 16 such proceeding nor later than 5 months after the
 17 expiration of such 60-day period” in the third sen-
 18 tence and inserting “on which the Commission pub-
 19 lishes notice of its intention to initiate such pro-
 20 ceeding”.

21 **SEC. 205. TRANSMISSION INTERCONNECTIONS.**

22 Section 210 of the Federal Power Act (16 U.S.C.
 23 824i) is amended to read as follows:

24 “TRANSMISSION INTERCONNECTION AUTHORITY

25 “SEC. 210. (a)(1) The Commission shall, by rule, es-
 26 tablish technical standards and procedures for the inter-

1 connection of facilities used for the generation of electric
2 energy with facilities used for the transmission of electric
3 energy in interstate commerce. The rule shall provide—

4 “(A) criteria to ensure that an interconnection
5 will not unreasonably impair the reliability of the
6 transmission system; and

7 “(B) criteria for the apportionment or reim-
8 bursement of the costs of making the interconnec-
9 tion.

10 “(2) Notwithstanding section 201(f), a transmitting
11 utility shall interconnect its transmission facilities with the
12 generation facilities of a power producer upon the applica-
13 tion of the power producer if the power producer complies
14 with the requirements of the rule.

15 “(b) Upon the application of a power producer or its
16 own motion, the Commission may, after giving notice and
17 an opportunity for a hearing to any entity whose interest
18 may be affected, issue an order requiring—

19 “(1) the physical connection of facilities used
20 for the generation of electric energy with facilities
21 used for the transmission of electric energy in inter-
22 state commerce;

23 “(2) such action as may be necessary to make
24 effective any such physical connection;

1 “(2) The Commission shall exempt from any rule or
2 order under this subsection any unregulated transmitting
3 utility that—

4 “(A) sells no more than 4,000,000 megawatt
5 hours of electricity per year;

6 “(B) does not own or operate any transmission
7 facilities that are necessary for operating an inter-
8 connected transmission system (or any portion
9 thereof), or

10 “(C) meets other criteria the Commission deter-
11 mines to be in the public interest.

12 “(3) The rate changing procedures applicable to pub-
13 lic utilities under subsections (c) and (d) of section 205
14 are applicable to unregulated transmitting utilities for
15 purposes of this section.

16 “(4) In exercising its authority under paragraph (1),
17 the Commission may remand transmission rates to an un-
18 regulated transmitting utility for review and revision
19 where necessary to meet the requirements of paragraph
20 (1).

21 “(5) The provision of transmission services under
22 paragraph (1) does not preclude a request for trans-
23 mission services under section 211.

24 “(6) The Commission may not require a State or mu-
25 nicipality to take action under this section that constitutes

1 a private business use for purposes of section 141 of the
2 Internal Revenue Code of 1986 (26 U.S.C. 141).

3 “(7) For purposes of this subsection, the term ‘un-
4 regulated transmitting utility’ means an entity that—

5 “(A) owns or operates facilities used for the
6 transmission of electric energy in interstate com-
7 merce or for the sale of electric energy at wholesale,
8 and

9 “(B) is either an entity described in section
10 201(f) or a rural electric cooperative.”.

11 **SEC. 207. ELECTRIC RELIABILITY STANDARDS.**

12 Part II of the Federal Power Act is further amended
13 by adding at the end the following:

14 **“SEC. 215. ELECTRIC RELIABILITY STANDARDS.**

15 “(a) DUTY OF THE COMMISSION.—The Commission
16 shall establish and enforce one or more systems of manda-
17 tory electric reliability standards to ensure the reliable op-
18 eration of the interstate transmission system, which shall
19 be applicable to—

20 “(1) any entity that sells, purchases, or trans-
21 mits, electric energy using the interstate trans-
22 mission system, and

23 “(2) any entity that owns, operates, or main-
24 tains facilities that are a part of the interstate
25 transmission system.

1 “(b) STANDARDS.—In carrying out its responsibility
2 under subsection (a), the Commission may adopt and en-
3 force, in whole or in part, a reliability standard proposed
4 or adopted by the North American Electric Reliability
5 Council, a regional reliability council, a similar organiza-
6 tion, or a State regulatory authority.

7 “(c) ENFORCEMENT.—In carrying out its responsi-
8 bility under subsection (a), the Commission may certify
9 one or more self-regulating reliability organizations (which
10 may include the North American Electric Reliability Coun-
11 cil, one or more regional reliability councils, one or more
12 regional transmission organizations, or any similar organi-
13 zation) to ensure the reliable operation of the interstate
14 transmission system and to monitor and enforce compli-
15 ance of their members with electric reliability standards
16 adopted under this section.

17 “(d) COOPERATION WITH CANADA AND MEXICO.—
18 The Commission shall ensure that any self-regulating reli-
19 ability organization certified under this section, one or
20 more of whose members are interconnected with transmit-
21 ting utilities in Canada or the Republic of Mexico, provide
22 for the participation of such utilities in the governance of
23 the organization and the adoption of reliability standards.
24 Nothing in this section shall be construed to extend the

1 jurisdiction of the Commission outside of the United
2 States.

3 “(e) PRESERVATION OF STATE AUTHORITY.—Noth-
4 ing in this section shall be construed to preempt the au-
5 thority of any State to take action to ensure the safety,
6 adequacy, and reliability of local distribution facilities
7 service within the State, except where the exercise of such
8 authority unreasonably impairs the reliability of the inter-
9 state transmission system.

10 “(f) DEFINITIONS.—For purposes of this section:

11 “(1) The term ‘interstate transmission system’
12 means the network of facilities used for the trans-
13 mission of electric energy in interstate commerce.

14 “(2) The term ‘reliability’ means the ability of
15 the interstate transmission system to transmit suffi-
16 cient electric energy to supply the aggregate electric
17 demand and energy requirements of electricity con-
18 sumers at all times and the ability of the system to
19 withstand sudden disturbances.”.

20 **SEC. 208. MARKET TRANSPARENCY RULES.**

21 Part II of the Federal Power Act is further amended
22 by adding at the end the following:

23 **“SEC. 216. MARKET TRANSPARENCY RULES.**

24 “(a) COMMISSION RULES.—Not later than 180 days
25 after the date of enactment of this section, the Commis-

1 sion shall issue rules establishing an electronic information
2 system to provide information about the availability and
3 price of wholesale electric energy and transmission services
4 to the Commission, state commissions, buyers and sellers
5 of wholesale electric energy, users of transmission services,
6 and the public on a timely basis.

7 “(b) INFORMATION REQUIRED.—The Commission
8 shall require—

9 “(1) each regional transmission organization to
10 provide statistical information about the available
11 capacity and capacity constraints of transmission fa-
12 cilities operated by the organization; and

13 “(2) each broker, exchange, or other market-
14 making entity that matches offers to sell and offers
15 to buy wholesale electric energy in interstate com-
16 merce to provide statistical information about the
17 amount and sale price of sales of electric energy at
18 wholesale in interstate commerce it transacts.

19 “(c) TIMELY BASIS.—The Commission shall require
20 the information required under subsection (b) to be posted
21 on the Internet as soon as practicable and updated as fre-
22 quently as practicable.

23 “(d) PROTECTION OF SENSITIVE INFORMATION.—
24 The Commission shall exempt from disclosure commercial
25 or financial information that the Commission, by rule or

1 order, determines to be privileged, confidential, or other-
2 wise sensitive.”.

3 **SEC. 209. ACCESS TO TRANSMISSION BY INTERMITTENT**
4 **GENERATORS.**

5 Part II of the Federal Power Act is further amended
6 by adding at the end the following:

7 **“SEC. 217. ACCESS TO TRANSMISSION BY INTERMITTENT**
8 **GENERATORS.**

9 “(a) FAIR TREATMENT OF INTERMITTENT GENERA-
10 TORS.—The Commission shall ensure that all transmitting
11 utilities provide transmission service to intermittent gen-
12 erators in a manner that does not penalize such genera-
13 tors, directly or indirectly, for characteristics that are—

14 “(1) inherent to intermittent energy resources;
15 and

16 “(2) are beyond the control of such generators.

17 “(b) POLICIES.—The Commission shall ensure that
18 the requirement in subsection (a) is met by adopting such
19 policies as it deems appropriate which shall include, but
20 not be limited to, the following:

21 “(1) Subject to the sole exception set forth in
22 paragraph (2), the Commission shall ensure that the
23 rates transmitting utilities charge intermittent gen-
24 erator customers for transmission services do not di-

1 rectly or indirectly penalize intermittent generator
2 customers for scheduling deviations.

3 “(2) The Commission may exempt a transmit-
4 ting utility from the requirement set forth in sub-
5 section (b) if the transmitting utility demonstrates
6 that scheduling deviations by its intermittent gener-
7 ator customers are likely to have a substantial ad-
8 verse impact on the reliability of the transmitting
9 utility’s system. For purposes of administering this
10 exemption, there shall be a rebuttable presumption
11 of no adverse impact where intermittent generators
12 collectively constitute 20 percent or less of total gen-
13 eration interconnected with transmitting utility’s
14 system and using transmission services provided by
15 transmitting utility.

16 “(3) The Commission shall ensure that to the
17 extent any transmission charges recovering the
18 transmitting utility’s embedded costs are assessed to
19 intermittent generators, they are assessed to such
20 generators on the basis of kilowatt-hours generated
21 rather than the intermittent generator’s capacity.

22 “(4) The Commission shall require transmitting
23 utilities to offer to intermittent generators, and may
24 require transmitting utilities to offer to all trans-
25 mission customers, access to nonfirm transmission

1 service pursuant to long-term contracts of up to ten
2 years duration under reasonable terms and condi-
3 tions.

4 “(c) DEFINITIONS.—As used in this section:

5 “(1) The term ‘intermittent generator’ means a
6 person that generates electricity using wind or solar
7 energy.

8 “(2) The term ‘nonfirm transmission service’
9 means transmission service provided on an ‘as avail-
10 able’ basis.

11 “(3) The term ‘scheduling deviation’ means de-
12 livery of more or less energy than has previously
13 been forecast in a schedule submitted by an inter-
14 mittent generator to a control area operator or
15 transmitting utility.”.

16 **SEC. 210. ENFORCEMENT.**

17 (a) COMPLAINTS.—Section 306 of the Federal Power
18 Act (16 U.S.C. 825e) is amended by—

19 (1) inserting “electric utility,” after “Any per-
20 son,”; and

21 (2) inserting “transmitting utility,” after “li-
22 censee” each place it appears.

23 (b) INVESTIGATIONS.—Section 307(a) of the Federal
24 Power Act (16 U.S.C. 825f(a)) is amended by inserting

1 “or transmitting utility” after “any person” in the first
2 sentence.

3 (c) REVIEW OF COMMISSION ORDERS.—Section
4 313(a) of the Federal Power Act (16 U.S.C. 8251) is
5 amended by inserting “electric utility,” after “Any per-
6 son,” in the first sentence.

7 (d) CRIMINAL PENALTIES.—Section 316(c) of the
8 Federal Power Act (16 U.S.C. 8250(c)) is repealed.

9 (e) CIVIL PENALTIES.—Section 316A of the Federal
10 Power Act (16 U.S.C. 8250–1) is amended by striking
11 “section 211, 212, 213, or 214” each place it appears and
12 inserting “Part II”.

13 **Subtitle B—Amendments to the**
14 **Public Utility**
15 **Holding Company Act**

16 **SEC. 221. SHORT TITLE.**

17 This subtitle may be cited as the “Public Utility
18 Holding Company Act of 2002”.

19 **SEC. 222. DEFINITIONS.**

20 For purposes of this subtitle:

21 (1) The term “affiliate” of a company means
22 any company, 5 percent or more of the outstanding
23 voting securities of which are owned, controlled, or
24 held with power to vote, directly or indirectly, by
25 such company.

1 (2) The term “associate company” of a com-
2 pany means any company in the same holding com-
3 pany system with such company.

4 (3) The term “Commission” means the Federal
5 Energy Regulatory Commission.

6 (4) The term “company” means a corporation,
7 partnership, association, joint stock company, busi-
8 ness trust, or any organized group of persons,
9 whether incorporated or not, or a receiver, trustee,
10 or other liquidating agent of any of the foregoing.

11 (5) The term “electric utility company” means
12 any company that owns or operates facilities used
13 for the generation, transmission, or distribution of
14 electric energy for sale.

15 (6) The terms “exempt wholesale generator”
16 and “foreign utility company” have the same mean-
17 ings as in sections 32 and 33, respectively, of the
18 Public Utility Holding Company Act of 1935 (15
19 U.S.C. 79z-5a, 79z-5b), as those sections existed on
20 the day before the effective date of this subtitle.

21 (7) The term “gas utility company” means any
22 company that owns or operates facilities used for
23 distribution at retail (other than the distribution
24 only in enclosed portable containers or distribution
25 to tenants or employees of the company operating

1 such facilities for their own use and not for resale)
2 of natural or manufactured gas for heat, light, or
3 power.

4 (8) The term “holding company” means—

5 (A) any company that directly or indirectly
6 owns, controls, or holds, with power to vote, 10
7 percent or more of the outstanding voting secu-
8 rities of a public utility company or of a holding
9 company of any public utility company; and

10 (B) any person, determined by the Com-
11 mission, after notice and opportunity for hear-
12 ing, to exercise directly or indirectly (either
13 alone or pursuant to an arrangement or under-
14 standing with one or more persons) such a con-
15 trolling influence over the management or poli-
16 cies of any public utility company or holding
17 company as to make it necessary or appropriate
18 for the rate protection of utility customers with
19 respect to rates that such person be subject to
20 the obligations, duties, and liabilities imposed
21 by this subtitle upon holding companies.

22 (9) The term “holding company system” means
23 a holding company, together with its subsidiary com-
24 panies.

1 (10) The term “jurisdictional rates” means
2 rates established by the Commission for the trans-
3 mission of electric energy in interstate commerce,
4 the sale of electric energy at wholesale in interstate
5 commerce, the transportation of natural gas in inter-
6 state commerce, and the sale in interstate commerce
7 of natural gas for resale for ultimate public con-
8 sumption for domestic, commercial, industrial, or
9 any other use.

10 (11) The term “natural gas company” means a
11 person engaged in the transportation of natural gas
12 in interstate commerce or the sale of such gas in
13 interstate commerce for resale.

14 (12) The term “person” means an individual or
15 company.

16 (13) The term “public utility” means any per-
17 son who owns or operates facilities used for trans-
18 mission of electric energy in interstate commerce or
19 sales of electric energy at wholesale in interstate
20 commerce.

21 (14) The term “public utility company” means
22 an electric utility company or a gas utility company.

23 (15) The term “State commission” means any
24 commission, board, agency, or officer, by whatever
25 name designated, of a State, municipality, or other

1 political subdivision of a State that, under the laws
2 of such State, has jurisdiction to regulate public util-
3 ity companies.

4 (16) The term “subsidiary company” of a hold-
5 ing company means—

6 (A) any company, 10 percent or more of
7 the outstanding voting securities of which are
8 directly or indirectly owned, controlled, or held
9 with power to vote, by such holding company;
10 and

11 (B) any person, the management or poli-
12 cies of which the Commission, after notice and
13 opportunity for hearing, determines to be sub-
14 ject to a controlling influence, directly or indi-
15 rectly, by such holding company (either alone or
16 pursuant to an arrangement or understanding
17 with one or more other persons) so as to make
18 it necessary for the rate protection of utility
19 customers with respect to rates that such per-
20 son be subject to the obligations, duties, and li-
21 abilities imposed by this subtitle upon sub-
22 subsidiary companies of holding companies.

23 (17) The term “voting security” means any se-
24 curity presently entitling the owner or holder thereof

1 to vote in the direction or management of the affairs
2 of a company.

3 **SEC. 223. REPEAL OF THE PUBLIC UTILITY HOLDING COM-**
4 **PANY ACT OF 1935.**

5 The Public Utility Holding Company Act of 1935 (15
6 U.S.C. 79 et seq.) is repealed.

7 **SEC. 224. FEDERAL ACCESS TO BOOKS AND RECORDS.**

8 (a) IN GENERAL.—Each holding company and each
9 associate company thereof shall maintain, and shall make
10 available to the Commission, such books, accounts, memo-
11 randa, and other records as the Commission deems to be
12 relevant to costs incurred by a public utility or natural
13 gas company that is an associate company of such holding
14 company and necessary or appropriate for the protection
15 of utility customers with respect to jurisdictional rates.

16 (b) AFFILIATE COMPANIES.—Each affiliate of a hold-
17 ing company or of any subsidiary company of a holding
18 company shall maintain, and shall make available to the
19 Commission, such books, accounts, memoranda, and other
20 records with respect to any transaction with another affil-
21 iate, as the Commission deems to be relevant to costs in-
22 curred by a public utility or natural gas company that is
23 an associate company of such holding company and nec-
24 essary or appropriate for the protection of utility cus-
25 tomers with respect to jurisdictional rates.

1 (c) HOLDING COMPANY SYSTEMS.—The Commission
2 may examine the books, accounts, memoranda, and other
3 records of any company in a holding company system, or
4 any affiliate thereof, as the Commission deems to be rel-
5 evant to costs incurred by a public utility or natural gas
6 company within such holding company system and nec-
7 essary or appropriate for the protection of utility cus-
8 tomers with respect to jurisdictional rates.

9 (d) CONFIDENTIALITY.—No member, officer, or em-
10 ployee of the Commission shall divulge any fact or infor-
11 mation that may come to his or her knowledge during the
12 course of examination of books, accounts, memoranda, or
13 other records as provided in this section, except as may
14 be directed by the Commission or by a court of competent
15 jurisdiction.

16 **SEC. 225. STATE ACCESS TO BOOKS AND RECORDS.**

17 (a) IN GENERAL.—Upon the written request of a
18 State commission having jurisdiction to regulate a public
19 utility company in a holding company system, the holding
20 company or any associate company or affiliate thereof,
21 other than such public utility company, wherever located,
22 shall produce for inspection books, accounts, memoranda,
23 and other records that—

24 (1) have been identified in reasonable detail in
25 a proceeding before the State commission;

1 (2) the State commission deems are relevant to
2 costs incurred by such public utility company; and

3 (3) are necessary for the effective discharge of
4 the responsibilities of the State commission with re-
5 spect to such proceeding.

6 (b) LIMITATION.—Subsection (a) does not apply to
7 any person that is a holding company solely by reason of
8 ownership of one or more qualifying facilities under the
9 Public Utility Regulatory Policies Act of 1978 (16 U.S.C.
10 2601 et seq.).

11 (c) CONFIDENTIALITY OF INFORMATION.—The pro-
12 duction of books, accounts, memoranda, and other records
13 under subsection (a) shall be subject to such terms and
14 conditions as may be necessary and appropriate to safe-
15 guard against unwarranted disclosure to the public of any
16 trade secrets or sensitive commercial information.

17 (d) EFFECT ON STATE LAW.—Nothing in this sec-
18 tion shall preempt applicable State law concerning the pro-
19 vision of books, accounts, memoranda, and other records,
20 or in any way limit the rights of any State to obtain books,
21 accounts, memoranda, and other records under any other
22 Federal law, contract, or otherwise.

23 (e) COURT JURISDICTION.—Any United States dis-
24 trict court located in the State in which the State commis-

1 sion referred to in subsection (a) is located shall have ju-
2 risdiction to enforce compliance with this section.

3 **SEC. 226. EXEMPTION AUTHORITY.**

4 (a) RULEMAKING.—Not later than 90 days after the
5 effective date of this subtitle, the Commission shall pro-
6 mulgate a final rule to exempt from the requirements of
7 section 224 any person that is a holding company, solely
8 with respect to one or more—

9 (1) qualifying facilities under the Public Utility
10 Regulatory Policies Act of 1978 (16 U.S.C. 2601 et
11 seq.);

12 (2) exempt wholesale generators; or

13 (3) foreign utility companies.

14 (b) OTHER AUTHORITY.—The Commission shall ex-
15 empt a person or transaction from the requirements of
16 section 224, if, upon application or upon the motion of
17 the Commission—

18 (1) the Commission finds that the books, ac-
19 counts, memoranda, and other records of any person
20 are not relevant to the jurisdictional rates of a pub-
21 lic utility or natural gas company; or

22 (2) the Commission finds that any class of
23 transactions is not relevant to the jurisdictional
24 rates of a public utility or natural gas company.

1 **SEC. 227. AFFILIATE TRANSACTIONS.**

2 (a) COMMISSION AUTHORITY UNAFFECTED.—Noth-
3 ing in this subtitle shall limit the authority of the Commis-
4 sion under the Federal Power Act (16 U.S.C. 791a et seq.)
5 to require that jurisdictional rates are just and reasonable,
6 including the ability to deny or approve the pass through
7 of costs, the prevention of cross-subsidization, and the pro-
8 mulgation of such rules and regulations as are necessary
9 or appropriate for the protection of utility consumers.

10 (b) RECOVERY OF COSTS.—Nothing in this subtitle
11 shall preclude the Commission or a State commission from
12 exercising its jurisdiction under otherwise applicable law
13 to determine whether a public utility company, public util-
14 ity, or natural gas company may recover in rates any costs
15 of an activity performed by an associate company, or any
16 costs of goods or services acquired by such public utility
17 company from an associate company.

18 **SEC. 228. APPLICABILITY.**

19 Except as otherwise specifically provided in this sub-
20 title, no provision of this subtitle shall apply to, or be
21 deemed to include—

22 (1) the United States;

23 (2) a State or any political subdivision of a
24 State;

25 (3) any foreign governmental authority not op-
26 erating in the United States;

1 (4) any agency, authority, or instrumentality of
2 any entity referred to in paragraph (1), (2), or (3);
3 or

4 (5) any officer, agent, or employee of any entity
5 referred to in paragraph (1), (2), or (3) acting as
6 such in the course of his or her official duty.

7 **SEC. 229. EFFECT ON OTHER REGULATIONS.**

8 Nothing in this subtitle precludes the Commission or
9 a State commission from exercising its jurisdiction under
10 otherwise applicable law to protect utility customers.

11 **SEC. 230. ENFORCEMENT.**

12 The Commission shall have the same powers as set
13 forth in sections 306 through 317 of the Federal Power
14 Act (16 U.S.C. 825e–825p) to enforce the provisions of
15 this subtitle.

16 **SEC. 231. SAVINGS PROVISIONS.**

17 (a) **IN GENERAL.**—Nothing in this subtitle prohibits
18 a person from engaging in or continuing to engage in ac-
19 tivities or transactions in which it is legally engaged or
20 authorized to engage on the effective date of this subtitle.

21 (b) **EFFECT ON OTHER COMMISSION AUTHORITY.**—
22 Nothing in this subtitle limits the authority of the Com-
23 mission under the Federal Power Act (16 U.S.C. 791a et
24 seq.) (including section 301 of that Act) or the Natural

1 Gas Act (15 U.S.C. 717 et seq.) (including section 8 of
2 that Act).

3 **SEC. 232. IMPLEMENTATION.**

4 Not later than 18 months after the date of enactment
5 of this subtitle, the Commission shall—

6 (1) promulgate such regulations as may be nec-
7 essary or appropriate to implement this subtitle
8 (other than section 225); and

9 (2) submit to the Congress detailed rec-
10 ommendations on technical and conforming amend-
11 ments to Federal law necessary to carry out this
12 subtitle and the amendments made by this subtitle.

13 **SEC. 233. TRANSFER OF RESOURCES.**

14 All books and records that relate primarily to the
15 functions transferred to the Commission under this sub-
16 title shall be transferred from the Securities and Exchange
17 Commission to the Commission.

18 **SEC. 234. INTER-AGENCY REVIEW OF COMPETITION IN THE**
19 **WHOLESALE AND RETAIL MARKETS FOR**
20 **ELECTRIC ENERGY.**

21 (a) **TASK FORCE.**—There is established an inter-
22 agency task force, to be known as the “Electric Energy
23 Market Competition Task Force” (referred to in this sec-
24 tion as the “task force”), which shall consist of—

25 (1) 1 member each from—

1 (A) the Department of Justice, to be ap-
2 pointed by the Attorney General of the United
3 States;

4 (B) the Federal Energy Regulatory Com-
5 mission, to be appointed by the chairman of
6 that Commission; and

7 (C) the Federal Trade Commission, to be
8 appointed by the chairman of that Commission;
9 and

10 (2) 2 advisory members (who shall not vote), of
11 whom—

12 (A) 1 shall be appointed by the Secretary
13 of Agriculture to represent the Rural Utility
14 Service; and

15 (B) 1 shall be appointed by the Chairman
16 of the Securities and Exchange Commission to
17 represent that Commission.

18 (b) STUDY AND REPORT.—

19 (1) STUDY.—The task force shall perform a
20 study and analysis of the protection and promotion
21 of competition within the wholesale and retail mar-
22 ket for electric energy in the United States.

23 (2) REPORT.—

24 (A) FINAL REPORT.—Not later than 1
25 year after the effective date of this subtitle, the

1 task force shall submit a final report of its find-
2 ings under paragraph (1) to the Congress.

3 (B) PUBLIC COMMENT.—At least 60 days
4 before submission of a final report to the Con-
5 gress under subparagraph (A), the task force
6 shall publish a draft report in the Federal Reg-
7 ister to provide for public comment.

8 (c) FOCUS.—The study required by this section shall
9 examine—

10 (1) the best means of protecting competition
11 within the wholesale and retail electric market;

12 (2) activities within the wholesale and retail
13 electric market that may allow unfair and unjusti-
14 fied discriminatory and deceptive practices;

15 (3) activities within the wholesale and retail
16 electric market, including mergers and acquisitions,
17 that deny market access or suppress competition;

18 (4) cross-subsidization that may occur between
19 regulated and nonregulated activities; and

20 (5) the role of State public utility commissions
21 in regulating competition in the wholesale and retail
22 electric market.

23 (d) CONSULTATION.—In performing the study re-
24 quired by this section, the task force shall consult with
25 and solicit comments from its advisory members, the

1 States, representatives of the electric power industry, and
2 the public.

3 **SEC. 235. GAO STUDY ON IMPLEMENTATION.**

4 (a) STUDY.—The Comptroller General shall conduct
5 a study of the success of the Federal Government and the
6 States during the 18-month period following the effective
7 date of this subtitle in—

8 (1) the prevention of anticompetitive practices
9 and other abuses by public utility holding companies,
10 including cross-subsidization and other market
11 power abuses; and

12 (2) the promotion of competition and efficient
13 energy markets to the benefit of consumers.

14 (b) REPORT TO CONGRESS.—Not earlier than 18
15 months after the effective date of this subtitle or later
16 than 24 months after that effective date, the Comptroller
17 General shall submit a report to the Congress on the re-
18 sults of the study conducted under subsection (a), includ-
19 ing probable causes of its findings and recommendations
20 to the Congress and the States for any necessary legisla-
21 tive changes.

22 **SEC. 236. EFFECTIVE DATE.**

23 This subtitle shall take effect 18 months after the
24 date of enactment of this subtitle.

1 **SEC. 237. AUTHORIZATION OF APPROPRIATIONS.**

2 There are authorized to be appropriated such funds
3 as may be necessary to carry out this subtitle.

4 **SEC. 238. CONFORMING AMENDMENTS TO THE FEDERAL**
5 **POWER ACT.**

6 (a) CONFLICT OF JURISDICTION.—Section 318 of the
7 Federal Power Act (16 U.S.C. 825q) is repealed.

8 (b) DEFINITIONS.—

9 (1) Section 201(g) of the Federal Power Act
10 (16 U.S.C. 824(g)) is amended by striking “1935”
11 and inserting “2002”.

12 (2) Section 214 of the Federal Power Act (16
13 U.S.C. 824m) is amended by striking “1935” and
14 inserting “2002”.

15 **Subtitle C—Amendments to the**
16 **Public Utility Regulatory Poli-**
17 **cies Act of 1978**

18 **SEC. 241. REAL-TIME PRICING STANDARD.**

19 (a) ADOPTION OF STANDARD.—Section 111(d) of the
20 Public Utility Regulatory Policies Act of 1978 (16 U.S.C.
21 2621(d)) is amended by adding at the end the following:

22 “(11) REAL-TIME PRICING.—(A) Each electric
23 utility shall, at the request of an electric consumer,
24 provide electric service under a real-time rate sched-
25 ule, under which the rate charged by the electric
26 utility varies by the hour (or smaller time interval)

1 according to changes in the electric utility's whole-
2 sale power cost. The real-time pricing service shall
3 enable the electric consumer to manage energy use
4 and cost through real-time metering and commu-
5 nications technology.

6 “(B) For purposes of implementing this para-
7 graph, any reference contained in this section to the
8 date of enactment of the Public Utility Regulatory
9 Policies Act of 1978 shall be deemed to be a ref-
10 erence to the date of enactment of this paragraph.

11 “(C) Notwithstanding subsections (b) and (c) of
12 section 112, each State regulatory authority shall
13 consider and make a determination concerning
14 whether it is appropriate to implement the standard
15 set out in subparagraph (A) not later than one year
16 after the date of enactment of this paragraph.”.

17 (b) SPECIAL RULES FOR REAL-TIME PRICING
18 STANDARD.—Section 115 of the Public Utility Regulatory
19 Policies Act of 1978 (16 U.S.C. 2625) is amended by add-
20 ing at the end the following:

21 “(i) REAL-TIME PRICING.—In a state that permits
22 third-party marketers to sell electric energy to retail elec-
23 tric consumers, the electric consumer shall be entitled to
24 receive the same real-time metering and communication

1 service as a direct retail electric consumer of the electric
2 utility.”.

3 **SEC. 242. ADOPTION OF ADDITIONAL STANDARDS.**

4 (a) ADOPTION OF STANDARDS.—Section 113(b) of
5 the Public Utility Regulatory Policies Act of 1978 (16
6 U.S.C. 2623(b)) is amended by adding at the end the fol-
7 lowing:

8 “(6) DISTRIBUTED GENERATION.—Each elec-
9 tric utility shall provide distributed generation, com-
10 bined heat and power, and district heating and cool-
11 ing systems competitive access to the local distribu-
12 tion grid and competitive pricing of service, and
13 shall use simplified standard contracts for the inter-
14 connection of generating facilities that have a power
15 production capacity of 250 kilowatts or less.

16 “(7) DISTRIBUTION INTERCONNECTIONS.—No
17 electric utility may refuse to interconnect a gener-
18 ating facility with the distribution facilities of the
19 electric utility if the owner or operator of the gener-
20 ating facility complies with technical standards
21 adopted by the State regulatory authority and
22 agrees to pay the costs established by such State
23 regulatory authority.

24 “(8) MINIMUM FUEL AND TECHNOLOGY DIVER-
25 SITY STANDARD.—Each electric utility shall develop

1 a plan to minimize dependence on one fuel source
2 and to ensure that the electric energy it sells to con-
3 sumers is generated using a diverse range of fuels
4 and technologies, including renewable technologies.

5 “(9) FOSSIL FUEL EFFICIENCY.—Each electric
6 utility shall develop and implement a ten-year plan
7 to increase the efficiency of its fossil fuel generation
8 and shall monitor and report to its State regulatory
9 authority excessive greenhouse gas emissions result-
10 ing from the inefficient operation of its fossil fuel
11 generating plants.”.

12 (c) TIME FOR ADOPTING STANDARD.—Section 113
13 of the Public Utility Regulatory Policies Act of 1978 (16
14 U.S.C. 2623) is further amended by adding at the end
15 the following:

16 “(d) SPECIAL RULE.—For purposes of implementing
17 paragraphs (6), (7), (8), and (9) of subsection (b), any
18 reference contained in this section to the date of enact-
19 ment of the Public Utility Regulatory Policies Act of 1978
20 shall be deemed to be a reference to the date of enactment
21 of this subsection.”.

22 **SEC. 243. TECHNICAL ASSISTANCE.**

23 Section 132(c) of the Public Utility Regulatory Poli-
24 cies Act of 1978 (16 U.S.C. 2642(c)) is amended to read
25 as follows:

1 “(c) TECHNICAL ASSISTANCE FOR CERTAIN RESPON-
 2 SIBILITIES.—The Secretary may provide such technical
 3 assistance as he determines appropriate to assist State
 4 regulatory authorities and electric utilities in carrying out
 5 their responsibilities under section 111(d)(11) and para-
 6 graphs (6), (7), (8), and (9) of section 113(b).”.

7 **SEC. 244. COGENERATION AND SMALL POWER PRODUC-**
 8 **TION PURCHASE AND SALE REQUIREMENTS.**

9 (a) TERMINATION OF MANDATORY PURCHASE AND
 10 SALE REQUIREMENTS.—Section 210 of the Public Utility
 11 Regulatory Policies Act of 1978 (16 U.S.C. 824a-3) is
 12 amended by adding at the end the following:

13 “(m) TERMINATION OF MANDATORY PURCHASE AND
 14 SALE REQUIREMENTS.—

15 “(1) IN GENERAL.—After the date of enact-
 16 ment of this subsection, no electric utility shall be
 17 required to enter into a new contract or obligation
 18 to purchase or sell electric energy under this section.

19 “(2) NO EFFECT ON EXISTING RIGHTS AND
 20 REMEDIES.—Nothing in this subsection affects the
 21 rights or remedies of any party with respect to the
 22 purchase or sale of electric energy or capacity from
 23 or to a facility under this section under any contract
 24 or obligation to purchase or to sell electric energy or

1 capacity on the date of enactment of this subsection,
2 including—

3 “(A) the right to recover costs of pur-
4 chasing such electric energy or capacity; and

5 “(B) in States without competition for re-
6 tail electric supply, the obligation of a utility to
7 provide, at just and reasonable rates for con-
8 sumption by a qualifying small power produc-
9 tion facility or a qualifying cogeneration facility,
10 backup, standby, and maintenance power.

11 “(3) RECOVERY OF COSTS.—

12 “(A) REGULATION.—To ensure recovery
13 by an electric utility that purchases electric en-
14 ergy or capacity from a qualifying facility pur-
15 suant to any legally enforceable obligation en-
16 tered into or imposed under this section before
17 the date of enactment of this subsection, of all
18 prudently incurred costs associated with the
19 purchases, the Commission shall issue and en-
20 force such regulations as may be required to en-
21 sure that the electric utility shall collect the
22 prudently incurred costs associated with such
23 purchases.

24 “(B) ENFORCEMENT.—A regulation under
25 subparagraph (A) shall be enforceable in ac-

1 cordance with the provisions of law applicable
2 to enforcement of regulations under the Federal
3 Power Act (16 U.S.C. 791a et seq.).”.

4 (b) ELIMINATION OF OWNERSHIP LIMITATIONS.—

5 (1) Section 3(17)(C) of the Federal Power Act
6 (16 U.S.C. 796(17)(C)) is amended to read as fol-
7 lows:

8 “(C) ‘qualifying small power production fa-
9 cility’ means a small power production facility
10 that the Commission determines, by rule, meets
11 such requirements (including requirements re-
12 specting minimum size, fuel use, and fuel effi-
13 ciency) as the Commission may, by rule, pre-
14 scribe.”.

15 (2) Section 3(18)(B) of the Federal Power Act
16 (16 U.S.C. 796(18)(B)) is amended to read as fol-
17 lows:

18 “(B) ‘qualifying cogeneration facility’
19 means a cogeneration facility that the Commis-
20 sion determines, by rule, meets such require-
21 ments (including requirements respecting min-
22 imum size, fuel use, and fuel efficiency) as the
23 Commission may, by rule, prescribe.”.

1 **SEC. 245. NET METERING.**

2 Title VI of the Public Utility Regulatory Policies Act
3 of 1978 is amended by adding at the end the following:

4 **“SEC. 605. NET METERING FOR RENEWABLE ENERGY AND**
5 **FUEL CELLS.**

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

7 “(1) The term ‘eligible on-site generating facil-
8 ity’ means—

9 “(A) a facility on the site of a residential
10 electric consumer with a maximum generating
11 capacity of 10 kilowatts or less that is fueled by
12 solar energy, wind energy, or fuel cells; or

13 “(B) a facility on the site of a commercial
14 electric consumer with a maximum generating
15 capacity of 500 kilowatts or less that is fueled
16 solely by a renewable energy resource, landfill
17 gas, or a high efficiency system.

18 “(2) The term ‘renewable energy resource’
19 means solar, wind, biomass, or geothermal energy.

20 “(3) The term ‘high efficiency system’ means
21 fuel cells or combined heat and power.

22 “(4) The term ‘net metering service’ means
23 service to an electric consumer under which electric
24 energy generated by that electric consumer from an
25 eligible on-site generating facility and delivered to
26 the local distribution facilities may be used to offset

1 electric energy provided by the electric utility to the
2 electric consumer during the applicable billing pe-
3 riod.

4 “(b) REQUIREMENT TO PROVIDE NET METERING
5 SERVICE.—Each electric utility shall make available upon
6 request net metering service to an electric consumer that
7 the electric utility serves.

8 “(c) RATES AND CHARGES.—

9 “(1) IDENTICAL CHARGES.—An electric
10 utility—

11 “(A) shall charge the owner or operator of
12 an on-site generating facility rates and charges
13 that are identical to those that would be
14 charged other electric consumers of the electric
15 utility in the same rate class; and

16 “(B) shall not charge the owner or oper-
17 ator of an on-site generating facility any addi-
18 tional standby, capacity, interconnection, or
19 other rate or charge.

20 “(2) MEASUREMENT.—An electric utility that
21 sells electric energy to the owner or operator of an
22 on-site generating facility shall measure the quantity
23 of electric energy produced by the on-site facility
24 and the quantity of electric energy consumed by the
25 owner or operator of an on-site generating facility

1 during a billing period in accordance with normal
2 metering practices.

3 “(3) ELECTRIC ENERGY SUPPLIED EXCEEDING
4 ELECTRIC ENERGY GENERATED.—If the quantity of
5 electric energy sold by the electric utility to an on-
6 site generating facility exceeds the quantity of elec-
7 tric energy supplied by the on-site generating facility
8 to the electric utility during the billing period, the
9 electric utility may bill the owner or operator for the
10 net quantity of electric energy sold, in accordance
11 with normal metering practices.

12 “(4) ELECTRIC ENERGY GENERATED EXCEED-
13 ING ELECTRIC ENERGY SUPPLIED.—If the quantity
14 of electric energy supplied by the on-site generating
15 facility to the electric utility exceeds the quantity of
16 electric energy sold by the electric utility to the on-
17 site generating facility during the billing period—

18 “(A) the electric utility may bill the owner
19 or operator of the on-site generating facility for
20 the appropriate charges for the billing period in
21 accordance with paragraph (2); and

22 “(B) the owner or operator of the on-site
23 generating facility shall be credited for the ex-
24 cess kilowatt-hours generated during the billing

1 period, with the kilowatt-hour credit appearing
2 on the bill for the following billing period.

3 “(d) SAFETY AND PERFORMANCE STANDARDS.—

4 “(1) An eligible on-site generating facility and
5 net metering system used by an electric consumer
6 shall meet all applicable safety, performance, reli-
7 ability, and interconnection standards established by
8 the National Electrical Code, the Institute of Elec-
9 trical and Electronics Engineers, and Underwriters
10 Laboratories.

11 “(2) The Commission, after consultation with
12 State regulatory authorities and nonregulated elec-
13 tric utilities and after notice and opportunity for
14 comment, may adopt, by rule, additional control and
15 testing requirements for on-site generating facilities
16 and net metering systems that the Commission de-
17 termines are necessary to protect public safety and
18 system reliability.

19 “(e) APPLICATION.—This section applies to each
20 electric utility during any calendar year in which the total
21 sales of electric energy by such utility for purposes other
22 than resale exceeded 1,000,000,000 kilowatt-hours during
23 the preceding calendar year. ”.

1 **Subtitle D—Consumer Protections**

2 **SEC. 251. INFORMATION DISCLOSURE.**

3 (a) OFFERS AND SOLICITATIONS.—The Federal
4 Trade Commission shall issue rules requiring each electric
5 utility that makes an offer to sell electric energy, or solicits
6 electric consumers to purchase electric energy to provide
7 the electric consumer a statement containing the following
8 information:

9 (1) the nature of the service being offered, in-
10 cluding information about interruptibility of service;

11 (2) the price of the electric energy, including a
12 description of any variable charges;

13 (3) a description of all other charges associated
14 with the service being offered, including access
15 charges, exit charges, back-up service charges,
16 stranded cost recovery charges, and customer service
17 charges; and

18 (4) information the Federal Trade Commission
19 determines is technologically and economically fea-
20 sible to provide, is of assistance to electric con-
21 sumers in making purchasing decisions, and
22 concerns—

23 (A) the product or its price,

24 (B) the share of electric energy that is
25 generated by each fuel type; and

1 (C) the environmental emissions produced
2 in generating the electric energy.

3 (b) PERIODIC BILLINGS.—The Federal Trade Com-
4 mission shall issue rules requiring any electric utility that
5 sells electric energy to transmit to each of its electric con-
6 sumers, in addition to the information transmitted pursu-
7 ant to section 115(f) of the Public Utility Regulatory Poli-
8 cies Act of 1978 (16 U.S.C. 2625(f)), a clear and concise
9 statement containing the information described in sub-
10 section (a)(4) for each billing period (unless such informa-
11 tion is not reasonably ascertainable by the electric utility).

12 **SEC. 252. CONSUMER PRIVACY.**

13 (a) PROHIBITION.—The Federal Trade Commission
14 shall issue rules prohibiting any electric utility that ob-
15 tains consumer information in connection with the sale or
16 delivery of electric energy to an electric consumer from
17 using, disclosing, or permitting access to such information
18 unless the electric consumer to whom such information re-
19 lates provides prior written approval.

20 (b) PERMITTED USE.—The rules issued under this
21 section shall not prohibit any electric utility from using,
22 disclosing, or permitting access to consumer information
23 referred to in subsection (a) for any of the following pur-
24 poses:

1 (1) to facilitate an electric consumer’s change
2 in selection of an electric utility under procedures
3 approved by the State or State regulatory authority;

4 (2) to initiate, render, bill, or collect for the sale
5 or delivery of electric energy to electric consumers
6 or for related services;

7 (3) to protect the rights or property of the per-
8 son obtaining such information;

9 (4) to protect retail electric consumers from
10 fraud, abuse, and unlawful subscription in the sale
11 or delivery of electric energy to such consumers;

12 (5) for law enforcement purposes; or

13 (6) for purposes of compliance with any Fed-
14 eral, State, or local law or regulation authorizing
15 disclosure of information to a Federal, State, or
16 local agency.

17 (c) **AGGREGATE CONSUMER INFORMATION.**—The
18 rules issued under this subsection may permit a person
19 to use, disclose, and permit access to aggregate consumer
20 information and may require an electric utility to make
21 such information available to other electric utilities upon
22 request and payment of a reasonable fee.

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

24 (1) The term “aggregate consumer informa-
25 tion” means collective data that relates to a group

1 or category of retail electric consumers, from which
2 individual consumer identities and characteristics
3 have been removed.

4 (2) The term “consumer information” means
5 information that relates to the quantity, technical
6 configuration, type, destination, or amount of use of
7 electric energy delivered to any retail electric con-
8 sumer.

9 **SEC. 253. UNFAIR TRADE PRACTICES.**

10 (a) SLAMMING.—The Federal Trade Commission
11 shall issue rules prohibiting the change of selection of an
12 electric utility except with the informed consent of the
13 electric consumer.

14 (b) CRAMMING.—The Federal Trade Commission
15 shall issue rules prohibiting the sale of goods and services
16 to an electric consumer unless expressly authorized by law
17 or the electric consumer.

18 **SEC. 254. APPLICABLE PROCEDURES.**

19 The Federal Trade Commission shall proceed in ac-
20 cordance with section 553 of title 5, United States Code,
21 when prescribing a rule required by this subtitle.

22 **SEC. 255. FEDERAL TRADE COMMISSION ENFORCEMENT.**

23 Violation of a rule issued under this subtitle shall be
24 treated as a violation of a rule under section 18 of the
25 Federal Trade Commission Act (15 U.S.C. 57a) respect-

1 ing unfair or deceptive acts or practices. All functions and
2 powers of the Federal Trade Commission under such Act
3 are available to the Federal Trade Commission to enforce
4 compliance with this subtitle notwithstanding any jurisdic-
5 tional limits in such Act.

6 **SEC. 256. STATE AUTHORITY.**

7 Nothing in this subtitle shall be construed to preclude
8 a State or State regulatory authority from prescribing and
9 enforcing additional laws, rules, or procedures regarding
10 the practices which are the subject of this section, so long
11 as such laws, rules, or procedures are not inconsistent with
12 the provisions of this section or with any rule prescribed
13 by the Federal Trade Commission pursuant to it.

14 **SEC. 257. APPLICATION OF SUBTITLE.**

15 The provisions of this subtitle apply to each electric
16 utility if the total sales of electric energy by such utility
17 for purposes other than resale exceed 500 million kilowatt-
18 hours per calendar year. The provisions of this subtitle
19 do not apply to the operations of an electric utility to the
20 extent that such operations relate to sales of electric en-
21 ergy for purposes of resale.

22 **SEC. 258. DEFINITIONS.**

23 As used in this subtitle:

24 (1) The term “aggregate consumer informa-
25 tion” means collective data that relates to a group

1 or category of electric consumers, from which indi-
2 vidual consumer identities and identifying character-
3 istics have been removed.

4 (2) The term “consumer information” means
5 information that relates to the quantity, technical
6 configuration, type, destination, or amount of use of
7 electric energy delivered to an electric consumer.

8 (3) The terms “electric consumer”, “electric
9 utility”, and “State regulatory authority” have the
10 meanings given such terms in section 3 of the Public
11 Utility Regulatory Policies Act of 1978 (16 U.S.C.
12 2602).

13 **Subtitle E—Renewable Energy and** 14 **Rural Construction Grants**

15 **SEC. 261. RENEWABLE ENERGY PRODUCTION INCENTIVE.**

16 (a) INCENTIVE PAYMENTS.—Section 1212(a) of the
17 Energy Policy Act of 1992 (42 U.S.C. 13317(a)) is
18 amended by striking “and which satisfies” and all that
19 follows through “Secretary shall establish.” and inserting
20 the following:

21 “. The Secretary shall establish other procedures nec-
22 essary for efficient administration of the program. The
23 Secretary shall not establish any criteria or procedures
24 that have the effect of assigning to proposals a higher or

1 lower priority for eligibility or allocation of appropriated
2 funds on the basis of the energy source proposed.”.

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

6 (1) by striking “a State or any political” and
7 all that follows through “nonprofit electrical cooper-
8 ative” and inserting the following: “an electricity-
9 generating cooperative exempt from taxation under
10 section 501(c)(12) or section 1381(a)(2)(C) of the
11 Internal Revenue Code of 1986, a public utility de-
12 scribed in section 115 of such Code, a State, Com-
13 monwealth, territory, or possession of the United
14 States or the District of Columbia, or a political
15 subdivision thereof, or an Indian tribal government
16 or subdivision thereof,”; and

17 (2) by inserting “landfill gas, incremental hy-
18 dropower, ocean” after “wind, biomass,”.

19 (c) ELIGIBILITY WINDOW.—Section 1212(c) of the
20 Energy Policy Act of 1992 (42 U.S.C. 13317(c)) is
21 amended by striking “during the 10-fiscal year period be-
22 ginning with the first full fiscal year occurring after the
23 enactment of this section” and inserting “before October
24 1, 2013”.

1 (d) PAYMENT PERIOD.—Section 1212(d) of the En-
2 ergy Policy Act of 1992 (42 U.S.C. 13317(d)) is amended
3 by inserting “or in which the Secretary finds that all nec-
4 essary Federal and State authorizations have been ob-
5 tained to begin construction of the facility” after “eligible
6 for such payments”.

7 (e) AMOUNT OF PAYMENT.—Section 1212(e)(1) of
8 the Energy Policy Act of 1992 (42 U.S.C. 13317(e)(1))
9 is amended by inserting “landfill gas, incremental hydro-
10 power, ocean” after “wind, biomass,”.

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

15 (g) INCREMENTAL HYDROPOWER; AUTHORIZATION
16 OF APPROPRIATIONS.—Section 1212 of the Energy Policy
17 Act of 1992 (42 U.S.C. 13317) is further amended by
18 striking subsection (g) and inserting the following:

19 “(g) CREMENTAL HYDROPOWER.—

20 “(1) PROGRAMS.—Subject to subsection (h)(2),
21 if an incremental hydropower program meets the re-
22 quirements of this section, as determined by the Sec-
23 retary, the incremental hydropower program shall be
24 eligible to receive incentive payments under this sec-
25 tion.

1 “(2) DEFINITION OF INCREMENTAL HYDRO-
2 POWER.—In this subsection, the term ‘incremental
3 hydropower’ means additional generating capacity
4 achieved from increased efficiency or additions of
5 new capacity at a hydroelectric facility in existence
6 on the date of enactment of this paragraph.

7 “(h) AUTHORIZATION OF APPROPRIATIONS.—

8 “(1) IN GENERAL.—Subject to paragraph (2),
9 there are authorized to be appropriated such sums
10 as may be necessary to carry out this section for fis-
11 cal years 2003 through 2023.

12 “(2) LIMITATION ON FUNDS USED FOR INCRE-
13 MENTAL HYDROPOWER PROGRAMS.—Not more than
14 30 percent of the amounts made available under
15 paragraph (1) shall be used to carry out programs
16 described in subsection (g)(2).

17 “(3) AVAILABILITY OF FUNDS.—Funds made
18 available under paragraph (1) shall remain available
19 until expended.”.

20 **SEC. 262. ASSESSMENT OF RENEWABLE ENERGY RE-**
21 **SOURCES.**

22 (a) RESOURCE ASSESSMENT.—Not later than 3
23 months after the date of enactment of this title, and each
24 year thereafter, the Secretary of Energy shall review the
25 available assessments of renewable energy resources avail-

1 able within the United States, including solar, wind, bio-
2 mass, ocean, geothermal, and hydroelectric energy re-
3 sources, and undertake new assessments as necessary,
4 taking into account changes in market conditions, avail-
5 able technologies and other relevant factors.

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

11 (1) a detailed inventory describing the available
12 amount and characteristics of the renewable energy
13 resources, and

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

21 **SEC. 263. FEDERAL PURCHASE REQUIREMENT.**

22 (a) REQUIREMENT.—The President shall ensure
23 that, of the total amount of electric energy the federal gov-
24 ernment consumes during any fiscal year—

1 (1) not less than 3 percent in fiscal years 2003
2 through 2004,

3 (2) not less than 5 percent in fiscal years 2005
4 through 2009, and

5 (3) not less than 7.5 percent in fiscal year 2010
6 and each fiscal year thereafter—shall be renewable
7 energy. The President shall encourage the use of in-
8 novative purchasing practices, including aggregation
9 and the use of renewable energy derivatives, by fed-
10 eral agencies.

11 (b) DEFINITION.—For purposes of this section, the
12 term “renewable energy” means electric energy generated
13 from solar, wind, biomass, geothermal, fuel cells, or addi-
14 tional hydroelectric generation capacity achieved from in-
15 creased efficiency or additions of new capacity at an exist-
16 ing hydroelectric dam.

17 (c) TRIBAL POWER GENERATION.—To the maximum
18 extent practicable, the President shall ensure that not less
19 than one-tenth of the amount specified in subsection (a)
20 shall be renewable energy that is generated by an Indian
21 tribe or by a corporation, partnership, or business associa-
22 tion which is wholly or majority owned, directly or indi-
23 rectly, by an Indian tribe. For purposes of this subsection,
24 the term “Indian tribe” means any Indian tribe, band, na-
25 tion, or other organized group or community, including

1 any Alaska Native village or regional or village corporation
2 as defined in or established pursuant to the Alaska Native
3 Claims Settlement Act (43 U.S.C. 1601 et seq.), which
4 is recognized as eligible for the special programs and serv-
5 ices provided by the United States to Indians because of
6 their status as Indians.

7 **SEC. 264. RURAL CONSTRUCTION GRANTS.**

8 Section 313 of the Rural Electrification Act of 1936
9 (7 U.S.C. 940c) is amended by adding after subsection
10 (b) the following:

11 “(c) RURAL AND REMOTE COMMUNITIES ELEC-
12 TRIFICATION GRANTS.—The Secretary of Agriculture, in
13 consultation with the Secretary of Energy and the Sec-
14 retary of the Interior, may provide grants to eligible bor-
15 rowers under this Act for the purpose of increasing energy
16 efficiency, siting or upgrading transmission and distribu-
17 tion lines, or providing or modernizing electric facilities
18 for—

19 “(1) a unit of local government of a State or
20 territory; or

21 “(2) an Indian tribe.

22 “(d) GRANT CRITERIA.—The Secretary shall make
23 grants based on a determination of cost-effectiveness and
24 most effective use of the funds to achieve the stated pur-
25 poses of this section.

1 “(e) PREFERENCE.—In making grants under this
2 section, the Secretary shall give a preference to renewable
3 energy facilities.

4 “(f) DEFINITION.—For purposes of this section, the
5 term ‘Indian tribe’ means any Indian tribe, band, nation,
6 or other organized group or community, including any
7 Alaska Native village or regional or village corporation as
8 defined in or established pursuant to the Alaska Native
9 Claims Settlement Act (43 U.S.C. 1601 et seq.), which
10 is recognized as eligible for the special programs and serv-
11 ices provided by the United States to Indians because of
12 their status as Indians;

13 “(e) AUTHORIZATION.—For the purpose of carrying
14 out subsection (c), there are authorized to be appropriated
15 to the Secretary \$20,000,000 for each of the seven fiscal
16 years following the date of enactment of this subsection.”.

17 **SEC. 265. RENEWABLE PORTFOLIO STANDARD.**

18 Title VI of the Public Utility Regulatory Policies Act
19 of 1978 is further amended by adding at the end the fol-
20 lowing:

21 **“SEC. 606. FEDERAL RENEWABLE PORTFOLIO STANDARD.**

22 “(a) MINIMUM RENEWABLE GENERATION REQUIRE-
23 MENT.—For each calendar year beginning with 2003, each
24 retail electric supplier shall submit to the Secretary renew-
25 able energy credits in an amount equal to the required

1 annual percentage, specified in subsection (b), of the total
2 electric energy sold by the retail electric supplier to electric
3 consumers in the calendar year. The retail electric supplier
4 shall make this submission before April 1 of the following
5 calendar year.

6 “(b) REQUIRED ANNUAL PERCENTAGE.—

7 “(1) For calendar years 2003 and 2004, the re-
8 quired annual percentage shall be determined by the
9 Secretary in an amount less than the amount in
10 paragraph (2);

11 “(2) For calendar year 2005 the required an-
12 nual percentage shall be 2.5 percent of the retail
13 electric supplier’s base amount; and

14 “(3) For each calendar year from 2006 through
15 2020, the required annual percentage of the retail
16 electric supplier’s base amount shall be .5 percent
17 greater than the required annual percentage for the
18 calendar year immediately preceding.

19 “(c) SUBMISSION OF CREDITS.—(1) A retail electric
20 supplier may satisfy the requirements of subsection (a)
21 through the submission of—

22 “(A) renewable energy credits issued under sub-
23 section (d) for renewable energy generated by the re-
24 tail electric supplier in the calendar year for which

1 credits are being submitted or any of the two pre-
2 vious calendar years;

3 “(B) renewable energy credits obtained by pur-
4 chase or exchange under subsection (e);

5 “(C) renewable energy credits borrowed against
6 future years under subsection (f); or

7 “(D) any combination of credits under subpara-
8 graphs (A), (B), and (C).

9 “(2) A credit may be counted toward compliance with
10 subsection (a) only once.

11 “(d) ISSUANCE OF CREDITS.—(1) The Secretary
12 shall establish, not later than one year after the date of
13 enactment of this section, a program to issue, monitor the
14 sale or exchange of, and track renewable energy credits.

15 “(2) Under the program, an entity that generates
16 electric energy through the use of a renewable energy re-
17 source may apply to the Secretary for the issuance of re-
18 newable energy credits. The application shall indicate—

19 “(A) the type of renewable energy resource used
20 to produce the electricity,

21 “(B) the State in which the electric energy was
22 produced, and

23 “(C) any other information the Secretary deter-
24 mines appropriate.

1 “(3)(A) Except as provided in paragraphs (B) and
2 (C), the Secretary shall issue to an entity one renewable
3 energy credit for each kilowatt-hour of electric energy the
4 entity generates in calendar year 2002 and any succeeding
5 year through the use of a renewable energy resource at
6 an eligible facility in any State.

7 “(B) For incremental hydropower the credits shall be
8 calculated based on a normalized annual capacity factor
9 for each facility, and not actual generation. The calcula-
10 tion of the credits for incremental hydropower shall not
11 be based on any operational changes at the hydroelectric
12 facility not directly associated with the efficiency improve-
13 ments or capacity additions.

14 “(C) The Secretary shall issue two renewable energy
15 credits for each kilowatt-hour of electric energy generated
16 in calendar year 2002 and any succeeding year through
17 the use of a renewable energy resource at an eligible facil-
18 ity in any State, if the generating facility is located on
19 Indian land. For purposes of this paragraph, renewable
20 energy generated by biomass cofired with other fuels is
21 eligible for two credits only if the biomass was grown on
22 the land eligible under this paragraph.

23 “(D) To be eligible for a renewable energy credit, the
24 unit of electric energy generated through the use of a re-
25 newable energy resource may be sold or may be used by

1 the generator. If both a renewable energy resource and
2 a non-renewable energy resource are used to generate the
3 electric energy, the Secretary shall issue credits based on
4 the proportion of the renewable energy resource used. The
5 Secretary shall identify renewable energy credits by type
6 of generation and by the State in which the generating
7 facility is located.

8 “(4) In order to receive a renewable energy credit,
9 the recipient of a renewable energy credit shall pay a fee,
10 calculated by the Secretary, in an amount that is equal
11 to the administrative costs of issuing, recording, moni-
12 toring the sale or exchange of, and tracking the credit or
13 does not exceed five percent of the dollar value of the cred-
14 it, whichever is lower. The Secretary shall retain the fee
15 and use it to pay these administrative costs.

16 “(5) When a generator sells electric energy generated
17 through the use of a renewable energy resource to a retail
18 electric supplier under a contract subject to section 210
19 of this Act, the retail electric supplier is treated as the
20 generator of the electric energy for the purposes of this
21 section for the duration of the contract.

22 “(e) CREDIT TRADING.—A renewable energy credit
23 may be sold or exchanged by the entity to whom issued
24 or by any other entity who acquires the credit. A renew-
25 able energy credit for any year that is not used to satisfy

1 the minimum renewable generation requirement of sub-
2 section (a) for that year may be carried forward for use
3 in another year.

4 “(f) CREDIT BORROWING.—At any time before the
5 end of calendar year 2003, a retail electric supplier that
6 has reason to believe that it will not have sufficient renew-
7 able energy credits to comply with subsection (a) may—

8 “(1) submit a plan to the Secretary dem-
9 onstrating that the retail electric supplier will earn
10 sufficient credits within the next 3 calendar years
11 which, when taken into account, will enable the re-
12 tail electric supplier to meet the requirements of
13 subsection (a) for the calendar year involved; and

14 “(2) upon the approval of the plan by the Sec-
15 retary, apply credits that the plan demonstrates will
16 be earned within the next 3 calendar years to meet
17 the requirements of subsection (a) for the calendar
18 year involved.

19 “(g) ENFORCEMENT.—The Secretary may bring an
20 action in the appropriate United States district court to
21 impose a civil penalty on a retail electric supplier that does
22 not comply with subsection (a). A retail electric supplier
23 who does not submit the required number of renewable
24 energy credits under subsection (a) is subject to a civil

1 penalty of not more than 3 cents each for the renewable
2 energy credits not submitted.

3 “(h) INFORMATION COLLECTION.—The Secretary
4 may collect the information necessary to verify and
5 audit—

6 “(1) the annual electric energy generation and
7 renewable energy generation of any entity applying
8 for renewable energy credits under this section,

9 “(2) the validity of renewable energy credits
10 submitted by a retail electric supplier to the Sec-
11 retary, and

12 “(3) the quantity of electricity sales of all retail
13 electric suppliers.

14 “(i) ENVIRONMENTAL SAVINGS CLAUSE.—Incre-
15 mental hydropower shall be subject to all applicable envi-
16 ronmental laws and licensing and regulatory requirements.

17 “(j) STATE SAVINGS CLAUSE.—This section does not
18 preclude a State from requiring additional renewable en-
19 ergy generation in that State.

20 “(k) DEFINITIONS.—For purposes of this section—

21 “(1) The term ‘eligible facility’ means—

22 “(A) a facility for the generation of electric
23 energy from a renewable energy resource that is
24 placed in service on or after January 1, 2002;

25 or

1 “(B) a repowering or cofiring increment
2 that is placed in service on or after January 1,
3 2002 at a facility for the generation of electric
4 energy from a renewable energy resource that
5 was placed in service before January 1, 2002.

6 An eligible facility does not have to be interconnected to
7 the transmission or distribution system facilities of an
8 electric utility.

9 “(2) The term ‘generation offset’ means re-
10 duced electricity usage metered at a site where a
11 customer consumes electricity from a renewable en-
12 ergy technology.

13 “(3) The term ‘incremental hydropower’ means
14 additional generation capacity achieved from in-
15 creased efficiency or additions of capacity after Jan-
16 uary 1, 2002 at a hydroelectric dam that was placed
17 in service before January 1, 2002.

18 “(4) The term ‘Indian land’ means—

19 “(A) any land within the limits of any In-
20 dian reservation, pueblo or rancharia,

21 “(B) any land not within the limits of any
22 Indian reservation, pueblo or rancharia title to
23 which was on the date of enactment of this
24 paragraph either held by the United States for
25 the benefit of any Indian tribe or individual or

1 held by any Indian tribe or individual subject to
2 restriction by the United States against alien-
3 ation,

4 “(C) any dependent Indian community,
5 and

6 “(D) any land conveyed to any Alaska Na-
7 tive corporation under the Alaska Native
8 Claims Settlement Act.

9 “(5) The term ‘Indian tribe’ means any Indian
10 tribe, band, nation, or other organized group or com-
11 munity, including any Alaska Native village or re-
12 gional or village corporation as defined in or estab-
13 lished pursuant to the Alaska Native Claims Settle-
14 ment Act (43 U.S.C. 1601 et seq.), which is recog-
15 nized as eligible for the special programs and serv-
16 ices provided by the United States to Indians be-
17 cause of their status as Indians.

18 “(6) The term ‘renewable energy’ means elec-
19 tric energy generated by a renewable energy re-
20 source.

21 “(7) The term ‘renewable energy resource’
22 means solar, wind, biomass, ocean, or geothermal
23 energy, a generation offset, or incremental hydro-
24 power facility.

1 “(8) The term ‘repowering or cofiring incre-
2 ment’ means the additional generation from a modi-
3 fication that is placed in service on or after January
4 1, 2002 to expand electricity production at a facility
5 used to generate electric energy from a renewable
6 energy resource or to cofire biomass that was placed
7 in service before January 1, 2002.

8 “(9) The term ‘retail electric supplier’ means a
9 person, State agency, or Federal agency that sells
10 electric energy to electric consumers and sold not
11 less than 500,000,000 kilowatt-hours of electric en-
12 ergy to electric consumers for purposes other than
13 resale during the preceding calendar year.

14 “(10) The term ‘retail electric supplier’s base
15 amount’ means the total amount of electric energy
16 sold by the retail electric supplier to electric cus-
17 tomers during the most recent calendar year for
18 which information is available, excluding electric en-
19 ergy generated by a renewable energy resource, land-
20 fill gas, or a hydroelectric facility.

21 “(l) SUNSET.—Subsection (a) of this section expires
22 December 31, 2020.”.

23 **SEC. 266. RENEWABLE ENERGY ON FEDERAL LAND.**

24 (a) PILOT PROGRAM.—Within 12 months after the
25 date of enactment of this section, the Secretary of the In-

1 terior, in consultation with the Secretaries of Agriculture
2 and Energy, shall develop guidelines for a pilot program
3 for the development of wind and solar energy on Federal
4 land.

5 (b) DEFINITION OF FEDERAL LAND.—As used in
6 this section, the term “Federal land” means land owned
7 by the United States that is subject to the operation of
8 the mineral leasing laws; and is either:

9 (1) public land as defined in section 103(e) of
10 the Federal Land Policy and Management Act of
11 1976 (42 U.S.C. 1702(e)); or

12 (2) a unit of the National Forest System as
13 that term is used in section 11(a) of the Forest and
14 Rangeland Renewable Resources Planning Act of
15 1974 (16 U.S.C. 1609(a)).

16 (c) RIGHTS-OF-WAYS.—The pilot program shall pro-
17 vide for the issuance of rights-of-way pursuant to the pro-
18 visions of title V of the Federal Land Policy and Manage-
19 ment Act of 1976 (43 U.S.C. 1761 et seq.) by the Sec-
20 retary of the Interior with respect to Federal land under
21 the jurisdiction of the Department of the Interior, and by
22 the Secretary of Agriculture with respect to federal lands
23 under the jurisdiction of the Department of Agriculture.

1 (d) ELIGIBLE SITES.—For purposes of this pilot pro-
2 gram, the issuance of rights-of-way shall be limited to
3 areas:

4 (1) of high energy potential for wind or solar
5 development;

6 (2) that have been identified by the wind or
7 solar energy industry, through a process of nomina-
8 tions or otherwise, as being of particular interest to
9 one or both industries;

10 (3) that are not located within roadless areas;

11 (4) where operation of wind or solar facilities
12 would be compatible with the scenic, recreational,
13 environmental, cultural, or historic values of the
14 Federal land, and would not require the construction
15 of new roads for the siting of lines or other trans-
16 mission facilities; and

17 (5) where issuance of the right-of-way is con-
18 sistent with the land and resource management
19 plans of the relevant land management agencies.

20 (e) COST-SHARE PAYMENTS BY DOE.—The Sec-
21 retary of Energy, in cooperation with the Secretary of the
22 Interior with respect to Federal land under the jurisdic-
23 tion of the Department of the Interior, and the Secretary
24 of Agriculture with respect to Federal land under the ju-
25 risdiction of the Department of Agriculture, shall deter-

1 mine if a project is eligible for funding pursuant to this
2 section. Only those projects that are consistent with the
3 requirements of this section and further the purposes of
4 this section shall be eligible. In the event a project is se-
5 lected for funding, the Secretary of Energy shall provide
6 no more than 15 percent of the costs of the project, and
7 the remainder of the costs shall be paid by non-Federal
8 sources.

9 (f) REVISION OF LAND USE PLANS.—The Secretary
10 of the Interior shall consider development of wind and
11 solar energy, as appropriate, in revisions of land use plans
12 under section 202 of the Federal Land Policy and Man-
13 agement Act of 1976 (42 U.S.C. 1712); and the Secretary
14 of Agriculture shall consider development of wind and
15 solar energy, as appropriate, in revisions of land and re-
16 source management plans under section 5 of the Forest
17 and Rangeland Renewable Resources Planning Act of
18 1974 (16 U.S.C. 1604). Nothing in this subsection shall
19 preclude the issuance of a right-of-way for the develop-
20 ment of a wind or solar energy project prior to the revision
21 of a land use plan by the appropriate land management
22 agency.

23 (g) REPORT TO CONGRESS.—Within 24 months after
24 the date of enactment of this section, the Secretary of the
25 Interior shall develop and report to Congress recommenda-

1 tions on any statutory or regulatory changes the Secretary
2 believes would assist in the development of renewable en-
3 ergy on Federal land. The report shall include—

4 (1) a five-year plan developed by the Secretary
5 of the Interior, in cooperation with the Secretary of
6 Agriculture, for encouraging the development of
7 wind and solar energy on Federal land in an envi-
8 ronmentally sound manner; and

9 (2) an analysis of—

10 (A) whether the use of rights-of-ways is
11 the best means of authorizing use of Federal
12 land for the development of wind and solar en-
13 ergy, or whether such resources could be better
14 developed through a leasing system, or other
15 method;

16 (B) the desirability of grants, loans, tax
17 credits or other provisions to promote wind and
18 solar energy development on Federal land; and

19 (C) any problems, including environmental
20 concerns, which the Secretary of the Interior or
21 the Secretary of Agriculture have encountered
22 in managing wind or solar energy projects on
23 Federal land, or believe are likely to arise in re-
24 lation to the development of wind or solar en-
25 ergy on Federal land;

1 (3) a list, developed in consultation with the
2 Secretaries of Energy and Defense, of lands under
3 the jurisdiction of the Departments of Energy and
4 Defense that would be suitable for development for
5 wind or solar energy, and recommended statutory
6 and regulatory mechanisms for such development;
7 and

8 (4) an analysis, developed in consultation with
9 the Secretaries of Energy and Commerce, of the po-
10 tential for development of wind, solar, and ocean en-
11 ergy on the Outer Continental Shelf, along with rec-
12 ommended statutory and regulatory mechanisms for
13 such development.

14 **TITLE III—HYDROELECTRIC**
15 **RELICENSING**

16 **SEC. 301. ALTERNATIVE CONDITIONS.**

17 (a) ALTERNATIVE MANDATORY CONDITIONS.—Sec-
18 tion 4 of the Federal Power Act (16 U.S.C. 797) is
19 amended by adding at the end the following:

20 “(h)(1) Whenever any person applies for a license for
21 any project works within any reservation of the United
22 States under subsection (e), and the Secretary of the de-
23 partment under whose supervision such reservation falls
24 (in this subsection referred to as the ‘Secretary’) shall
25 deem a condition to such license to be necessary under

1 the first proviso of such section, the license applicant may
2 propose an alternative condition that will either—

3 “(A) cost less to implement, or

4 “(B) result in improved operation of the project
5 works for electricity production.

6 “(2) Notwithstanding the first proviso of subsection
7 (e), the Secretary shall accept the alternative condition
8 proposed by the license applicant, and the Commission
9 shall include in the license such alternative condition, if
10 the Secretary determines that the alternative condition
11 provides no less protection for the reservation than pro-
12 vided by the condition deemed necessary by the Secretary.

13 “(3) The Secretary shall give interested persons other
14 than the license applicant an opportunity to propose alter-
15 native conditions. After consideration of the relevant mat-
16 ter presented, the Secretary shall accept or reject each
17 proposed condition.

18 “(4) The Secretary shall submit to the Commission
19 with any condition under subsection (e) or alternative con-
20 dition it accepts under this subsection a written statement
21 explaining the basis for accepting such condition and for
22 not accepting any condition proposed by the license appli-
23 cant under paragraph (1) or by an interested person under
24 paragraph (3), along with all studies, data, and other in-
25 formation on which the Secretary based his decision.

1 “(5) The Commission shall place any statement,
2 study, data, or other information received from the Sec-
3 retary under paragraph (4) on the public record of the
4 licensing proceeding.

5 “(6) The Secretary shall establish schedules for the
6 submission of proposed conditions and the review of the
7 acceptance or rejection of proposed conditions as may be
8 necessary to coordinate with the Commission’s license ap-
9 plication process.”.

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

12 (1) inserting “(a)” before the first sentence;

13 and

14 (2) adding at the end the following:

15 “(b)(1) Whenever the Commission shall require a li-
16 censee to construct, maintain, or operate a fishway pre-
17 scribed by the Secretary of the Interior or the Secretary
18 of Commerce under this section, the licensee may propose
19 an alternative that will either—

20 “(A) cost less to implement, or

21 “(B) result in improved operation of the project
22 works for electricity production.

23 “(2) Notwithstanding subsection (a), the Secretary of
24 the Interior or the Secretary of Commerce, as appropriate,
25 shall accept and prescribe, and the Commission shall re-

1 quire, the alternative proposed by the licensee, if the Sec-
2 retary of the appropriate department determines that the
3 alternative will be no less effective than the fishway ini-
4 tially prescribed by the Secretary.

5 “(3) The Secretary of the appropriate department
6 shall give interested persons other than the licensee an op-
7 portunity to propose alternative fishway prescriptions.
8 After consideration of the relevant matter presented, the
9 Secretary shall accept or reject each proposed alternative.

10 “(4) The Secretary of the appropriate department
11 shall submit to the Commission with any fishway prescrip-
12 tion under subsection (a) or alternative fishway prescrip-
13 tion it accepts under this subsection a written statement
14 explaining the basis for accepting such prescription and
15 for not accepting any prescription proposed by the licensee
16 under paragraph (1) or by an interested person under
17 paragraph (3), along with all studies, data, and other in-
18 formation on which the Secretary based his decision.

19 “(5) The Commission shall place any statement,
20 study, data, or other information received from the Sec-
21 retary under paragraph (4) on the public record of the
22 licensing proceeding.

23 “(6) The Secretary of the appropriate department
24 shall establish schedules for the submission of proposed
25 conditions and the review of the acceptance or rejection

1 of proposed conditions as may be necessary to coordinate
2 with the Commission’s license application process.”.

3 **SEC. 302. CHARGES FOR TRIBAL LANDS.**

4 Section 10(e)(1) of the Federal Power Act (16 U.S.C.
5 803(e)(1) is amended by inserting after the second proviso
6 the following: “*Provided further*, That the Commission
7 shall not issue a new or original license for projects involv-
8 ing tribal lands embraced within Indian reservations until
9 annual charges required under this section have been
10 fixed.”

11 **SEC. 303. DISPOSITION OF HYDROELECTRIC CHARGES.**

12 Section 17 of the Federal Power Act (16 U.S.C. 810)
13 is further amended—

14 (1) by striking “is hereby appropriated to be
15 paid into the Treasury of the United States and
16 credited to ‘Miscellaneous receipts’” and inserting
17 “shall be reserved, subject to appropriation, for the
18 purpose of carrying out activities for the protection
19 of water resources under subsection (c)”;

20 (2) by adding at the end the following:

21 “(c)(1) Of the amount reserved for the protection of
22 water resources under subsection (a), there are authorized
23 to be appropriated to the Secretary responsible for the res-
24 ervation from which the charges were paid such sums as
25 may be necessary for the purpose of carrying out activities

1 for the protection of the water resources on or for the ben-
2 efit of—

3 “(A) the reservation on which the project for
4 which the charges were paid is located; or

5 “(B) the reservation on which the headwaters
6 of the waterway, on which the project for which the
7 charges were paid, is located.

8 “(2) For purposes of this subsection, activities for the
9 protection of water resources for which funds are author-
10 ized to be appropriated under this subsection may be used
11 may only include the following:

12 “(A) promoting the recovery of threatened and
13 endangered species;

14 “(B) road and trail assessments and plans,
15 maintenance, obliteration, or closure;

16 “(C) wildlife and fish habitat management;

17 “(D) multiparty monitoring of water protection
18 activities;

19 “(E) watershed analysis, including resource
20 conditions and trend assessments;

21 “(F) erosion control and restoring hydrologic
22 function to meadows, wetlands, and floodplains; and

23 “(G) job training associated with paragraph
24 (3).

1 “(3) In carrying out the activities provided for in
2 paragraph (2) and in order to provide employment and
3 job training opportunities to residents of rural commu-
4 nities located within or near a reservation identified in
5 paragraph (1), the Secretary may make grants or enter
6 into cooperative agreements or contracts with—

7 “(A) a private, non-profit, or cooperative entity
8 within the same county as the reservation;

9 “(B) businesses that employ 25 or less employ-
10 ees;

11 “(C) an entity that will hire or train residents
12 of communities located within or near the reserva-
13 tion to perform the contract; or

14 “(D) the Youth Conservation Corps or related
15 partnerships with State, local, or non-profit youth
16 groups.”.

17 **SEC. 304. ANNUAL LICENSES.**

18 Section 15(a) of the Federal Power Act (16 U.S.C.
19 808(a)) is amended by adding at the end the following:

20 “(4) Prior to issuing a fourth and subsequent
21 annual license under paragraph (1), the Commission
22 shall first consult with the Secretary of the Interior
23 and the Secretary of Commerce, and if the project
24 is within any reservation, with the Secretary under
25 whose supervision such reservation falls.

1 “(5) Prior to issuing a fourth and subsequent
2 annual license under paragraph (1), the Commission
3 shall publish a written statement setting forth the
4 reasons why the annual license is needed, and de-
5 scribing the results of consultation with the Sec-
6 retary of the Interior, the Secretary of Commerce,
7 and the Secretary under whose supervision the res-
8 ervation falls. Such explanation shall also contain
9 the best judgement of the Commission as to whether
10 the Commission anticipates issuing an additional an-
11 nual license, and if so, the likely terms and condi-
12 tions of such additional annual license.

13 “(6) At least 60 days prior to expiration of the
14 seventh and subsequent annual licenses issued under
15 paragraph (1), the Commission shall submit to Con-
16 gress the written statement required in paragraph
17 (5).”.

18 **SEC. 305. ENFORCEMENT.**

19 (a) **MONITORING AND INVESTIGATIONS OF MANDA-**
20 **TORY CONDITIONS AND FISHWAY PRESCRIPTIONS.**—The
21 first sentence of section 31(a) of the Federal Power Act
22 (16 U.S.C. 823b(a)) is amended to read as follows: “The
23 Commission shall monitor and investigate compliance with
24 each license and permit issued under this Part, each condi-
25 tion imposed under section 4(e) or 4(h), each fishway pre-

1 scription imposed under section 18, and each exemption
2 granted from any requirement of this Part.”

3 (b) COMPLIANCE ORDERS.—The third sentence of
4 section 31(a) of the Federal Power Act (16 U.S.C. 823(a))
5 is amended to read as follows: “After notice and oppor-
6 tunity for public hearing, the Commission may issue such
7 orders as necessary to require compliance with the terms
8 and conditions of licenses and permits issued under this
9 Part, with conditions imposed under section 4(e) or 4(h),
10 with fishway prescriptions imposed under section 18, and
11 with the terms and conditions of exemptions granted from
12 any requirement of this Part.”

13 **SEC. 306. ESTABLISHMENT OF HYDROELECTRIC RELI-**
14 **CENSING PROCEDURES.**

15 (a) JOINT PROCEDURES OF THE COMMISSION AND
16 RESOURCE AGENCIES.—

17 (1) Within 18 months after the date of enact-
18 ment of this section, the Commission, the Secretary
19 of the Interior, the Secretary of Commerce, and the
20 Secretary of Agriculture, shall, after public review
21 and comment, issue coordinated regulations gov-
22 erning the issuance of a license under section 15 of
23 the Federal Power Act (16 U.S.C. 808).

24 (2) Such regulations shall provide for—

1 (A) the participation of the Commission in
2 the pre-application environmental scoping pro-
3 cess conducted by the resource agencies pursu-
4 ant to section 15(b) of the Federal Power Act
5 (16 U.S.C. 808(b)), sufficient to allow the Com-
6 mission and the resource agencies to coordinate
7 environmental reviews and other regulatory pro-
8 cedures of the Commission and the resource
9 agencies under Part I of the Federal Power
10 Act, and under the National Environmental
11 Policy Act of 1969 (42 U.S.C. 4321 et seq.).

12 (B) issuance by the resource agencies of
13 draft and final mandatory conditions under sec-
14 tion 4(e) of the Federal Power Act (16 U.S.C.
15 797(e)), and draft and final fishway prescrip-
16 tions under section 18 of the Federal Power
17 Act (16 U.S.C. 811);

18 (C) to the maximum extent possible, iden-
19 tification by the Commission staff in the draft
20 analysis of the license application conducted
21 under the National Environmental Policy Act,
22 of all license articles and license conditions the
23 Commission is likely to include in the license;

24 (D) coordination by the Commission and
25 the resource agencies of analysis under the Na-

1 tional Environmental Policy Act for final license
2 articles and conditions recommended by Com-
3 mission staff, and the final mandatory condi-
4 tions and fishway prescriptions of the resource
5 agencies; and

6 (E) procedures for ensuring coordination
7 and sharing, to the maximum extent possible, of
8 information, studies, data and analysis by the
9 Commission and the resource agencies to reduce
10 the need for duplicative studies and analysis by
11 license applicants and other parties to the li-
12 cense proceeding.

13 (b) PROCEDURES OF THE COMMISSION.—Within 18
14 months after the date of enactment of this section, the
15 Commission shall, after public comment and review, issue
16 additional regulations governing the issuance of a license
17 under section 15 of the Federal Power Act (16 U.S.C.
18 808). Such regulations shall—

19 (1) set a schedule for the Commission to
20 issue—

21 (A) a tendering notice indicating that an
22 application has been filed with the Commission;

23 (B) advanced notice to resource agencies of
24 the issuance of the Ready for Environmental
25 Analysis Notice requesting submission of rec-

1 ommendations, conditions, prescriptions, and
2 comments;

3 (C) a license decision after completion of
4 environmental assessments or environmental
5 impact statements prepared pursuant to the
6 National Environmental Policy Act; and

7 (D) responses to petitions, motions, com-
8 plaints and requests for rehearing;

9 (2) set deadlines for an applicant to conduct all
10 needed resource studies in support of its license ap-
11 plication;

12 (3) ensure a coordinated schedule for all major
13 actions by the applicant, the Commission, affected
14 Federal and State agencies, Indian Tribes and other
15 parties, through final decision on the application;
16 and

17 (4) provide for the adjustment of schedules if
18 unavoidable delays occur.

19 **SEC. 307. RELICENSING STUDY.**

20 (a) IN GENERAL.—The Federal Energy Regulatory
21 Commission shall, jointly with the Secretary of Commerce,
22 the Secretary of the Interior, and the Secretary of Agri-
23 culture, conduct a study of all new licenses issued for ex-
24 isting projects under section 15 of the Federal Power Act
25 (16 U.S.C. 808) since January 1, 1994.

1 (b) SCOPE.—The study shall analyze:

2 (1) the length of time the Commission has
3 taken to issue each new license for an existing
4 project;

5 (2) the additional cost to the licensee attrib-
6 utable to new license conditions;

7 (3) the change in generating capacity attrib-
8 utable to new license conditions;

9 (4) the environmental benefits achieved by new
10 license conditions;

11 (5) significant unmitigated environmental dam-
12 age of the project and costs to mitigate such dam-
13 age; and

14 (6) litigation arising from the issuance or fail-
15 ure to issue new licenses for existing projects under
16 section 15 of the Federal Power Act or the imposi-
17 tion or failure to impose new license conditions.

18 (c) DEFINITION.—As used in this section, the term
19 “new license condition” means any condition imposed
20 under—

21 (1) section 4(e) of the Federal Power Act (16
22 U.S.C. 797(e)),

23 (2) section 10(a) of the Federal Power Act (16
24 U.S.C. 803(a)),

1 (2) section 10(e) of the Federal Power Act (16
2 U.S.C. 803(e)),

3 (3) section 10(j) of the Federal Power Act (16
4 U.S.C. 803(j)),

5 (4) section 18 of the Federal Power Act (16
6 U.S.C. 811), or

7 (5) section 401(d) of the Clean Water Act (33
8 U.S.C. 1341(d)).

9 (d) CONSULTATION.—The Commission shall give in-
10 terested persons and licensees an opportunity to submit
11 information and views in writing.

12 (e) REPORT.—The Commission shall report its find-
13 ings to the Committee on Energy and Natural Resources
14 of the United States Senate and the Committee on Energy
15 and Commerce of the House of Representatives not later
16 than 24 months after the date of enactment of this sec-
17 tion.

18 **SEC. 308. DATA COLLECTION PROCEDURES.**

19 Within 24 months after the date of enactment of this
20 section, the Federal Energy Regulatory Commission, the
21 Secretary of the Interior, the Secretary of Commerce, and
22 the Secretary of Agriculture shall jointly develop proce-
23 dures for ensuring complete and accurate information con-
24 cerning the time and cost to parties in the hydroelectric
25 licensing process under part I of the Federal Power Act

1 (16 U.S.C. 791 et seq.). Such data shall be published reg-
2 ularly, but no less frequently than every three years.

3 **TITLE IV—INDIAN ENERGY**

4 **SEC. 401. COMPREHENSIVE INDIAN ENERGY PROGRAM.**

5 Title XXVI of the Energy Policy Act of 1992 (25
6 U.S.C. 3501–3506) is amended by adding after section
7 2606 the following:

8 **“SEC. 2607. COMPREHENSIVE INDIAN ENERGY PROGRAM.**

9 “(a) DEFINITIONS.—For purposes of this section—

10 “(1) the term ‘Director’ means the Director of
11 the Office of Indian Energy Policy and Programs es-
12 tablished by section 217 of the Department of En-
13 ergy Organization Act, and

14 “(2) the term ‘Indian land’ means—

15 “(A) any land within the limits of an In-
16 dian reservation, pueblo, or rancheria;

17 “(B) any land not within the limits of an
18 Indian reservation, pueblo, or rancheria whose
19 title on the date of enactment of this section
20 was held—

21 “(i) in trust by the United States for
22 the benefit of an Indian tribe,

23 “(ii) by an Indian tribe subject to re-
24 striction by the United States against
25 alienation, or

1 “(iii) by a dependent Indian commu-
2 nity; and

3 “(C) land conveyed to an Alaska Native
4 Corporation under the Alaska Native Claims
5 Settlement Act.

6 “(b) INDIAN ENERGY EDUCATION PLANNING AND
7 MANAGEMENT ASSISTANCE.—

8 “(1) The Director shall establish programs
9 within the Office of Indian Energy Policy and Pro-
10 grams to assist Indian tribes in meeting their energy
11 education, research and development, planning, and
12 management needs.

13 “(2) The Director may make grants, on a com-
14 petitive basis, to an Indian tribe for—

15 “(A) renewable energy, energy efficiency,
16 and conservation programs;

17 “(B) studies and other activities sup-
18 porting tribal acquisition of energy supplies,
19 services, and facilities;

20 “(C) planning, constructing, developing,
21 operating, maintaining, and improving tribal
22 electrical generation, transmission, and dis-
23 tribution facilities; and

24 “(D) developing, constructing, and inter-
25 connecting electric power transmission facilities

1 with transmission facilities owned and operated
2 by a Federal power marketing agency or an
3 electric utility that provides open access trans-
4 mission service.

5 “(3) The Director may develop, in consultation
6 with Indian tribes, a formula for making grants
7 under this section. The formula may take into ac-
8 count the following—

9 “(A) the total number of acres of Indian
10 land owned by an Indian tribe;

11 “(B) the total number of households on
12 the Indian tribe’s Indian land;

13 “(C) the total number of households on the
14 Indian tribe’s Indian land that have no elec-
15 tricity service or are under-served; and

16 “(D) financial or other assets available to
17 the Indian tribe from any source.

18 “(4) In making a grant under paragraph (2),
19 the Director shall give priority to an application re-
20 ceived from an Indian tribe that is not served or is
21 served inadequately by an electric utility, as that
22 term is defined in section 3(4) of the Public Utility
23 Regulatory Policies Act of 1978 (16 U.S.C.
24 2602(4)), or by a person, State agency, or any other
25 non-federal entity that owns or operates a local dis-

1 tribution facility used for the sale of electric energy
2 to an electric consumer.

3 “(5) There are authorized to be appropriated to
4 the Department of Energy such sums as may be
5 necessary to carry out the purposes of this section.

6 “(6) The Secretary is authorized to promulgate
7 such regulations as the Secretary determines to be
8 necessary to carry out the provisions of this sub-
9 section.

10 “(c) LOAN GUARANTEE PROGRAM.—

11 “(1) AUTHORITY.—The Secretary may guar-
12 antee not more than 90 percent of the unpaid prin-
13 cipal and interest due on any loan made to any In-
14 dian tribe for energy development, including the
15 planning, development, construction, and mainte-
16 nance of electrical generation plants, and for trans-
17 mission and delivery mechanisms for electricity pro-
18 duced on Indian land. A loan guaranteed under this
19 subsection shall be made by—

20 “(A) a financial institution subject to the
21 examination of the Secretary; or

22 “(B) an Indian tribe, from funds of the In-
23 dian tribe, to another Indian tribe.

24 “(2) AVAILABILITY OF APPROPRIATIONS.—

25 Amounts appropriated to cover the cost of loan

1 guarantees shall be available without fiscal year limi-
2 tation to the Secretary to fulfill obligations arising
3 under this subsection.

4 “(3) AUTHORIZATION OF APPROPRIATIONS.—

5 “(A) There are authorized to be appro-
6 priated to the Secretary such sums as may be
7 necessary to cover the cost of loan guarantees,
8 as defined by section 502(5) of the Federal
9 Credit Reform Act of 1990 (2 U.S.C. 661a(5)).

10 “(B) There are authorized to be appro-
11 priated to the Secretary such sums as may be
12 necessary to cover the administrative expenses
13 related to carrying out the loan guarantee pro-
14 gram established by this subsection.

15 “(4) LIMITATION ON AMOUNT.—The aggregate
16 outstanding amount guaranteed by the Secretary of
17 Energy at any one time under this subsection shall
18 not exceed \$2,000,000,000.

19 “(5) REGULATIONS.—The Secretary is author-
20 ized to promulgate such regulations as the Secretary
21 determines to be necessary to carry out the provi-
22 sions of this subsection.

23 “(d) INDIAN ENERGY PREFERENCE.—(1) An agency
24 or department of the United States Government may give,
25 in the purchase of electricity, oil, gas, coal, or other energy

1 product or by-product, preference in such purchase to an
 2 energy and resource production enterprise, partnership,
 3 corporation, or other type of business organization major-
 4 ity or wholly owned and controlled by a tribal government.

5 “(2) In implementing this subsection, an agency or
 6 department shall pay no more than the prevailing market
 7 price for the energy product or by-product and shall obtain
 8 no less than existing market terms and conditions.

9 “(e) EFFECT ON OTHER LAWS.—This section does
 10 not—

11 “(1) limit the discretion vested in an Adminis-
 12 trator of a Federal power marketing agency to mar-
 13 ket and allocate Federal power, or

14 “(2) alter Federal laws under which a Federal
 15 power marketing agency markets, allocates, or pur-
 16 chases power.”.

17 **SEC. 402. OFFICE OF INDIAN ENERGY POLICY AND PRO-**
 18 **GRAMS.**

19 Title II of the Department of Energy Organization
 20 Act is amended by adding at the end the following:

21 “OFFICE OF INDIAN ENERGY POLICY AND PROGRAMS.

22 “SEC. 217. (a) There is established within the De-
 23 partment an Office of Indian Energy Policy and Pro-
 24 grams. This Office shall be headed by a Director, who
 25 shall be appointed by the Secretary and compensated at

1 the rate equal to that of level IV of the Executive Schedule
2 under section 5315 of Title 5, United States Code.

3 “(b) The Director shall provide, direct, foster, coordi-
4 nate, and implement energy planning, education, manage-
5 ment, conservation, and delivery programs of the Depart-
6 ment that—

7 “(1) promote tribal energy efficiency and utili-
8 zation;

9 “(2) modernize and develop, for the benefit of
10 Indian tribes, tribal energy and economic infrastruc-
11 ture related to natural resource development and
12 electrification;

13 “(3) preserve and promote tribal sovereignty
14 and self determination related to energy matters and
15 energy deregulation;

16 “(4) lower or stabilize energy costs; and

17 “(5) electrify tribal members’ homes and tribal
18 lands.

19 “(c) The Director shall carry out the duties assigned
20 the Secretary or the Director under title XXVI of the En-
21 ergy Policy Act of 1992 (25 U.S.C. 3501 et seq.).”.

22 **SEC. 403. CONFORMING AMENDMENTS.**

23 (a) AUTHORIZATION OF APPROPRIATIONS.—Section
24 2603(c) of the Energy Policy Act of 1992 (25 U.S.C.
25 3503(c)) is amended to read as follows:

1 “(c) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated such sums as may be
3 necessary to carry out the purposes of this section.”.

4 (b) TABLE OF CONTENTS.—The Table of Contents
5 of the Department of Energy Act is amended by inserting
6 after the item relating to section 216 the following new
7 item:

“Sec. 217. Office of Indian Energy Policy and Programs.”.

8 (c) EXECUTIVE SCHEDULE.—Section 5315 of title 5,
9 United States Code, is amended by inserting “Director,
10 Office of Indian Energy Policy and Programs, Depart-
11 ment of Energy.” after “Inspector General, Department
12 of Energy.”.

13 **SEC. 404. SITING ENERGY FACILITIES ON TRIBAL LANDS.**

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

15 (1) INDIAN TRIBE.—The term “Indian tribe”
16 means any Indian tribe, band, nation, or other orga-
17 nized group or community, which is recognized as el-
18 igible for the special programs and services provided
19 by the United States to Indians because of their sta-
20 tus as Indians, except that such term does not in-
21 clude any Regional Corporation as defined in section
22 3(g) of the Alaska Native Claims Settlement Act (43
23 U.S.C. 1602(g)).

24 (2) INTERESTED PARTY.—The term “interested
25 party” means a person whose interests could be ad-

1 versely affected by the decision of an Indian tribe to
2 grant a lease or right-of-way pursuant to this sec-
3 tion.

4 (3) PETITION.—The term “petition” means a
5 written request submitted to the Secretary for the
6 review of an action (or inaction) of the Indian tribe
7 that is claimed to be in violation of the approved
8 tribal regulations;

9 (4) RESERVATION.—The term “reservation”
10 means—

11 (A) with respect to a reservation in a State
12 other than Oklahoma, all land that has been set
13 aside or that has been acknowledged as having
14 been set aside by the United States for the use
15 of an Indian tribe, the exterior boundaries of
16 which are more particularly defined in a final
17 tribal treaty, agreement, executive order, federal
18 statute, secretarial order, or judicial determina-
19 tion;

20 (B) with respect to a reservation in the
21 State of Oklahoma, all land that is—

22 (i) within the jurisdictional area of an
23 Indian tribe, and

24 (ii) within the boundaries of the last
25 reservation of such tribe that was estab-

1 lished by treaty, executive order, or secre-
2 tarial order.

3 (5) SECRETARY.—The term “Secretary” means
4 the Secretary of the Interior.

5 (6) TRIBAL LANDS.—The term “tribal lands”
6 means any tribal trust lands or other lands owned
7 by an Indian tribe that are within a reservation, or
8 tribal trust lands located contiguous thereto.

9 (b) LEASES INVOLVING GENERATION, TRANS-
10 MISSION, DISTRIBUTION OR ENERGY PROCESSING FA-
11 CILITIES.—An Indian tribe may grant a lease of tribal
12 land for electric generation, transmission, or distribution
13 facilities, or facilities to process or refine renewable or
14 nonrenewable energy resources developed on tribal lands,
15 and such leases shall not require the approval of the Sec-
16 retary if the lease is executed under tribal regulations ap-
17 proved by the Secretary under this subsection and the
18 term of the lease does not exceed 30 years.

19 (c) RIGHTS-OF-WAY FOR ELECTRIC GENERATION,
20 TRANSMISSION, DISTRIBUTION OR ENERGY PROCESSING
21 FACILITIES.—An Indian tribe may grant a right-of-way
22 over tribal lands for a pipeline or an electric transmission
23 or distribution line without separate approval by the Sec-
24 retary, if—

1 (1) the right-of-way is executed under and com-
2 plies with tribal regulations approved by the Sec-
3 retary and the term of the right-of-way does not ex-
4 ceed 30 years; and

5 (2) the pipeline or electric transmission or dis-
6 tribution line serves—

7 (A) an electric generation, transmission or
8 distribution facility located on tribal land, or

9 (B) a facility located on tribal land that
10 processes or refines renewable or nonrenewable
11 energy resources developed on tribal lands.

12 (d) RENEWALS.—Leases or rights-of-way entered
13 into under this subsection may be renewed at the discre-
14 tion of the Indian tribe in accordance with the require-
15 ments of this section.

16 (e) TRIBAL REGULATION REQUIREMENTS.—

17 (1) The Secretary shall have the authority to
18 approve or disapprove tribal regulations required
19 under this subsection. The Secretary shall approve
20 such tribal regulations if they are comprehensive in
21 nature, including provisions that address—

22 (A) securing necessary information from
23 the lessee or right-of-way applicant;

24 (B) term of the conveyance;

25 (C) amendments and renewals;

1 (D) consideration for the lease or right-of-
2 way;

3 (E) technical or other relevant require-
4 ments;

5 (F) requirements for environmental review
6 as set forth in paragraph (3);

7 (G) requirements for complying with all
8 applicable environmental laws; and

9 (H) final approval authority.

10 (2) No lease or right-of-way shall be valid un-
11 less authorized in compliance with the approved trib-
12 al regulations.

13 (3) An Indian tribe, as a condition of securing
14 Secretarial approval as contemplated in paragraph
15 (1), must establish an environmental review process
16 that includes the following—

17 (A) an identification and evaluation of all
18 significant environmental impacts of the pro-
19 posed action as compared to a no action alter-
20 native;

21 (B) identification of proposed mitigation;

22 (C) a process for ensuring that the public
23 is informed of and has an opportunity to com-
24 ment on the proposed action prior to tribal ap-
25 proval of the lease or right-of-way; and

1 (D) sufficient administrative support and
2 technical capability to carry out the environ-
3 mental review process.

4 (4) The Secretary shall review and approve or
5 disapprove the regulations of the Indian tribe within
6 180 days of the submission of such regulations to
7 the Secretary. Any disapproval of such regulations
8 by the Secretary shall be accompanied by written
9 documentation that sets forth the basis for the dis-
10 approval. The 180-day period may be extended by
11 the Secretary after consultation with the Indian
12 tribe.

13 (5) If the Indian tribe executes a lease or right-
14 of-way pursuant to tribal regulations required under
15 this subsection, the Indian tribe shall provide the
16 Secretary with—

17 (A) a copy of the lease or right-of-way doc-
18 ument and all amendments and renewals there-
19 to; and

20 (B) in the case of regulations or a lease or
21 right-of-way that permits payment to be made
22 directly to the Indian tribe, documentation of
23 the payments sufficient to enable the Secretary
24 to discharge the trust responsibility of the

1 United States as appropriate under existing
2 law.

3 (6) The United States shall not be liable for
4 losses sustained by any party to a lease executed
5 pursuant to tribal regulations under this subsection,
6 including the Indian tribe.

7 (7)(A) An interested party may, after exhaus-
8 tion of tribal remedies, submit, in a timely manner,
9 a petition to the Secretary to review the compliance
10 of the Indian tribe with any tribal regulations ap-
11 proved under this subsection. If upon such review,
12 the Secretary determines that the regulations were
13 violated, the Secretary may take such action as may
14 be necessary to remedy the violation, including re-
15 scinding or holding the lease or right-of-way in abey-
16 ance until the violation is cured. The Secretary may
17 also rescind the approval of the tribal regulations
18 and reassume the responsibility for approval of
19 leases or rights-of-way associated with the facilities
20 addressed in this section.

21 (B) If the Secretary seeks to remedy a violation
22 described in subparagraph (A), the Secretary shall—

23 (i) make a written determination with re-
24 spect to the regulations that have been violated;

1 (ii) provide the Indian tribe with a written
2 notice of the alleged violation together with
3 such written determination; and

4 (iii) prior to the exercise of any remedy or
5 the rescission of the approval of the regulations
6 involved and reassumption of the lease or right-
7 of-way approval responsibility, provide the In-
8 dian tribe with a hearing and a reasonable op-
9 portunity to cure the alleged violation.

10 (C) The tribe shall retain all rights to appeal as
11 provided by regulations promulgated by the Sec-
12 retary.

13 (f) AGREEMENTS.—

14 (1) Agreements between an Indian tribe and a
15 business entity that are directly associated with the
16 development of electric generation, transmission or
17 distribution facilities, or facilities to process or refine
18 renewable or nonrenewable energy resources devel-
19 oped on tribal lands, shall not separately require the
20 approval of the Secretary pursuant to section 18 of
21 title 25, United States Code, so long as the activity
22 that is the subject of the agreement has been the
23 subject of an environmental review process pursuant
24 to subsection (e) of this section.

1 (2) The United States shall not be liable for
2 any losses or damages sustained by any party, in-
3 cluding the Indian tribe, that are associated with an
4 agreement entered into under this subsection.

5 (g) **DISCLAIMER.**—Nothing in this section is intended
6 to modify or otherwise affect the applicability of any provi-
7 sion of the Indian Mineral Leasing Act of 1938 (25 U.S.C.
8 396a–396g); Indian Mineral Development Act of 1982 (25
9 U.S.C. 2101–2108); Surface Mining Control and Rec-
10 lamation Act of 1977 (30 U.S.C. 1201–1328); any amend-
11 ments thereto; or any other laws not specifically addressed
12 in this section.

13 **SEC. 405. INDIAN MINERAL DEVELOPMENT ACT REVIEW.**

14 (a) **IN GENERAL.**—The Secretary of the Interior shall
15 conduct a review of the activities that have been conducted
16 by the governments of Indian tribes under the authority
17 of the Indian Mineral Development Act of 1982 (25
18 U.S.C. 2101 et seq.).

19 (b) **REPORT.**—Not later than one year after the date
20 of the enactment of this Act, the Secretary shall transmit
21 to the Committee on Resources of the House of Represent-
22 atives and the Committee on Indian Affairs and the Com-
23 mittee on Energy and Natural Resources of the Senate
24 a report containing:

25 (1) the results of the review;

1 (2) recommendations designed to help ensure
2 that Indian tribes have the opportunity to develop
3 their nonrenewable energy resources; and

4 (3) an analysis of the barriers to the develop-
5 ment of energy resources on Indian land, including
6 federal policies and regulations, and make rec-
7 ommendations regarding the removal of those bar-
8 riers.

9 (c) CONSULTATION.—The Secretary shall consult
10 with Indian tribes on a government-to-government basis
11 in developing the report and recommendations as provided
12 in this subsection.

13 **SEC. 406. RENEWABLE ENERGY STUDY.**

14 (a) IN GENERAL.—Not later than 2 years after the
15 date of the enactment of this Act, and once every 2 years
16 thereafter, the Secretary of Energy shall transmit to the
17 Committees on Energy and Commerce and Resources of
18 the House of Representatives and the Committees on En-
19 ergy and Natural Resources and Indian Affairs of the Sen-
20 ate a report on energy consumption and renewable energy
21 development potential on Indian land. The report shall
22 identify barriers to the development of renewable energy
23 by Indian tribes, including federal policies and regulations,
24 and make recommendations regarding the removal of such
25 barriers.

1 (b) CONSULTATION.—The Secretary shall consult
 2 with Indian tribes on a government-to-government basis
 3 in developing the report and recommendations as provided
 4 in this section.

5 **SEC. 407. FEDERAL POWER MARKETING ADMINISTRA-**
 6 **TIONS.**

7 Title XXVI of the Energy Policy Act of 1992 (25
 8 U.S.C. 3501) (as amended by section 201) is amended by
 9 adding the at the end of the following:

10 **“SEC. 2608. FEDERAL POWER MARKETING ADMINISTRA-**
 11 **TIONS.**

12 “(a) DEFINITION OF ADMINISTRATOR.—In this sec-
 13 tion, the term ‘Administrator’ means—

14 “(1) the Administrator of the Bonneville Power
 15 Administration; or

16 “(2) the Administrator of the Western Area
 17 Power Administration.

18 “(b) ASSISTANCE FOR TRANSMISSION STUDIES.—

19 “(1) Each Administrator may provide technical
 20 assistance to Indian tribes seeking to use the high-
 21 voltage transmission system for delivery of electric
 22 power. The costs of such technical assistance shall
 23 be funded—

24 “(A) by the Administrator using non-reim-
 25 bursable funds appropriated for this purpose, or

1 “(B) by the Indian tribe.

2 “(2) PRIORITY FOR ASSISTANCE FOR TRANS-
3 MISSION STUDIES.—In providing discretionary as-
4 sistance to Indian tribes under paragraph (1), each
5 Administrator shall give priority in funding to In-
6 dian tribes that have limited financial capability to
7 conduct such studies.”.

8 **SEC. 408. FEASIBILITY STUDY OF COMBINED WIND AND HY-**
9 **DROPOWER DEMONSTRATION PROJECT.**

10 (a) STUDY.—The Secretary of Energy, in coordina-
11 tion with the Secretary of the Army and the Secretary of
12 the Interior, shall conduct a study of the cost and feasi-
13 bility of developing a demonstration project that would use
14 wind energy generated by Indian tribes and hydropower
15 generated by the Army Corps of Engineers on the Mis-
16 souri River to supply firming power to the Western Area
17 Power Administration.

18 (b) SCOPE OF STUDY.—The study shall—

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

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

1 (3) assess the wind energy resource potential on
2 tribal lands and projected cost savings through a
3 blend of wind and hydropower over a thirty-year pe-
4 riod; and

5 (4) include a preliminary interconnection study
6 and a determination of resource adequacy of the
7 Upper Great Plains Region of the Western Area
8 Power Administration;

9 (5) determine seasonal capacity needs and asso-
10 ciated transmission upgrades for integration of tribal
11 wind generation; and

12 (6) include an independent tribal engineer as a
13 study team member.

14 (c) REPORT.—The Secretary of Energy and Sec-
15 retary of the Army shall submit a report to Congress not
16 later than one year after the date of enactment of this
17 title. The Secretaries shall include in the report—

18 (1) an analysis of the potential energy cost sav-
19 ings to the customers of the Western Area Power
20 Administration through the blend of wind and hy-
21 dropower;

22 (2) an evaluation of whether a combined wind
23 and hydropower system can reduce reservoir fluctua-
24 tion, enhance efficient and reliable energy production
25 and provide Missouri River management flexibility;

1 (3) recommendations for a demonstration
2 project which the Western Area Power Administra-
3 tion could carry out in partnership with an Indian
4 tribal government or tribal government energy con-
5 sortium to demonstrate the feasibility and potential
6 of using wind energy produced on Indian lands to
7 supply firming energy to the Western Area Power
8 Administration or other Federal power marketing
9 agency; and

10 (4) an identification of the economic and envi-
11 ronmental benefits to be realized through such a fed-
12 eral-tribal partnership and identification of how such
13 a partnership could contribute to the energy security
14 of the United States.

15 (d) CONSULTATION.—The Secretary shall consult
16 with Indian tribes on a government-to-government basis
17 in developing the report and recommendations provided in
18 this section.

19 (e) AUTHORIZATION OF APPROPRIATIONS.—There
20 are authorized to be appropriated \$500,000 to carry out
21 this section, which shall remain available until expended.
22 All costs incurred by the Western Area Power Administra-
23 tion associated with performing the tasks required under
24 this section shall be non-reimbursable.

1 **TITLE V—NUCLEAR POWER**
2 **Subtitle A—Price-Anderson Act**
3 **Reauthorization**

4 **SEC. 501. SHORT TITLE.**

5 This subtitle may be cited as the “Price-Anderson
6 Amendments Act of 2002”.

7 **SEC. 502. EXTENSION OF DEPARTMENT OF ENERGY INDEM-**
8 **NIFICATION AUTHORITY.**

9 Section 170 d.(1)(A) of the Atomic Energy Act of
10 1954 (42 U.S.C. 2210(d)(1)(A)) is amended by striking
11 “, until August 1, 2002,”.

12 **SEC. 503. DEPARTMENT OF ENERGY LIABILITY LIMIT.**

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

17 “(2) In agreements of indemnification entered
18 into under paragraph (1), the Secretary—

19 “(A) may require the contractor to provide
20 and maintain financial protection of such a type
21 and in such amounts as the Secretary shall de-
22 termine to be appropriate to cover public liabil-
23 ity arising out of or in connection with the con-
24 tractual activity, and

1 “(B) shall indemnify the persons indem-
2 nified against such claims above the amount of
3 the financial protection required, in the amount
4 of \$10,000,000,000 (subject to adjustment for
5 inflation under subsection t.), in the aggregate,
6 for all persons indemnified in connection with
7 such contract and for each nuclear incident, in-
8 cluding such legal costs of the contractor as are
9 approved by the Secretary.”.

10 (b) CONTRACT AMENDMENTS.—Section 170 d. of the
11 Atomic Energy Act of 1954 (42 U.S.C. 2210(d)) is further
12 amended by striking paragraph (3) and inserting the fol-
13 lowing:

14 “(3) All agreements of indemnification under
15 which the Department of Energy (or its predecessor
16 agencies) may be required to indemnify any person,
17 shall be deemed to be amended, on the date of the
18 enactment of the Price-Anderson Amendments Act
19 of 2002, to reflect the amount of indemnity for pub-
20 lic liability and any applicable financial protection
21 required of the contractor under this subsection on
22 such date.”.

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

1 amended by striking “paragraph (3)” and inserting “para-
2 graph (2)(B)”.

3 **SEC. 504. INCIDENTS OUTSIDE THE UNITED STATES.**

4 (a) AMOUNT OF INDEMNIFICATION.—Section 170
5 d.(5) of the Atomic Energy Act of 1954 (42 U.S.C.
6 2210(d)(5)) is amended by striking “\$100,000,000” and
7 inserting “\$500,000,000”.

8 (b) LIABILITY LIMIT.—Section 170 e.(4) of the
9 Atomic Energy Act of 1954 (42 U.S.C. 2210(e)(4) is
10 amended by striking “\$100,000,000” and inserting
11 “\$500,000,000”.

12 **SEC. 505. REPORTS.**

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

16 **SEC. 506. INFLATION ADJUSTMENT.**

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

19 (1) by renumbering paragraph (2) as paragraph
20 (3); and

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

22 “(2) The Secretary shall adjust the amount of
23 indemnification provided under an agreement of in-
24 demnification under subsection d. not less than once
25 during each 5-year period following July 1, 2002, in

1 accordance with the aggregate percentage change in
2 the Consumer Price Index since—

3 “(A) such date of enactment, in the case
4 of the first adjustment under this paragraph; or
5 “(B) the previous adjustment under this
6 paragraph.”.

7 **SEC. 507. CIVIL PENALTIES.**

8 (a) **REPEAL OF AUTOMATIC REMISSION.**—Section
9 234A b.(2) of the Atomic Energy of 1954 (42 U.S.C.
10 2282a (b)(2)) is amended by striking the last sentence.

11 (b) **LIMITATION FOR NONPROFIT INSTITUTIONS.**—
12 Section 234A of the Atomic Energy Act of 1954 (42
13 U.S.C. 2282a) is further amended by striking subsection
14 d. and inserting the following:

15 “d. In the case of a contractor, subcontractor, or sup-
16 plier of the Department of Energy that is an organization
17 described in section 501(c)(3) of the Internal Revenue
18 Code of 1986 and that is exempt from taxation under sec-
19 tion 501(a) of the Code—

20 “(1) the assessment of any civil penalty under
21 subsection a. against that entity may not be made
22 until the entity enters into a new contract with the
23 Department of Energy or an extension of a current
24 contract with the Department; and

1 “(2) the total amount of civil penalties under
2 subsection a. in a fiscal year may not exceed the
3 total amount of fees paid by the Department of En-
4 ergy to that entity in that fiscal year.”.

5 **SEC. 508. EFFECTIVE DATE.**

6 The amendments made by sections 503(a) and 504
7 shall not apply to any nuclear incident that occurs before
8 the date of the enactment of this subtitle.

9 **Subtitle B—Miscellaneous**
10 **Provisions**

11 **SEC. 511. URANIUM SALES.**

12 (a) URANIUM HEXAFLUORIDE DERIVED FROM RUS-
13 SIAN HIGHLY ENRICHED URANIUM.—Section 3112(b)(2)
14 of the USEC Privatization Act (42 U.S.C. 2297h-
15 10(b)(2)) is amended to read as follows:

16 “(2) The Secretary may not sell any uranium
17 hexafluoride transferred to the Secretary pursuant
18 to paragraph (1) to any end user other than the
19 United States for consumption in the United States
20 prior to March 24, 2009, and may not sell or trans-
21 fer more than 3,000,000 pounds of U₃O₈ equivalent
22 for consumption in the United States in calendar
23 year 2009 or in any calendar year thereafter.”.

1 (b) INVENTORY SALES.—Section 3112(d)(1) of the
2 USEC Privatization Act (42 U.S.C. 2297h–10(d)(1)) is
3 amended to read as follows:

4 “(1) Except as provided in subsections (b), (c),
5 and (e), and except for transfers or sales of any ura-
6 nium that will be further processed at a domestic
7 uranium mill, the Secretary may not sell natural or
8 low-enriched uranium (including low-enriched ura-
9 nium derived from highly enriched uranium) from
10 the Department of Energy’s stockpile prior to May
11 24, 2009.”.

12 **SEC. 512. REAUTHORIZATION OF THORIUM REIMBURSE-**
13 **MENT.**

14 (a) REIMBURSEMENT OF THORIUM LICENSEES.—
15 Section 1001(b)(2)(C) of the Energy Policy Act of 1992
16 (42 U.S.C. 2296a) is amended by striking
17 “\$140,000,000” and inserting “\$263,000,000”.

18 (b) AUTHORIZATION OF APPROPRIATIONS.—Section
19 1003(a) of the Energy Policy Act of 1992 (42 U.S.C.
20 2296a–2) is amended by striking “\$490,000,000” and in-
21 serting “\$613,000,000”.

22 (c) DECONTAMINATION AND DECOMMISSIONING
23 FUND.—Section 1802(a) of the Atomic Energy Act of
24 1954 (42 U.S.C. 2297g–1) is amended by striking
25 “\$488,333,333” and inserting “\$508,833,333”.

1 **SEC. 513. FAST FLUX TEST FACILITY.**

2 The Secretary of Energy shall not reactivate the Fast
3 Flux Test Facility to conduct—

4 (1) any atomic energy defense activity,

5 (2) any space-related mission, or

6 (3) any program for the production or utiliza-
7 tion of nuclear material if the Secretary has deter-
8 mined, in a record of decision, that the program can
9 be carried out at existing operating facilities.

10 **DIVISION B—DOMESTIC OIL AND**
11 **GAS PRODUCTION AND**
12 **TRANSPORTATION**
13 **TITLE VI—OIL AND GAS**
14 **PRODUCTION**

15 **SEC. 601. PERMANENT AUTHORITY TO OPERATE THE STRA-**
16 **TEGIC PETROLEUM RESERVE.**

17 (a) AMENDMENT TO TITLE I OF THE ENERGY POL-
18 ICY AND CONSERVATION ACT.—Title I of the Energy Pol-
19 icy and Conservation Act (42 U.S.C. 6211 et seq.) is
20 amended—

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

23 “SEC. 166. There are authorized to be appropriated
24 to the Secretary such sums as may be necessary to carry
25 out this part, to remain available until expended.”; and

1 (2) by striking part E (42 U.S.C. 6251; relat-
2 ing to the expiration of title I of the Act) and its
3 heading.

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

8 (1) by striking section 256(h) (42 U.S.C.
9 6276(h)) and inserting—

10 “(h) AUTHORIZATION OF APPROPRIATIONS.—There
11 are authorized to be appropriated to the Secretary such
12 sums as may be necessary to carry out this part, to remain
13 available until expended.”.

14 (2) by striking section 273(e) (42 U.S.C.
15 6283(e); relating to the expiration of summer fill
16 and fuel budgeting programs); and

17 (3) by striking part D (42 U.S.C. 6285; relat-
18 ing to the expiration of title II of the Act) and its
19 heading.

20 (c) TECHNICAL AMENDMENTS.—The table of con-
21 tents for the Energy Policy and Conservation Act is
22 amended by striking the items relating to part D of title
23 I and part D of title II.

1 **SEC. 602. FEDERAL ONSHORE LEASING PROGRAMS FOR**
2 **OIL AND GAS.**

3 (a) **TIMELY ACTION ON LEASES AND PERMITS.**—The
4 Secretary of the Interior shall provide for the timely leas-
5 ing of lands containing oil or gas and timely action on
6 applications for permits to drill under section 17 of the
7 Mineral Leasing Act (30 U.S.C. 226). To ensure timely
8 action on oil and gas leases and applications for permits
9 to drill, the Secretary shall—

10 (1) ensure expeditious compliance with the re-
11 quirements section 102(2)(C) of the National Envi-
12 ronmental Policy Act of 1969 (42 U.S.C.
13 4332(2)(C));

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

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

18 (4) improve inspection and enforcement activi-
19 ties related to oil and gas leases.

20 (b) **AUTHORIZATION OF APPROPRIATIONS.**—For the
21 purpose of carrying out paragraphs (1) through (4) of
22 subsection (a), there are authorized to be appropriated to
23 the Secretary of the Interior \$60,000,000 for each of the
24 fiscal years 2003 through 2006, in addition to amounts
25 otherwise authorized to be appropriated for the purpose

1 of carrying out section 17 of the Mineral Leasing Act (30
2 U.S.C. 226).

3 **SEC. 603. OIL AND GAS LEASE ACREAGE LIMITATIONS.**

4 Section 27(d)(1) of the Mineral Leasing Act (30
5 U.S.C. 184(d)(1)) is amended by inserting after “acreage
6 held in special tar sand areas” the following: “as well as
7 acreage under any lease any portion of which has been
8 committed to a Federally approved unit or cooperative
9 plan or communitization agreement, or for which royalty,
10 including compensatory royalty or royalty in kind, was
11 paid in the preceding calendar year.”.

12 **SEC. 604. HYDRAULIC FRACTURING.**

13 Section 1421 of the Safe Drinking Water Act (42
14 U.S.C. Sec. 300h) is amended by adding at the end the
15 following:

16 “(e) HYDRAULIC FRACTURING FOR OIL AND GAS
17 PRODUCTION.—

18 “(1) STUDY OF THE EFFECTS OF HYDRAULIC
19 FRACTURING.—

20 “(A) IN GENERAL.—Not later than 24
21 months after the date of enactment of this sub-
22 section, the Administrator shall complete a
23 study of the known and potential effects on un-
24 derground drinking water sources of hydraulic
25 fracturing, including the effects of hydraulic

1 fracturing on underground drinking water
2 sources on a nationwide basis, and within spe-
3 cific regions, States, or portions of States.

4 “(B) CONSULTATION.—In planning and
5 conducting the study, the Administrator shall
6 consult with the Secretary of the Interior, the
7 Secretary of Energy, the Ground Water Protec-
8 tion Council, affected States, and, as appro-
9 priate, representatives of environmental, indus-
10 try, academic, scientific, public health, and
11 other relevant organizations. Such study may be
12 accomplished in conjunction with other ongoing
13 studies related to the effects of oil and gas pro-
14 duction on groundwater resources.

15 “(C) STUDY ELEMENTS.—The study con-
16 ducted under subparagraph (A) shall, at a min-
17 imum, examine and make findings as to
18 whether—

19 “(i) such hydraulic fracturing has, or
20 will, endanger (as defined under subsection
21 (d)(2)) underground drinking water
22 sources, including those sources within spe-
23 cific regions, States or portions of States;

24 “(ii) there are specific methods, prac-
25 tices, or hydrogeologic circumstances in

1 which hydraulic fracturing has, or will, en-
2 danger underground drinking water
3 sources; and

4 “(iii) there are any precautionary ac-
5 tions that may reduce or eliminate any
6 such endangerment.

7 “(2) INDEPENDENT SCIENTIFIC REVIEW.—

8 “(A) IN GENERAL.— Not later than 2
9 months after the study under paragraph (1) is
10 completed, the Administrator shall enter into an
11 appropriate agreement with the National Acad-
12 emy of Sciences to have the Academy review the
13 conclusions of the study.

14 “(B) REPORT—Not later than 9 months
15 after entering into an appropriate agreement
16 with the Administrator, the National Academy
17 of Sciences shall report to the Administrator,
18 the Committee on Energy and Commerce of the
19 House of Representatives, and the Committee
20 on Environment and Public Works of the Sen-
21 ate, on the—

22 “(i) findings related to the study con-
23 ducted by the Administrator under para-
24 graph (1); and

1 “(ii) recommendations, if any, for
2 modifying the findings of the study.

3 “(3) REGULATORY DETERMINATION.—

4 “(A) IN GENERAL.—Not later than 6
5 months after receiving the National Academy of
6 Sciences report under paragraph (2), the Ad-
7 ministrator shall determine, after informal pub-
8 lic hearings and public notice and opportunity
9 for comment, and based on information devel-
10 oped or accumulated in connection with the
11 study required under paragraph (1) and the
12 National Academy of Sciences report under
13 paragraph (2), either:

14 “(i) that regulation of hydraulic frac-
15 turing under this part is necessary to en-
16 sure that underground sources of drinking
17 water will not be endangered on a nation-
18 wide basis, or within a specific region,
19 State or portions of a State; or

20 “(ii) that regulation described under
21 clause (i) is unnecessary.

22 “(B) PUBLICATION OF DETERMINATION.—
23 The Administrator shall publish the determina-
24 tion in the Federal Register, accompanied by an
25 explanation and the reasons for it.

1 “(4) PROMULGATION OF REGULATIONS.—

2 “(A) REGULATION NECESSARY.—If the
3 Administrator determines under paragraph (3)
4 that regulation of hydraulic fracturing under
5 this part is necessary to ensure that hydraulic
6 fracturing does not endanger underground
7 drinking water sources on a nationwide basis,
8 or within a specific region, State or portions of
9 a State, the Administrator shall, within 6
10 months after the issuance of that determina-
11 tion, and after public notice and opportunity for
12 comment, promulgate regulations under section
13 1421 (42 U.S.C. 300h) to ensure that hydraulic
14 fracturing will not endanger such underground
15 sources of drinking water.

16 “(B) REGULATION UNNECESSARY.—The
17 Administrator shall not promulgate regulations
18 for hydraulic fracturing under this part unless
19 the Administrator determines under paragraph
20 (3) that such regulations are necessary.

21 “(C) EXISTING REGULATIONS.—A deter-
22 mination by the Administrator under paragraph
23 (3) that regulation is unnecessary will relieve
24 States from any further obligation to regulate

1 hydraulic fracturing as an underground injec-
2 tion under this part.

3 “(5) DEFINITION OF HYDRAULIC FRAC-
4 TURING.—For purposes of this subsection, the term
5 ‘hydraulic fracturing’ means the process of creating
6 a fracture in a reservoir rock, and injecting fluids
7 and propping agents, for the purposes of reservoir
8 stimulation related to oil and gas production activi-
9 ties.

10 “(6) SAVINGS.—Nothing in this subsection shall
11 in any way limit the authorities of the Administrator
12 under section 1431 (42 U.S.C. 300i).”.

13 **SEC. 605. ORPHANED WELLS ON FEDERAL LAND.**

14 (a) ESTABLISHMENT.—The Secretary of the Interior,
15 in cooperation with the Secretary of Agriculture, shall es-
16 tablish a program to ensure within three years after the
17 date of enactment remediation, reclamation, and closure
18 of orphaned oil and gas wells located on lands adminis-
19 tered by the land management agencies within the Depart-
20 ment of the Interior and the U.S. Forest Service. The pro-
21 gram shall include a means of ranking critical sites for
22 priority in remediation based on potential environmental
23 harm, other land use priorities, and public health and safe-
24 ty. The program shall provide that responsible parties be
25 identified wherever possible and that the costs of remedi-

1 ation be recovered. In carrying out the program, the Sec-
2 retary of the Interior shall work cooperatively with the
3 Secretary of Agriculture and the states within which the
4 federal lands are located, and shall consult with the Sec-
5 retary of Energy, and the Interstate Oil and Gas Compact
6 Commission.

7 (b) PLAN.—Within six months from the date of en-
8 actment of this section, the Secretary of the Interior, in
9 cooperation with the Secretary of Agriculture, shall pre-
10 pare a plan for carrying out the program established
11 under subsection (a). Copies of the plan shall be trans-
12 mitted to the Committee on Energy and Natural Re-
13 sources of the Senate and the Committee on Resources
14 of the House of Representatives.

15 (c) AUTHORIZATION OF APPROPRIATIONS.—There
16 are authorized to be appropriated to the Secretary of the
17 Interior \$5,000,000 for each of fiscal years 2003 through
18 2005 to carry out the activities provided for in this sec-
19 tion.

20 **SEC. 606. ORPHANED AND ABANDONED OIL AND GAS WELL**
21 **PROGRAM.**

22 (a) ESTABLISHMENT.—The Secretary of Energy
23 shall establish a program to provide technical assistance
24 to the various oil and gas producing states to facilitate
25 state efforts over a ten-year period to ensure a practical

1 and economical remedy for environmental problems caused
2 by orphaned and abandoned exploration or production well
3 sites on state and private lands. The Secretary shall work
4 with the states, through the Interstate Oil and Gas Com-
5 pact Commission, to assist the states in quantifying and
6 mitigating environmental risks of onshore abandoned and
7 orphaned wells on state and private lands.

8 (b) PROGRAM ELEMENTS.—The program should
9 include—

10 (1) mechanisms to facilitate identification of re-
11 sponsible parties wherever possible;

12 (2) criteria for ranking critical sites based on
13 factors such as other land use priorities, potential
14 environmental harm and public visibility; and

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

17 (c) AUTHORIZATION OF APPROPRIATIONS.—There
18 are authorized to be appropriated to the Secretary of En-
19 ergy for the activities under this section \$5,000,000 for
20 each of fiscal years 2003 through 2005 to carry out the
21 provisions of this section.

22 **SEC. 607. OFFSHORE DEVELOPMENT.**

23 Section 5 of the Outer Continental Shelf Lands Act
24 of 1953 (43 U.S.C. 1334) is amended by adding at the
25 end the following:

1 “(k) SUSPENSION OF OPERATIONS FOR SUBSALT
2 EXPLORATION.—Notwithstanding any other provision of
3 law or regulation, the Secretary may grant a request for
4 a suspension of operations under any lease to allow the
5 lessee to reprocess or reinterpret geologic or geophysical
6 data beneath allocthonous salt sheets, when in the Sec-
7 retary’s judgment such suspension is necessary to prevent
8 waste caused by the drilling of unnecessary wells, and to
9 maximize ultimate recovery of hydrocarbon resources
10 under the lease. Such suspension shall be limited to the
11 minimum period of time the Secretary determines is nec-
12 essary to achieve the objectives of this subsection.”.

13 **SEC. 608. COALBED METHANE STUDY.**

14 (a) STUDY.—The Secretary of the Interior, in con-
15 sultation with the Administrator of the Environmental
16 Protection Agency, and the Secretaries of Energy and Ag-
17 riculture, shall conduct a study on the effects of coalbed
18 methane production on surface and water resources.

19 (b) DATA ANALYSIS.—The study shall analyze avail-
20 able hydrogeologic and water quality data, along with
21 other pertinent environmental or other information to
22 determine—

23 (1) adverse effects associated with surface or
24 subsurface disposal of waters produced during ex-
25 traction of coalbed methane;

1 development of domestic oil and gas resources and on reve-
2 nues to Federal, State, local and tribal governments.

3 (b) SCOPE.—The evaluation under subsection (a)
4 shall—

5 (1) analyze the impact of fiscal policies on oil
6 and natural gas exploration, development drilling,
7 and production under different price scenarios, in-
8 cluding the impact of the individual and corporate
9 Alternative Minimum Tax, state and local produc-
10 tion taxes and fixed royalty rates during low price
11 periods;

12 (2) assess the effect of existing federal and
13 state fiscal policies on investment under different ge-
14 ological and developmental circumstances, including
15 but not limited to deepwater environments, subsalt
16 formations, deep and deviated wells, coalbed meth-
17 ane and other unconventional oil and gas forma-
18 tions;

19 (3) assess the extent to which federal and state
20 fiscal policies negatively impact the ultimate recovery
21 of resources from existing fields and smaller accu-
22 mulations in offshore waters, especially in water
23 depths less than 800 meters, of the Gulf of Mexico;

24 (4) compare existing federal and state policies
25 with tax and royalty regimes in other countries with

1 particular emphasis on similar geological, develop-
2 mental and infrastructure conditions; and

3 (5) evaluate how alternative tax and royalty
4 policies, including counter-cyclical measures, could
5 increase recovery of domestic oil and natural gas re-
6 sources and revenues to Federal, State, local and
7 tribal governments.

8 (c) POLICY RECOMMENDATIONS.—Based upon the
9 findings of the evaluation under subsection (a), a report
10 describing the findings and recommendations for policy
11 changes shall be provided to the President, the Congress,
12 the Governors of the member states of the Interstate Oil
13 and Gas Compact Commission, and Indian tribes having
14 an oil and gas lease approved by the Secretary of the Inte-
15 rior. The recommendations should ensure that the public
16 interest in receiving the economic benefits of tax and roy-
17 alty revenues is balanced with the broader national secu-
18 rity and economic interests in maximizing recovery of do-
19 mestic resources. The report should include recommenda-
20 tions regarding actions to—

21 (1) ensure stable development drilling during
22 periods of low oil and/or natural gas prices to main-
23 tain reserve replacement and deliverability;

24 (2) minimize the negative impact of a volatile
25 investment climate on the oil and gas service indus-

1 try and domestic oil and gas exploration and produc-
2 tion;

3 (3) ensure a consistent level of domestic activity
4 to encourage the education and retention of a tech-
5 nical workforce; and

6 (4) maintain production capability during peri-
7 ods of low oil and/or natural gas prices.

8 (d) ROYALTY GUIDELINES.—The recommendations
9 required under (c) should include guidelines for private re-
10 source holders as to the appropriate level of royalties given
11 geology, development cost, and the national interest in
12 maximizing recovery of oil and gas resources.

13 (e) REPORT.—The study under subsection (a) shall
14 be completed not later than 18 months after the date of
15 enactment of this section. The report and recommenda-
16 tions required in (c) shall be transmitted to the President,
17 the Congress, Indian tribes, and the Governors of the
18 member States of the Interstate Oil and Gas Compact
19 Commission.

20 **SEC. 610. STRATEGIC PETROLEUM RESERVE.**

21 (a) FULL CAPACITY.—The President shall—

22 (1) fill the Strategic Petroleum Reserve estab-
23 lished pursuant to part B of title I of the Energy
24 Policy and Conservation Act (42 U.S.C. 6231 et
25 seq.) to full capacity as soon as practicable;

1 (2) acquire petroleum for the Strategic Petro-
 2 leum Reserve by the most practicable and cost-effec-
 3 tive means, including the acquisition of crude oil the
 4 United States is entitled to receive in kind as royal-
 5 ties from production on Federal lands; and

6 (3) ensure that the fill rate minimizes impacts
 7 on petroleum markets.

8 (b) RECOMMENDATIONS.—Not later than 180 days
 9 after the date of enactment of this Act, the Secretary of
 10 Energy shall submit to Congress a plan to—

11 (1) eliminate any infrastructure impediments
 12 that may limit maximum drawdown capability; and

13 (2) determine whether the capacity of the Stra-
 14 tegic Petroleum Reserve on the date of enactment of
 15 this section is adequate in light of the increasing
 16 consumption of petroleum and the reliance on im-
 17 ported petroleum.

18 **TITLE VII—NATURAL GAS**

19 **PIPELINES**

20 **Subtitle A—Alaska Natural Gas**

21 **Pipeline**

22 **SEC. 701. SHORT TITLE.**

23 This subtitle may be cited as the “Alaska Natural
 24 Gas Pipeline Act of 2002”.

1 **SEC. 702. PURPOSES.**

2 The purposes of this subtitle are:

3 (1) to expedite the approval, construction, and
4 initial operation of one or more transportation sys-
5 tems for the delivery of Alaska natural gas to the
6 contiguous United States;

7 (2) to ensure access to such transportation sys-
8 tems on an equal and nondiscriminatory basis and
9 to promote competition in the exploration, develop-
10 ment and production of Alaska Natural Gas;

11 (3) to provide federal financial assistance to
12 any transportation system for the transport of Alas-
13 ka natural gas to the contiguous United States, for
14 which an application for a certificate of public con-
15 venience and necessity is filed with the Commission
16 not later than six months after the date of enact-
17 ment of this title.

18 **SEC. 703. ISSUANCE OF CERTIFICATE OF PUBLIC CONVEN-**
19 **IENCE AND NECESSITY.**

20 (a) **AUTHORITY OF THE COMMISSION.**—Notwith-
21 standing the provisions of the Alaska Natural Gas Trans-
22 portation Act of 1976 (15 U.S.C. 719–719o), the Commis-
23 sion shall consider and act on an application for the
24 issuance of a certificate of public convenience and neces-
25 sity authorizing the construction and operation of an Alas-

1 ka natural gas transportation project under section 7(c)
2 of the Natural Gas Act (15 U.S.C. 717f(c)).

3 (b) ISSUANCE OF CERTIFICATE.—

4 (1) PROJECTS IN ALASKA.—The Commission
5 shall issue a certificate of public convenience and ne-
6 cessity authorizing the construction and operation of
7 an Alaska natural gas transportation project within
8 the State of Alaska if the applicant has—

9 (A) entered into a contract to transport
10 Alaska natural gas through the proposed Alas-
11 ka natural gas transportation project for use in
12 the contiguous United States; and

13 (B) satisfied the requirements of section
14 7(e) of the Natural Gas Act (15 U.S.C.
15 717f(e)) with respect to—

16 (i) rates, charges, and terms and con-
17 ditions of such transportation services; and

18 (ii) all environmental laws applicable
19 to the proposed facilities.

20 (2) PROJECTS IN THE CONTIGUOUS UNITED
21 STATES.—The Commission may issue a certificate of
22 public convenience and necessity authorizing the
23 construction and operation of an Alaska natural gas
24 transportation project in the contiguous United
25 States if the applicant satisfies the requirements of

1 section 7(e) of the Natural Gas Act (15 U.S.C.
2 717f(e)).

3 (c) COMPETITIVE EFFECTS.—In carrying out its re-
4 sponsibilities under this section, the Commission shall take
5 into account the effect on competition in the exploration,
6 development and production of natural gas in Alaska, and
7 shall ensure that any Alaska natural gas transportation
8 project provides open and nondiscriminatory access to all
9 shippers.

10 (d) EXPEDITED APPROVAL PROCESS.—The Commis-
11 sion shall issue a final order granting or denying any ap-
12 plication for a certificate of public and convenience and
13 necessity under section 7(c) of the Natural Gas Act (15
14 U.S.C. 717f(c)) and this section not more than 60 days
15 after the issuance of the final environmental impact state-
16 ment for that project pursuant to section 704.

17 (e) REVIEWS AND ACTIONS OF OTHER FEDERAL
18 AGENCIES.—All reviews conducted and actions taken by
19 any federal officer or agency relating to an Alaska natural
20 gas transportation project shall be expedited, in a manner
21 consistent with completion of the necessary reviews and
22 approvals by the deadlines set forth in this subtitle.

23 **SEC. 704. ENVIRONMENTAL REVIEWS.**

24 (a) COMPLIANCE WITH NEPA.—The issuance of a
25 certificate of public convenience and necessity authorizing

1 the construction and operation of any Alaska natural gas
2 transportation project shall be treated as a major federal
3 action significantly affecting the quality of the human en-
4 vironment within the meaning of section 102(2)(C) of the
5 National Environmental Policy Act of 1969 (42 U.S.C.
6 4332(2)(C)).

7 (b) DESIGNATION OF LEAD AGENCY.—The Commis-
8 sion shall be the lead agency for purposes of complying
9 with the National Environmental Policy Act of 1969, and
10 shall be responsible for preparing the statement required
11 by section 102(2)(c) of that Act (42 U.S.C. 4332(2)(c))
12 with respect to the project. The Commission shall prepare
13 a single environmental statement under this section, which
14 shall consolidate the environmental reviews of all Federal
15 agencies considering any aspect of the project.

16 (c) OTHER AGENCIES.—All Federal agencies consid-
17 ering aspects of the construction and operation of the
18 Alaska natural gas transportation project shall cooperate
19 with the Commission, and shall comply with deadlines es-
20 tablished by the Commission in the preparation of the
21 statement under this section. The statement prepared
22 under this section shall be used by all such agencies to
23 satisfy their responsibilities under section 102(2)(C) of the
24 National Environmental Policy Act of 1969 (42 U.S.C.
25 4332(2)(C)) with respect to such project.

1 (d) EXPEDITED PROCESS.—The Commission shall
2 issue a draft statement under this section not later than
3 12 months after the Commission determines the applica-
4 tion to be complete and shall issue the final statement not
5 later than 6 months after the Commission issues the draft
6 statement, unless the Commission for good cause finds
7 that additional time is needed.

8 **SEC. 705. FEDERAL COORDINATOR.**

9 (a) ESTABLISHMENT.—There is established as an
10 independent establishment in the executive branch, the Of-
11 fice of the Federal Coordinator for Alaska Natural Gas
12 Transportation Projects.

13 (b) THE FEDERAL COORDINATOR.—The Office shall
14 be headed by a Federal Coordinator for Alaska Natural
15 Gas Transportation Projects (the “Federal Coordinator”),
16 who shall—

17 (1) be appointed by the President, by and with
18 the advice of the Senate,

19 (2) hold office at the pleasure of the President,
20 and

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

23 (c) DUTIES.—The Federal Coordinator shall be re-
24 sponsible for—

1 (1) coordinating the expeditious discharge of all
2 activities by federal agencies with respect to an Alas-
3 ka natural gas transportation project; and

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

6 **SEC. 706. JUDICIAL REVIEW.**

7 (a) **EXCLUSIVE JURISDICTION.**—The United States
8 Court of Appeals for the District of Columbia Circuit shall
9 have exclusive jurisdiction to determine—

10 (1) the validity of any final order or action (in-
11 cluding a failure to act) of the Commission under
12 this subtitle;

13 (2) the constitutionality of any provision of this
14 subtitle, or any decision made or action taken there-
15 under; or

16 (3) the adequacy of any environmental impact
17 statement prepared under the National Environ-
18 mental Policy Act of 1969 with respect to any action
19 under this subtitle.

20 (b) **DEADLINE FOR FILING CLAIM.**—Claims arising
21 under this subtitle may be brought not later than 60 days
22 after the date of the decision or action giving rise to the
23 claim.

1 **SEC. 707. LOAN GUARANTEE.**

2 (a) **AUTHORITY.**—The Secretary of Energy may
3 guarantee not more than 80 percent of the principal of
4 any loan made to the holder of a certificate of public con-
5 venience and necessity issued under section 701(b)(1) of
6 this Act or section 9 of the Alaska Natural Gas Transpor-
7 tation Act of 1976 (15 U.S.C. 719g) for the purpose of
8 constructing a natural gas pipeline system for trans-
9 porting natural gas from the North Slope of Alaska to
10 the border between Alaska and Canada.

11 (b) **CONDITIONS.**—

12 (1) The Secretary of Energy may not guarantee
13 a loan under this section unless the guarantee has
14 filed an application for a certificate of public conven-
15 ience and necessity under section 701(b)(1) of this
16 Act or for an amended certificate under section 9 of
17 the Alaska Natural Gas Transportation Act of 1976
18 (15 U.S.C. 719g) with the Federal Energy Regu-
19 latory Commission not later than six months after
20 the date of enactment of this title.

21 (2) A loan guaranteed under this section shall
22 be made by a financial institution subject to the ex-
23 amination of the Secretary.

24 (3) Loan requirements, including term, max-
25 imum size, collateral requirements and other fea-
26 tures shall be determined by the Secretary.

1 (c) LIMITATION ON AMOUNT.—Commitments to
2 guarantee loans may be made by the Secretary of Energy
3 only to the extent that the total loan principal, any part
4 of which is guaranteed, will not exceed \$10,000,000,000.

5 (d) REGULATIONS.—The Secretary of Energy may
6 issue regulations to carry out the provisions of this sec-
7 tion.

8 (e) AUTHORIZATION OF APPROPRIATIONS.—There
9 are authorized to be appropriated to the Secretary such
10 sums as may be necessary to cover the cost of loan guaran-
11 tees, as defined by section 502(5) of the Federal Credit
12 Reform Act of 1990 (2 U.S.C. 661a(5)).

13 **SEC. 708. DEFINITIONS.**

14 For purposes of this subtitle:

15 (1) the term “Alaska natural gas” means nat-
16 ural gas derived from the area of the State of Alas-
17 ka generally known as the North Slope of Alaska,
18 including the Continental Shelf thereof;

19 (2) the term “Alaska natural gas transportation
20 project” means—

21 (A) any natural gas pipeline system that
22 carries Alaska natural gas—

23 (i) from the North Slope of Alaska to
24 the border between Alaska and Canada, or

1 (ii) from the border between Canada
2 and the contiguous United States to a nat-
3 ural gas pipeline system in the contiguous
4 United States in operation on the date of
5 enactment of this subtitle, and

6 (B) facilities subjected to the jurisdiction
7 of the Commission that are related to such
8 pipeline systems;

9 (3) the term “Commission” means the Federal
10 Energy Regulatory Commission.

11 (4) the term “natural gas company” means a
12 person engaged in the transportation of natural gas
13 in interstate commerce or the sale in interstate com-
14 merce of such gas for resale.

15 **SEC. 709. SAVINGS CLAUSE.**

16 Nothing in this title affects the decisions made pursu-
17 ant to the Alaska Natural Gas Transportation Act (15
18 U.S.C. 719–719o, as amended) regarding the selection,
19 designation and description of the Alaska Natural Gas
20 Transportation System, or the obligations and authorities
21 of Federal officers and agencies under that Act, to grant
22 or issue all certificate, rights-of-way, leases, permits and
23 other authorizations necessary for the construction and
24 authorization of the Alaska Natural Gas Transportation
25 System, to expedite and give priority to any applications

1 or requests for, and to modify any terms and conditions
2 of such certificates, rights-of-way, leases, permits and
3 other authorizations.

4 **SEC. 710. SENSE OF THE SENATE.**

5 It is the sense of the Senate that an Alaska natural
6 gas transportation project will provide significant eco-
7 nomic benefits to the United States and Canada. In order
8 to maximize those benefits, the Senate urges the sponsors
9 of the pipeline project to make every effort to use steel
10 that is manufactured or produced in North America and
11 to negotiate a project labor agreement to expedite con-
12 struction of the pipeline.

13 **Subtitle B—Operating Pipelines**

14 **SEC. 711. APPLICATION OF HISTORIC PRESERVATION ACT**
15 **TO OPERATING PIPELINES.**

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

18 “(i)(1) Notwithstanding the National Historic Pres-
19 ervation Act (16 U.S.C. 470 et seq.), a transportation fa-
20 cility shall not be eligible for inclusion on the National
21 Register of Historic Places unless—

22 “(A) the Commission has permitted the aban-
23 donment of the transportation facility pursuant to
24 subsection (b), or

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

3 “(2) Any transportation facility considered eligible
4 for inclusion on the National Register of Historic Places
5 prior to the date of enactment of this subsection shall no
6 longer be eligible unless the owner of the facility gives
7 written consent to such eligibility.”.

8 **SEC. 712. ENVIRONMENTAL REVIEW AND PERMITTING OF**
9 **NATURAL GAS PIPELINE PROJECTS.**

10 (a) INTERAGENCY REVIEW.—The Chairman of the
11 Council on Environmental Quality, in coordination with
12 the Federal Energy Regulatory Commission, shall estab-
13 lish an interagency task force to develop an interagency
14 memorandum of understanding to expedite the environ-
15 mental review and permitting of natural gas pipeline
16 projects.

17 (b) MEMBERSHIP OF INTERAGENCY TASK FORCE.—
18 The task force shall consist of—

19 (1) the Chairman of the Council on Environ-
20 mental Quality, who shall serve as the Chairman of
21 the interagency task force,

22 (2) the Chairman of the Federal Energy Regu-
23 latory Commission,

24 (3) the Director of the Bureau of Land Man-
25 agement,

1 (4) the Director of the U.S. Fish and Wildlife
2 Service,

3 (5) the Commanding General, U.S. Army Corps
4 of Engineers,

5 (6) the Chief of the Forest Service,

6 (7) the Administrator of the Environmental
7 Protection Agency,

8 (8) the Chairman of the Advisory Council on
9 Historic Preservation, and

10 (9) the heads of such other agencies as the
11 Chairman of the Council on Environmental Quality
12 and the Chairman of the Federal Energy Regulatory
13 Commission deem appropriate.

14 (c) MEMORANDUM OF UNDERSTANDING.—The agen-
15 cies represented by the members of the interagency task
16 force shall enter into the memorandum of understanding
17 not later than one year after the date of the enactment
18 of this section.

1 **DIVISION C—DIVERSIFYING EN-**
2 **ERGY DEMAND AND IMPROV-**
3 **ING EFFICIENCY**

4 **TITLE VIII—FUELS AND**
5 **VEHICLES**

6 **Subtitle A—Increased Vehicle Fuel**
7 **Efficiency**

8 **SEC. 801. INCREASED VEHICLE FUEL EFFICIENCY.**

9 [Reserved.]

10 **SEC. 802. FUEL ECONOMY OF THE FEDERAL FLEET OF**
11 **AUTOMOBILES.**

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

14 **“§32917. Standards for executive agency automobiles**

15 “(a) **BASELINE AVERAGE FUEL ECONOMY.**—The
16 head of each executive agency shall determine, for all auto-
17 mobiles in the agency’s fleet of automobiles that were
18 leased or bought as a new vehicle in fiscal year 1999, the
19 average fuel economy for such automobiles. For the pur-
20 poses of this section, the average fuel economy so deter-
21 mined shall be the baseline average fuel economy for the
22 agency’s fleet of automobiles.

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

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

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

13 “(c) CALCULATION OF AVERAGE FUEL ECONOMY.—
14 Average fuel economy shall be calculated for the purposes
15 of this section in accordance with guidance which the Sec-
16 retary of Transportation shall prescribe for the implemen-
17 tation of this section.

18 “(d) DEFINITIONS.—In this section:

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

22 “(2) The term ‘executive agency’ has the mean-
23 ing given that term in section 105 of title 5.

24 “(3) The term ‘new automobile’, with respect to
25 the fleet of automobiles of an executive agency,

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

4 **SEC. 803. ASSISTANCE FOR STATE PROGRAMS TO RETIRE**
5 **FUEL-INEFFICIENT MOTOR VEHICLES.**

6 (a) ESTABLISHMENT.—The Secretary shall establish
7 a program, to be known as the “National Motor Vehicle
8 Efficiency Improvement Program,” under which the Sec-
9 retary shall provide grants to States to operate programs
10 to offer owners of passenger automobiles and light-duty
11 trucks manufactured in model years more than 15 years
12 prior to the fiscal year in which appropriations are made
13 under subsection (d) to provide financial incentives to
14 scrap such automobiles and to replace them with auto-
15 mobiles with higher fuel efficiency.

16 (b) STATE PLAN.—Not later than 180 days after the
17 date of enactment of an appropriations act containing
18 funds authorized under subsection (d), to be eligible to re-
19 ceive funds under the program, the Governor of a State
20 shall submit to the Secretary a plan to carry out a pro-
21 gram under this subtitle in that State.

22 (c) ELIGIBILITY CRITERIA.—The Secretary shall ap-
23 prove a State plan and provide the funds under subsection
24 (d), if the State plan—

1 (1) requires that all passenger automobiles and
2 light-duty trucks turned in be scrapped;

3 (2) requires that all passenger automobiles and
4 light-duty trucks turned in be currently registered in
5 the State in order to be eligible;

6 (3) requires that all passenger automobiles and
7 light-duty trucks turned in be operational at the
8 time that they are turned in;

9 (4) restricts automobile owners (except not-for-
10 profit organizations) from turning in more than one
11 passenger automobile and one light-duty truck in a
12 12-month period;

13 (5) provides an appropriate payment to the per-
14 son recycling the scrapped passenger automobile or
15 light-duty truck for each turned-in passenger auto-
16 mobile or light-duty truck;

17 (6) provides a minimum payment to the auto-
18 mobile owner for each passenger automobile and
19 light-duty truck turned in; and

20 (7) provides, in addition to the payment under
21 paragraph (6), an additional credit that may be re-
22 deemed by the owner of the turned-in passenger
23 automobile or light-duty truck at the time of pur-
24 chase of new fuel-efficient automobile.

1 (d) AUTHORIZATION OF APPROPRIATIONS.—There
2 are hereby authorized to be appropriated to the Secretary
3 to carry out this section such sums as may be necessary,
4 to remain available until expended.

5 (e) ALLOCATION FORMULA.—The amounts appro-
6 priated pursuant to subsection (d) shall be allocated
7 among the States on the basis of the population of the
8 States as contained in the most recent reliable census data
9 available from the Bureau of the Census, Department of
10 Commerce, for all States at the time that the Secretary
11 needs to compute shares under this subsection.

12 (f) DEFINITIONS.—In this section:

13 (1) AUTOMOBILE.—The term “automobile” has
14 the meaning given such term in section 32901(3) of
15 title 49, United States Code.

16 (2) FUEL-EFFICIENT AUTOMOBILE.—

17 (A) The term “fuel-efficient automobile”
18 means a passenger automobile or a light-duty
19 truck that has an average fuel economy greater
20 than the average fuel economy standard pre-
21 scribed pursuant to section 32902 of title 49,
22 United States Code, or other law, applicable to
23 such passenger automobile or light-duty truck.

1 (B) The term “average fuel economy” has
2 the meaning given such term in section
3 32901(5) of title 49, United States Code.

4 (C) The term “average fuel economy
5 standard” has the meaning given such term in
6 section 32901(6) of title 49, United States
7 Code.

8 (D) The term “fuel economy” has the
9 meaning given such term in section 32901(10)
10 of title 49, United States Code.

11 (3) LIGHT-DUTY TRUCK.—The term “light-duty
12 truck” means an automobile that is not a passenger
13 automobile. Such term shall include a pickup truck,
14 a van, or a four-wheel-drive general utility vehicle, as
15 those terms are defined in section 600.002–85 of
16 title 40, Code of Federal Regulations.

17 (4) PASSENGER AUTOMOBILE.—The term “pas-
18 senger automobile” has the meaning given such term
19 by section 32901(16) of title 49, United States
20 Code.

21 (5) SECRETARY.—The term “Secretary” means
22 the Secretary of Energy.

23 (6) STATE.—The term “State” means any of
24 the several States and the District of Columbia.

1 **Subtitle B—Alternative and**
2 **Renewable Fuels**

3 **SEC. 811. INCREASED USE OF ALTERNATIVE FUELS BY FED-**
4 **ERAL FLEETS.**

5 (a) REQUIREMENT TO USE ALTERNATIVE FUELS.—

6 Section 400AA(a)(3)(E) of the Energy Policy and Con-
7 servation Act (42 U.S.C. 6374(a)(3)(E)) is amended to
8 read as follows:

9 “(E) Dual fueled vehicles acquired pursu-
10 ant to this section shall be operated on alter-
11 native fuels. If the Secretary determines that all
12 dual fueled vehicles acquired pursuant to this
13 section cannot operate on alternative fuels at all
14 times, he may waive the requirement in part,
15 but only to the extent that:

16 “(i) not later than September 30,
17 2003, not less than 50 percent of the total
18 annual volume of fuel used in such dual
19 fueled vehicles shall be from alternative
20 fuels; and

21 “(ii) not later than September 30,
22 2005, not less than 75 percent of the total
23 annual volume of fuel used in such dual
24 fueled vehicles shall be from alternative
25 fuels.”.

1 (b) DEFINITION OF “DEDICATED VEHICLE”.—Sec-
2 tion 400AA(g)(4)(B) of the Energy Policy and Conserva-
3 tion Act (42 U.S.C. 6374(g)(4)(B)) is amended by insert-
4 ing after “solely on alternative fuel” the following: “, in-
5 cluding a three-wheeled enclosed electric vehicle having a
6 vehicle identification number”.

7 **SEC. 812. EXCEPTION TO HOV PASSENGER REQUIREMENTS**
8 **FOR ALTERNATIVE FUEL VEHICLES.**

9 Section 102(a)(1) of title 23, United States Code, is
10 amended by inserting after “required” the following: “(un-
11 less, in the discretion of the State transportation depart-
12 ment, the vehicle is being operated on, or is being fueled
13 by, an alternative fuel (as defined in section 301(2) of the
14 Energy Policy Act of 1992 (42 U.S.C. 13211(2)))”.

15 **SEC. 813. DATA COLLECTION.**

16 Section 205 of the Department of Energy Organiza-
17 tion Act (42 U.S.C. 7135) is amended by adding at the
18 end the following:

19 “(m) In order to improve the ability to evaluate the
20 effectiveness of the Nation’s renewable fuels mandate, the
21 Administrator shall conduct and publish the results of a
22 survey of renewable fuels consumption in the motor vehicle
23 fuels market in the United States monthly, and in a man-
24 ner designed to protect the confidentiality of individual re-
25 sponses. In conducting the survey, the Administrator shall

1 collect information both on a national basis and a regional
2 basis, including—

- 3 (1) the quantity of renewable fuels produced;
- 4 (2) the cost of production;
- 5 (3) the cost of blending and marketing;
- 6 (4) the quantity of renewable fuels consumed;
- 7 (5) the quantity of renewable fuels imported;
- 8 and
- 9 (6) market price data.

10 **SEC. 814. GREEN SCHOOL BUS PILOT PROGRAM.**

11 (a) ESTABLISHMENT.—The Secretary of Energy and
12 the Secretary of Transportation shall jointly establish a
13 pilot program for awarding grants on a competitive basis
14 to eligible entities for the demonstration and commercial
15 application of alternative fuel school buses and ultra-low
16 sulfur diesel school buses.

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

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

4 (d) ELIGIBLE RECIPIENTS.—A grant shall be award-
5 ed under this section only—

6 (1) to a local governmental entity responsible
7 for providing school bus service for one or more pub-
8 lic school systems; or

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

12 (e) TYPES OF GRANTS.—

13 (1) IN GENERAL.—Grants under this section
14 shall be for the demonstration and commercial appli-
15 cation of technologies to facilitate the use of alter-
16 native fuel school buses and ultra-low sulfur diesel
17 school buses instead of buses manufactured before
18 model year 1977 and diesel-powered buses manufac-
19 tured before model year 1991.

20 (2) NO ECONOMIC BENEFIT.—Other than the
21 receipt of the grant, a recipient of a grant under this
22 section may not receive any economic benefit in con-
23 nection with the receipt of the grant.

24 (3) PRIORITY OF GRANT APPLICATIONS.—The
25 Secretary shall give priority to awarding grants to

1 applicants who can demonstrate the use of alter-
2 native fuel buses and ultra-low sulfur diesel school
3 buses instead of buses manufactured before model
4 year 1977.

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

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

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

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

17 (B) to provide—

18 (i) up to 10 percent of the price of the
19 alternative fuel buses acquired, for nec-
20 essary alternative fuel infrastructure if the
21 infrastructure will only be available to the
22 grant recipient; and

23 (ii) up to 15 percent of the price of
24 the alternative fuel buses acquired, for nec-
25 essary alternative fuel infrastructure if the

1 infrastructure will be available to the grant
2 recipient and to other bus fleets.

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

6 (4) In the case of a grant recipient receiving a
7 grant to demonstrate ultra-low sulfur diesel school
8 buses, the grant recipient shall be required to pro-
9 vide documentation to the satisfaction of the Sec-
10 retary that diesel fuel containing sulfur at not more
11 than 15 parts per million is available for carrying
12 out the purposes of the grant, and a commitment by
13 the applicant to use such fuel in carrying out the
14 purposes of the grant.

15 (g) BUSES.—Funding under a grant made under this
16 section may be used to demonstrate the use only of new
17 alternative fuel school buses or ultra-low sulfur diesel
18 school buses—

19 (1) with a gross vehicle weight of greater than
20 14,000 pounds;

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

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

24 (A) for buses manufactured in model year
25 2002, 2.5 grams per brake horsepower-hour of

1 nonmethane hydrocarbons and oxides of nitro-
2 gen and .01 grams per brake horsepower-hour
3 of particulate matter; and

4 (B) for buses manufactured in model years
5 2003 through 2006, 1.8 grams per brake horse-
6 power-hour of nonmethane hydrocarbons and
7 oxides of nitrogen and .01 grams per brake
8 horsepower-hour of particulate matter; and

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

11 (A) for buses manufactured in model year
12 2002 or 2003, 3.0 grams per brake horsepower-
13 hour of nonmethane hydrocarbons and oxides of
14 nitrogen and .01 grams per brake horsepower-
15 hour of particulate matter; and

16 (B) for buses manufactured in model years
17 2004 through 2006, 2.5 grams per brake horse-
18 power-hour of nonmethane hydrocarbons and
19 oxides of nitrogen and .01 grams per brake
20 horsepower-hour of particulate matter, except
21 that under no circumstances shall buses be ac-
22 quired under this section that emit nonmethane
23 hydrocarbons, oxides of nitrogen, or particulate
24 matter at a rate greater than the best per-
25 forming technology of ultra-low sulfur diesel

1 school buses commercially available at the time
2 the grant is made.

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

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

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

17 (1) the term “alternative fuel school bus”
18 means a bus powered substantially by electricity (in-
19 cluding electricity supplied by a fuel cell), or by liq-
20 uefied natural gas, compressed natural gas, liquefied
21 petroleum gas, hydrogen, propane, or methanol or
22 ethanol at no less than 85 percent by volume; and

23 (2) the term “ultra-low sulfur diesel school
24 bus” means a school bus powered by diesel fuel

1 which contains sulfur at not more than 15 parts per
2 million.

3 **SEC. 815. FUEL CELL BUS DEVELOPMENT AND DEM-**
4 **ONSTRATION PROGRAM.**

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

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

16 (1) 20 percent for fuel infrastructure develop-
17 ment activities; and

18 (2) 50 percent for demonstration activities and
19 for development activities not described in paragraph
20 (1).

21 (c) FUNDING.—No more than \$25,000,000 of the
22 amounts authorized under section 815 may be used for
23 carrying out this section for the period encompassing fis-
24 cal years 2003 through 2006.

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

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

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

10 **SEC. 816. AUTHORIZATION OF APPROPRIATIONS.**

11 There are authorized to be appropriated to the Sec-
12 retary of Energy for carrying out sections 814 and 815,
13 to remain available until expended—

14 (1) \$50,000,000 for fiscal year 2003;

15 (2) \$60,000,000 for fiscal year 2004;

16 (3) \$70,000,000 for fiscal year 2005; and

17 (4) \$80,000,000 for fiscal year 2006.

18 **SEC. 817. BIODIESEL FUEL USE CREDIT.**

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

21 (1) by striking “NOT” in the subsection head-
22 ing; and

23 (2) by striking “not”.

1 **SEC. 818. RENEWABLE CONTENT OF MOTOR VEHICLE FUEL.**

2 (a) IN GENERAL.—Section 211 of the Clean Air Act
3 (42 U.S.C. 7545) is amended—

4 (1) by redesignating subsection (o) as sub-
5 section (q); and

6 (2) by inserting after subsection (n) the fol-
7 lowing:

8 “(o) RENEWABLE FUEL PROGRAM.—

9 “(1) DEFINITIONS.—In this section:

10 “(A) CELLULOSIC BIOMASS ETHANOL.—

11 The term ‘cellulosic biomass ethanol’ means
12 ethanol derived from any lignocellulosic or
13 hemicellulosic matter that is available on a re-
14 newable or recurring basis, including—

15 “(i) dedicated energy crops and trees;

16 “(ii) wood and wood residues;

17 “(iii) plants;

18 “(iv) grasses;

19 “(v) agricultural commodities and res-
20 idues;

21 “(vi) fibers;

22 “(vii) animal wastes and other waste
23 materials; and

24 “(viii) municipal solid waste.

25 “(B) RENEWABLE FUEL.—

1 “(i) IN GENERAL.—The term ‘renew-
2 able fuel’ means motor vehicle fuel that—

3 “(I)(aa) is produced from grain,
4 starch, oilseeds, or other biomass; or

5 “(bb) is natural gas produced
6 from a biogas source, including a
7 landfill, sewage waste treatment plant,
8 feedlot, or other place where decaying
9 organic material is found; and

10 “(II) is used to replace or reduce
11 the quantity of fossil fuel present in a
12 fuel mixture used to operate a motor
13 vehicle.

14 “(ii) INCLUSION.—The term ‘renew-
15 able fuel’ includes cellulosic biomass eth-
16 anol and biodiesel (as defined in section
17 312(f)(1) of the Energy Policy Act of 1992
18 (42 U.S.C. 13220(f)(1)).

19 “(C) SMALL REFINERY.—The term ‘small
20 refinery’ means a refinery for which average ag-
21 gregate daily crude oil throughput for the cal-
22 endar year (as determined by dividing the ag-
23 gregate throughput for the calendar year by the
24 number of days in the calendar year) do not ex-
25 ceed 65,000 barrels.

1 “(2) RENEWABLE FUEL PROGRAM.—

2 “(A) IN GENERAL.—Except as provided in
3 subparagraph (B)(i)(II), the motor vehicle fuel
4 sold or introduced into commerce in the United
5 States in calendar year 2003 or any calendar
6 year thereafter by a refiner, blender, or im-
7 porter shall contain, on a 6-month average
8 basis, a quantity of renewable fuel, measured in
9 gallons, that is not less than the applicable vol-
10 ume determined under subparagraph (B).

11 “(B) APPLICABLE VOLUME.—

12 “(i) CALENDAR YEAR 2003.—For cal-
13 endar year 2003—

14 “(I) for the purpose of subpara-
15 graph (A), the applicable volume shall
16 be 2,000,000,000 gallons; and

17 “(II) subparagraph (A) shall
18 apply only to a refiner, blender, or im-
19 porter located in Petroleum Adminis-
20 tration for Defense District II, III, or
21 IV.

22 “(ii) CALENDAR YEARS 2004 THROUGH
23 2012.—For the purpose of subparagraph
24 (A), the applicable volume for any of cal-
25 endar years 2004 through 2012 shall be

1 determined in accordance with the fol-
2 lowing table:

“Calendar year:	Applicable volume of renewable fuel: (in billions of gallons)
2004	2.3
2005	2.6
2006	2.9
2007	3.2
2008	3.5
2009	3.9
2010	4.3
2011	4.7
2012	5.0.

3 “(iii) CALENDAR YEAR 2013 AND
4 THEREAFTER.—For the purpose of sub-
5 paragraph (A), the applicable volume for
6 calendar year 2013 and each calendar year
7 thereafter shall be equal to the product ob-
8 tained by multiplying—

9 “(I) the number of gallons of
10 motor vehicle fuel that the Adminis-
11 trator estimates will be sold or intro-
12 duced into commerce in the calendar
13 year; and

14 “(II) the ratio that—

15 “(aa) the number of gallons
16 of motor vehicle fuel sold or in-
17 troduced into commerce in cal-
18 endar year 2012 that consists of
19 renewable fuel; bears to

1 “(bb) the number of gallons
2 of motor vehicle fuel sold or in-
3 troduced into commerce in cal-
4 endar year 2012.

5 “(3) CELLULOSIC BIOMASS ETHANOL.—For the
6 purpose of paragraph (2), 1 gallon of cellulosic bio-
7 mass ethanol shall be considered to be the equivalent
8 of 1.5 gallons of renewable fuel.

9 “(4) CREDIT PROGRAM.—

10 “(A) IN GENERAL.—The regulations pro-
11 mulgated to carry out this subsection shall pro-
12 vide for the generation of an appropriate
13 amount of credits by a person that refines,
14 blends, or imports motor vehicle fuel that con-
15 tains, on a 6-month average basis, a quantity of
16 renewable fuel that is greater than the quantity
17 required for that 6-month period under para-
18 graph (2).

19 “(B) USE OF CREDITS.—A person that
20 generates credits under subparagraph (A) may
21 use the credits, or transfer all or a portion of
22 the credits to another person, for the purpose
23 of complying with paragraph (2).

24 “(C) EXPIRATION OF CREDITS.—A credit
25 generated under this paragraph shall expire 1

1 year after the date on which the credit was gen-
2 erated.

3 “(5) WAIVERS.—

4 “(A) IN GENERAL.—The Administrator, in
5 consultation with the Secretary of Agriculture
6 and the Secretary of Energy, may waive the re-
7 quirement of paragraph (2) in whole or in part
8 on petition by 1 or more States by reducing the
9 national quantity of renewable fuel required
10 under this subsection—

11 “(i) based on a determination by the
12 Administrator, after public notice and op-
13 portunity for comment, that implementa-
14 tion of the requirement would severely
15 harm the economy or environment of a
16 State, a region, or the United States; or

17 “(ii) based on a determination by the
18 Administrator, after public notice and op-
19 portunity for comment, that there is an in-
20 adequate domestic supply or distribution
21 capacity to meet the requirement.

22 “(B) PETITIONS FOR WAIVERS.—The Ad-
23 ministrator, in consultation with the Secretary
24 of Agriculture and the Secretary of Energy—

1 “(i) shall approve or deny a State pe-
2 tition for a waiver of the requirement of
3 paragraph (2) within 180 days after the
4 date on which the petition is received; but

5 “(ii) may extend that period for up to
6 60 additional days to provide for public no-
7 tice and opportunity for comment and for
8 consideration of the comments submitted.

9 “(C) TERMINATION OF WAIVERS.—A waiv-
10 er granted under subparagraph (A) shall termi-
11 nate after 1 year, but may be renewed by the
12 Administrator after consultation with the Sec-
13 retary of Agriculture and the Secretary of En-
14 ergy.

15 “(6) SMALL REFINERS.—The requirement of
16 paragraph (2) shall not apply to a small refinery.

17 “(7) REGULATIONS.—Not later than 270 days
18 after the date of enactment of this paragraph, the
19 Administrator shall promulgate regulations to carry
20 out this subsection.”.

21 (b) DISTILLATION INDEX.—Section 211 of the Clean
22 Air Act (42 U.S.C. 7545) is amended by inserting before
23 subsection (q) (as redesignated by subsection (a)(1)) the
24 following:

1 “(p) DISTILLATION INDEX.—Effective January 1,
2 2004, no person shall manufacture, sell, supply, offer for
3 sale, or supply, dispense, transport, or introduce into com-
4 merce gasoline that has a distillation index that exceeds
5 1,200.”.

6 (c) PENALTIES AND ENFORCEMENT.—Section
7 211(d) of the Clean Air Act (42 U.S.C. 7545(d)) is
8 amended—

9 (1) in paragraph (1)—

10 (A) in the first sentence, by striking “or
11 (n)” each place it appears and inserting “(n),
12 (o), or (p)”;

13 (B) in the second sentence, by striking “or
14 (m)” and inserting “(m), (o), or (p)”;

15 (2) in the first sentence of paragraph (2), by
16 striking “and (n)” each place it appears and insert-
17 ing “(n), (o), and (p)”.

18 (d) ELIMINATION OF ETHANOL WAIVER.—Section
19 211(h)(4) of the Clean Air Act (42 U.S.C. 7545(h)(4))
20 is amended by striking “For” and inserting “In the case
21 of a State that is not located east of the Mississippi River,
22 for”.

23 **SEC. 819. NEIGHBORHOOD ELECTRIC VEHICLES.**

24 Section 301 of the Energy Policy Act of 1992 (42
25 U.S.C. 13211) is amended—

1 (1) by striking “or a dual fueled vehicle” and
 2 inserting “, a dual fueled vehicle, or a neighborhood
 3 electric vehicle”;

4 (2) by striking “and” at the end of paragraph
 5 (13);

6 (3) by striking the period at the end of sub-
 7 paragraph (14) and inserting “; and”; and

8 (4) by adding at the end the following:

9 “(15) the term ‘neighborhood electric vehicle’
 10 means a motor vehicle that qualifies as both—

11 “(A) a low-speed vehicle, as such term is
 12 defined in section 571.3(b) of title 49, Code of
 13 Federal Regulations; and

14 “(B) a zero-emission vehicle, as such term
 15 is defined in section 86.1703–99 of title 40,
 16 Code of Federal Regulations.”.

17 **Subtitle C—Federal Reformulated** 18 **Fuels**

19 **SEC. 821. SHORT TITLE.**

20 This subtitle may be cited as the “Federal Reformu-
 21 lated Fuels Act of 2002”.

22 **SEC. 822. LEAKING UNDERGROUND STORAGE TANKS.**

23 (a) USE OF LUST FUNDS FOR REMEDIATION OF
 24 MTBE CONTAMINATION.—Section 9003(h) of the Solid
 25 Waste Disposal Act (42 U.S.C. 6991b(h)) is amended—

1 (1) in paragraph (7)(A)—

2 (A) by striking “paragraphs (1) and (2) of
3 this subsection” and inserting “paragraphs (1),
4 (2), and (12)”; and

5 (B) by inserting “and section 9010” before
6 “if”; and

7 (2) by adding at the end the following:

8 “(12) REMEDIATION OF MTBE CONTAMINA-
9 TION.—

10 “(A) IN GENERAL.—The Administrator
11 and the States may use funds made available
12 under section 9011(1) to carry out corrective
13 actions with respect to a release of methyl ter-
14 tiary butyl ether that presents a threat to
15 human health, welfare, or the environment.

16 “(B) APPLICABLE AUTHORITY.—Subpara-
17 graph (A) shall be carried out—

18 “(i) in accordance with paragraph (2);

19 and

20 “(ii) in the case of a State, in accord-
21 ance with a cooperative agreement entered
22 into by the Administrator and the State
23 under paragraph (7).”.

24 (b) RELEASE PREVENTION AND COMPLIANCE.—Sub-
25 title I of the Solid Waste Disposal Act (42 U.S.C. 6991

1 et seq.) is amended by striking section 9010 and inserting
2 the following:

3 **“SEC. 9010. RELEASE PREVENTION AND COMPLIANCE.**

4 “Funds made available under section 9011(2) from
5 the Leaking Underground Storage Tank Trust Fund may
6 be used for conducting inspections, or for issuing orders
7 or bringing actions under this subtitle—

8 “(1) by a State (pursuant to section
9 9003(h)(7)) acting under—

10 “(A) a program approved under section
11 9004; or

12 “(B) State requirements regulating under-
13 ground storage tanks that are similar or iden-
14 tical to this subtitle; and

15 “(2) by the Administrator, acting under this
16 subtitle or a State program approved under section
17 9004.

18 **“SEC. 9011. AUTHORIZATION OF APPROPRIATIONS.**

19 “In addition to amounts made available under section
20 2007(f), there are authorized to be appropriated from the
21 Leaking Underground Storage Tank Trust Fund—

22 “(1) to carry out section 9003(h)(12),
23 \$200,000,000 for fiscal year 2002, to remain avail-
24 able until expended; and

25 “(2) to carry out section 9010—

1 “(A) \$50,000,000 for fiscal year 2002; and
2 “(B) \$30,000,000 for each of fiscal years
3 2003 through 2007.”.

4 (c) TECHNICAL AMENDMENTS.—

5 (1) Section 1001 of the Solid Waste Disposal
6 Act (42 U.S.C. prec. 6901) is amended by striking
7 the item relating to section 9010 and inserting the
8 following:

 “Sec. 9010. Release prevention and compliance.

 “Sec. 9011. Authorization of appropriations.”.

9 (2) Section 9001(3)(A) of the Solid Waste Dis-
10 posal Act (42 U.S.C. 6991(3)(A)) is amended by
11 striking “sustances” and inserting “substances”.

12 (3) Section 9003(f)(1) of the Solid Waste Dis-
13 posal Act (42 U.S.C. 6991b(f)(1)) is amended by
14 striking “subsection (c) and (d) of this section” and
15 inserting “subsections (c) and (d)”.

16 (4) Section 9004(a) of the Solid Waste Disposal
17 Act (42 U.S.C. 6991c(a)) is amended in the second
18 sentence by striking “referred to” and all that fol-
19 lows and inserting “referred to in subparagraph (A)
20 or (B), or both, of section 9001(2).”.

21 (5) Section 9005 of the Solid Waste Disposal
22 Act (42 U.S.C. 6991d) is amended—

23 (A) in subsection (a), by striking “study
24 taking” and inserting “study, taking”;

1 (B) in subsection (b)(1), by striking
2 “relevent” and inserting “relevant”; and

3 (C) in subsection (b)(4), by striking “Envi-
4 ronmental” and inserting “Environmental”.

5 **SEC. 823. AUTHORITY FOR WATER QUALITY PROTECTION**
6 **FROM FUELS.**

7 (a) IN GENERAL.—Section 211(c) of the Clean Air
8 Act (42 U.S.C. 7545(c)) is amended—

9 (1) in paragraph (1)(A)—

10 (A) by inserting “fuel or fuel additive or”
11 after “Administrator any”; and

12 (B) by striking “air pollution which” and
13 inserting “air pollution, or water pollution,
14 that”;

15 (2) in paragraph (4)(B), by inserting “or water
16 quality protection,” after “emission control,”; and

17 (3) by adding at the end the following:

18 “(5) BAN ON THE USE OF MTBE.—Not later
19 than 4 years after the date of enactment of this
20 paragraph, the Administrator shall ban use of meth-
21 yl tertiary butyl ether in motor vehicle fuel.”.

22 (b) NO EFFECT ON LAW REGARDING STATE AU-
23 THORITY.—The amendments made by subsection (a) have
24 no effect on the law in effect on the day before the date

1 of enactment of this Act regarding the authority of States
2 to limit the use of methyl tertiary butyl ether in gasoline.

3 **SEC. 824. WAIVER OF OXYGEN CONTENT REQUIREMENT**
4 **FOR REFORMULATED GASOLINE.**

5 Section 211(k)(1) of the Clean Air Act (42 U.S.C.
6 7545(k)(1)) is amended—

7 (1) by striking “Within 1 year after the enact-
8 ment of the Clean Air Act Amendments of 1990,”
9 and inserting the following:

10 “(A) IN GENERAL.—Not later than No-
11 vember 15, 1991,”; and

12 (2) by adding at the end the following:

13 “(B) WAIVER OF OXYGEN CONTENT RE-
14 QUIREMENT.—

15 “(i) AUTHORITY OF THE GOV-
16 ERNOR.—

17 “(I) IN GENERAL.—Notwith-
18 standing any other provision of this
19 subsection, a Governor of a State,
20 upon notification by the Governor to
21 the Administrator during the 90-day
22 period beginning on the date of enact-
23 ment of this subparagraph, or during
24 the 90-day period beginning on the
25 date on which an area in the State be-

1 comes a covered area by operation of
2 the second sentence of paragraph
3 (10)(D), may waive the application of
4 paragraphs (2)(B) and (3)(A)(v) to
5 gasoline sold or dispensed in the
6 State.

7 “(II) OPT-IN AREAS.—A Gov-
8 ernor of a State that submits an ap-
9 plication under paragraph (6) may, as
10 part of that application, waive the ap-
11 plication of paragraphs (2)(B) and
12 (3)(A)(v) to gasoline sold or dispensed
13 in the State.

14 “(ii) TREATMENT AS REFORMULATED
15 GASOLINE.—In the case of a State for
16 which the Governor invokes the waiver de-
17 scribed in clause (i), gasoline that complies
18 with all provisions of this subsection other
19 than paragraphs (2)(B) and (3)(A)(v) shall
20 be considered to be reformulated gasoline
21 for the purposes of this subsection.

22 “(iii) EFFECTIVE DATE OF WAIVER.—
23 A waiver under clause (i) shall take effect
24 on the earlier of—

1 “(I) the date on which the per-
2 formance standards under subpara-
3 graph (C) take effect; or

4 “(II) the date that is 270 days
5 after the date of enactment of this
6 subparagraph.

7 “(C) MAINTENANCE OF TOXIC AIR POL-
8 LUTANT EMISSION REDUCTIONS.—

9 “(i) IN GENERAL.—As soon as prac-
10 ticable after the date of enactment of this
11 subparagraph, the Administrator shall—

12 “(I) promulgate regulations con-
13 sistent with subparagraph (A) and
14 paragraph (3)(B)(ii) to ensure that
15 reductions of toxic air pollutant emis-
16 sions achieved under the reformulated
17 gasoline program under this section
18 before the date of enactment of this
19 subparagraph are maintained in
20 States for which the Governor waives
21 the oxygenate requirement under sub-
22 paragraph (B)(i); or

23 “(II) determine that the require-
24 ment described in clause (iv)—

1 “(aa) is consistent with the
2 bases for performance standards
3 described in clause (ii); and

4 “(bb) shall be deemed to be
5 the performance standards under
6 clause (ii) and shall be applied in
7 accordance with clause (iii).

8 “(ii) PADD PERFORMANCE STAND-
9 ARDS.—The Administrator, in regulations
10 promulgated under clause (i)(I), shall es-
11 tablish annual average performance stand-
12 ards for each Petroleum Administration for
13 Defense District (referred to in this sub-
14 paragraph as a “PADD”) based on—

15 “(I) the average of the annual
16 aggregate reductions in emissions of
17 toxic air pollutants achieved under the
18 reformulated gasoline program in each
19 PADD during calendar years 1999
20 and 2000, determined on the basis of
21 the 1999 and 2000 Reformulated
22 Gasoline Survey Data, as collected by
23 the Administrator; and

1 “(II) such other information as
2 the Administrator determines to be
3 appropriate.

4 “(iii) APPLICABILITY.—

5 “(I) IN GENERAL.—The perform-
6 ance standards under this subpara-
7 graph shall be applied on an annual
8 average importer or refinery-by-refin-
9 ery basis to reformulated gasoline that
10 is sold or introduced into commerce in
11 a State for which the Governor waives
12 the oxygenate requirement under sub-
13 paragraph (B)(i).

14 “(II) MORE STRINGENT RE-
15 QUIREMENTS.—The performance
16 standards under this subparagraph
17 shall not apply to the extent that any
18 requirement under section 202(l) is
19 more stringent than the performance
20 standards.

21 “(III) STATE STANDARDS.—The
22 performance standards under this
23 subparagraph shall not apply in any
24 State that has received a waiver under
25 section 209(b).

1 “(IV) CREDIT PROGRAM.—The
2 Administrator shall provide for the
3 granting of credits for exceeding the
4 performance standards under this
5 subparagraph in the same manner as
6 provided in paragraph (7).

7 “(iv) STATUTORY PERFORMANCE
8 STANDARDS.—

9 “(I) IN GENERAL.—Subject to
10 subclause (IV), if the regulations
11 under clause (i)(I) have not been pro-
12 mulgated by the date that is 270 days
13 after the date of enactment of this
14 subparagraph, the requirement de-
15 scribed in subclause (III) shall be
16 deemed to be the performance stand-
17 ards under clause (ii) and shall be ap-
18 plied in accordance with clause (iii).

19 “(II) PUBLICATION IN FEDERAL
20 REGISTER.—Not later than 30 days
21 after the date of enactment of this
22 subparagraph, the Administrator shall
23 publish in the Federal Register, for
24 each PADD, the percentage equal to
25 the average of the annual aggregate

1 reductions in the PADD described in
2 clause (ii)(I).

3 “(III) TOXIC AIR POLLUTANT
4 EMISSIONS.—The annual aggregate
5 emissions of toxic air pollutants from
6 baseline vehicles when using reformu-
7 lated gasoline in each PADD shall be
8 not greater than—

9 “(aa) the aggregate emis-
10 sions of toxic air pollutants from
11 baseline vehicles when using
12 baseline gasoline in the PADD;
13 reduced by

14 “(bb) the quantity obtained
15 by multiplying the aggregate
16 emissions described in item (aa)
17 for the PADD by the percentage
18 published under subclause (II)
19 for the PADD.

20 “(IV) SUBSEQUENT REGULA-
21 TIONS.—Through promulgation of
22 regulations under clause (i)(I), the
23 Administrator may modify the per-
24 formance standards established under
25 subclause (I) to require each PADD

1 to achieve a greater percentage reduc-
2 tion than the percentage published
3 under subclause (II) for the PADD.”.

4 **SEC. 825. PUBLIC HEALTH AND ENVIRONMENTAL IMPACTS**
5 **OF FUELS AND FUEL ADDITIVES.**

6 Section 211(b) of the Clean Air Act (42 U.S.C.
7 7545(b)) is amended—

8 (1) in paragraph (2)—

9 (A) by striking “may also” and inserting
10 “shall, on a regular basis,”; and

11 (B) by striking subparagraph (A) and in-
12 serting the following:

13 “(A) to conduct tests to determine poten-
14 tial public health and environmental effects of
15 the fuel or additive (including carcinogenic,
16 teratogenic, or mutagenic effects); and”;

17 (2) by adding at the end the following:

18 “(4) ETHYL TERTIARY BUTYL ETHER.—

19 “(A) IN GENERAL.—Not later than 2 years
20 after the date of enactment of this paragraph,
21 the Administrator shall—

22 “(i) conduct a study on the effects on
23 public health, air quality, and water re-
24 sources of increased use of, and the feasi-

1 bility of using as substitutes for methyl
2 tertiary butyl ether in gasoline—

3 “(I) ethyl tertiary butyl ether;
4 and

5 “(II) other ethers, as determined
6 by the Administrator; and

7 “(ii) submit to the Committee on En-
8 ergy and Commerce of the House of Rep-
9 resentatives and the Committee on Envi-
10 ronment and Public Works of the Senate a
11 report describing the results of the study.

12 “(B) CONTRACTS FOR STUDY.—In car-
13 rying out this paragraph, the Administrator
14 may enter into 1 or more contracts with non-
15 governmental entities.”.

16 **SEC. 826. ANALYSES OF MOTOR VEHICLE FUEL CHANGES.**

17 Section 211 of the Clean Air Act (42 U.S.C. 7545)
18 is amended—

19 (1) by redesignating subsection (o) as sub-
20 section (p); and

21 (2) by inserting after subsection (n) the fol-
22 lowing:

23 “(o) ANALYSES OF MOTOR VEHICLE FUEL CHANGES
24 AND EMISSIONS MODEL.—

25 “(1) ANTI-BACKSLIDING ANALYSIS.—

1 “(A) DRAFT ANALYSIS.—Not later than 4
2 years after the date of enactment of this sub-
3 section, the Administrator shall publish for pub-
4 lic comment a draft analysis of the changes in
5 emissions of air pollutants and air quality due
6 to the use of motor vehicle fuel and fuel addi-
7 tives resulting from implementation of the
8 amendments made by the Federal Reformulated
9 Fuels Act of 2002.

10 “(B) FINAL ANALYSIS.—After providing a
11 reasonable opportunity for comment but not
12 later than 5 years after the date of enactment
13 of this subsection, the Administrator shall pub-
14 lish the analysis in final form.

15 “(2) EMISSIONS MODEL.—For the purposes of
16 this subsection, as soon as the necessary data are
17 available, the Administrator shall develop and final-
18 ize an emissions model that reasonably reflects the
19 effects of fuel characteristics or components on emis-
20 sions from vehicles in the motor vehicle fleet during
21 calendar year 2005.”.

22 **SEC. 827. ADDITIONAL OPT-IN AREAS UNDER REFORMU-**
23 **LATED GASOLINE PROGRAM.**

24 Section 211(k)(6) of the Clean Air Act (42 U.S.C.
25 7545(k)(6)) is amended—

1 (1) by striking “(6) OPT-IN AREAS.—(A)
2 Upon” and inserting the following:

3 “(6) OPT-IN AREAS.—

4 “(A) CLASSIFIED AREAS.—

5 “(i) IN GENERAL.—Upon”;

6 (2) in subparagraph (B), by striking “(B) If”
7 and inserting the following:

8 “(ii) EFFECT OF INSUFFICIENT DO-
9 MESTIC CAPACITY TO PRODUCE REFORMU-
10 LATED GASOLINE.—If”;

11 (3) in subparagraph (A)(ii) (as so redesign-
12 nated)—

13 (A) in the first sentence, by striking “sub-
14 paragraph (A)” and inserting “clause (i)”; and

15 (B) in the second sentence, by striking
16 “this paragraph” and inserting “this subpara-
17 graph”; and

18 (4) by adding at the end the following:

19 “(B) NONCLASSIFIED AREAS.—

20 “(i) IN GENERAL.—In accordance
21 with section 110, a State may submit to
22 the Administrator, and the Administrator
23 may approve, a State implementation plan
24 revision that provides for application of the
25 prohibition specified in paragraph (5) in

1 any portion of the State that is not a cov-
 2 ered area or an area referred to in sub-
 3 paragraph (A)(i).

4 “(ii) PERIOD OF EFFECTIVENESS.—
 5 Under clause (i), the State implementation
 6 plan shall establish a period of effective-
 7 ness for applying the prohibition specified
 8 in paragraph (5) to a portion of a State
 9 that—

10 “(I) commences not later than 1
 11 year after the date of approval by the
 12 Administrator of the State implemen-
 13 tation plan; and

14 “(II) ends not earlier than 4
 15 years after the date of commencement
 16 under subclause (I).”.

17 **SEC. 828. MTBE MERCHANT PRODUCER CONVERSION**
 18 **ASSISTANCE.**

19 Section 211(c) of the Clean Air Act (42 U.S.C.
 20 7545(c)) (as amended by section 823(a)(3)) is amended
 21 by adding at the end the following:

22 “(6) MTBE MERCHANT PRODUCER CONVER-
 23 SION ASSISTANCE.—

24 “(A) IN GENERAL.—The Administrator
 25 may make grants to merchant producers of

1 methyl tertiary butyl ether in the United States
2 to assist the producers in the conversion of eli-
3 gible production facilities described in subpara-
4 graph (B) to the production of other fuel addi-
5 tives that—

6 “(i) will be consumed in nonattain-
7 ment areas;

8 “(ii) will assist the nonattainment
9 areas in achieving attainment with a na-
10 tional primary ambient air quality stand-
11 ard;

12 “(iii) will not degrade air quality or
13 surface or ground water quality or re-
14 sources; and

15 “(iv) have been registered and tested
16 in accordance with the requirements of this
17 section.

18 “(B) ELIGIBLE PRODUCTION FACILI-
19 TIES.—A production facility shall be eligible to
20 receive a grant under this paragraph if the pro-
21 duction facility—

22 “(i) is located in the United States;
23 and

1 “(ii) produced methyl tertiary butyl
2 ether for consumption in nonattainment
3 areas during the period—

4 “(I) beginning on the date of en-
5 actment of this paragraph; and

6 “(II) ending on the effective date
7 of the ban on the use of methyl ter-
8 tiary butyl ether under paragraph (5).

9 “(C) AUTHORIZATION OF APPROPRIA-
10 TIONS.—There is authorized to be appropriated
11 to carry out this paragraph \$250,000,000 for
12 each of fiscal years 2002 through 2004.”.

13 **TITLE IX—ENERGY EFFICIENCY**
14 **AND ASSISTANCE TO LOW IN-**
15 **COME CONSUMERS**

16 **Subtitle A—Low Income Assistance**
17 **and State Energy Programs**

18 **SEC. 901. INCREASED FUNDING FOR LIHEAP, WEATHERIZA-**
19 **TION ASSISTANCE, AND STATE ENERGY**
20 **GRANTS.**

21 (a) LIHEAP.—(1) Section 2602(b) of the Low-In-
22 come Home Energy Assistance Act of 1981 (42 U.S.C.
23 8621(b)) is amended by striking the first sentence and in-
24 serting the following: “There are authorized to be appro-
25 priated to carry out the provisions of this title (other than

1 section 2607A), \$3,400,000,000 for each of fiscal years
2 2003 through 2005.”.

3 (2) Section 2602(e) of the Low-Income Home Energy
4 Assistance Act of 1981 (42 U.S.C. 8621(e) is amended
5 by striking “\$600,000,000” and inserting
6 “\$1,000,000,000”.

7 (3) Section 2609A(a) of the Low-Income Energy As-
8 sistance Act of 1981 (42 U.S.C. 8628a(a)) is amended by
9 striking “not more than \$300,000” and inserting: “not
10 more than \$750,000”.

11 (b) WEATHERIZATION ASSISTANCE.—Section 422 of
12 the Energy Conservation and Production Act (42 U.S.C.
13 6872) is amended by striking “for fiscal years 1999
14 through 2003 such sums as may be necessary.” and in-
15 serting: “\$325,000,000 for fiscal year 2003,
16 \$400,000,000 for fiscal year 2004, and \$500,000,000 for
17 fiscal year 2005.”.

18 **SEC. 902. STATE ENERGY PROGRAMS.**

19 (a) STATE ENERGY CONSERVATION PLANS.—Section
20 362 of the Energy Policy and Conservation Act (42 U.S.C.
21 6322)) is amended by adding at the end the following:

22 “(g) The Secretary shall, at least once every three
23 years, invite the Governor of each State to review and,
24 if necessary, revise the energy conservation plan of the
25 State submitted under subsection (b) or (e). Such reviews

1 should consider the energy conservation plans of other
2 States within the region, and identify opportunities and
3 actions that may be carried out in pursuit of common en-
4 ergy conservation goals.”.

5 (b) STATE ENERGY CONSERVATION GOALS.—Section
6 364 of the Energy Policy and Conservation Act (42 U.S.C.
7 6324) is amended to read as follows:

8 “SEC. 364. Each State energy conservation plan with
9 respect to which assistance is made available under this
10 part on or after the date of enactment of the Energy Pol-
11 icy Act of 2002 shall contain a goal, consisting of an im-
12 provement of 25 percent or more in the efficiency of use
13 of energy in the State concerned in calendar year 2010
14 as compared to calendar year 1990, and may contain in-
15 terim goals.”.

16 (c) STATE ENERGY CONSERVATION GRANTS.—Sec-
17 tion 365(f) of the Energy Policy and Conservation Act (42
18 U.S.C. 6325(f)) is amended by striking “for fiscal years
19 1999 through 2003 such sums as may be necessary.” and
20 inserting: “\$100,000,000 for each of fiscal years 2003 and
21 2004; \$125,000,000 for fiscal year 2005; and such sums
22 as may be necessary for each fiscal year thereafter.”.

1 **SEC. 903. ENERGY EFFICIENT SCHOOLS.**

2 (a) ESTABLISHMENT.—There is established in the
3 Department of Energy the High Performance Schools
4 Program (in this section referred to as the “Program”).

5 (b) GRANTS.—The Secretary of Energy may make
6 grants to a State energy office—

7 (1) to assist school districts in the State to im-
8 prove the energy efficiency of school buildings;

9 (2) to administer the Program; and

10 (3) to promote participation in the Program.

11 (c) GRANTS TO ASSIST SCHOOL DISTRICTS.—The
12 Secretary shall condition grants under subsection (b)(1)
13 on the State energy office using the grants to assist school
14 districts that have demonstrated—

15 (1) a need for the grants to build additional
16 school buildings to meet increasing elementary or
17 secondary enrollments or to renovate existing school
18 buildings; and

19 (2) a commitment to use the grant funds to de-
20 velop high performance school buildings in accord-
21 ance with a plan that the State energy office, in con-
22 sultation with the State educational agency, has de-
23 termined is feasible and appropriate to achieve the
24 purposes for which the grant is made.

25 (d) GRANTS FOR ADMINISTRATION.—Grants under
26 subsection (b)(2) shall be used to—

1 (1) evaluate compliance by school districts with
2 requirements of this section;

3 (2) distribute information and materials to
4 clearly define and promote the development of high
5 performance school buildings for both new and exist-
6 ing facilities;

7 (3) organize and conduct programs for school
8 board members, school personnel, architects, engi-
9 neers, and others to advance the concepts of high
10 performance school buildings;

11 (4) obtain technical services and assistance in
12 planning and designing high performance school
13 buildings; or

14 (5) collect and monitor data and information
15 pertaining to the high performance school building
16 projects.

17 (e) GRANTS TO PROMOTE PARTICIPATION.—Grants
18 under subsection (b)(3) shall be used for promotional and
19 marketing activities, including facilitating private and
20 public financing, promoting the use of energy savings per-
21 formance contracts, working with school administrations,
22 students, and communities, and coordinating public ben-
23 efit programs.

24 (f) SUPPLEMENTING GRANT FUNDS.—The State en-
25 ergy office shall encourage qualifying school districts to

1 supplement funds awarded pursuant to this section with
2 funds from other sources in the implementation of their
3 plans.

4 (g) ALLOCATIONS.—Except as provided in subsection
5 (h), funds appropriated to carry out this section shall be
6 allocated as follows:

7 (1) 70 percent shall be used to make grants
8 under subsection (b)(1);

9 (2) 15 percent shall be used to make grants
10 under subsection (b)(2); and

11 (3) 15 percent shall be used to make grants
12 under subsection (b)(3).

13 (h) OTHER FUNDS.—The Secretary of Energy may
14 retain an amount, not to exceed \$300,000 per year, to
15 assist State energy offices in coordinating and imple-
16 menting the Program. Such funds may be used to develop
17 reference materials to further define the principles and cri-
18 teria to achieve high performance school buildings.

19 (i) AUTHORIZATION OF APPROPRIATIONS.—For
20 grants under subsection (b) there are authorized to be
21 appropriated—

22 (1) \$200,000,000 for fiscal year 2003;

23 (2) \$210,000,000 for fiscal year 2004;

24 (3) \$220,000,000 for fiscal year 2005;

25 (4) \$230,000,000 for fiscal year 2006; and

1 (5) such sums as may be necessary for fiscal
2 year 2007 and each fiscal year thereafter through
3 fiscal year 2012.

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

5 (1) HIGH PERFORMANCE SCHOOL BUILDING.—

6 The term “high performance school building” means
7 a school building that, in its design, construction,
8 operation, and maintenance—

9 (A) maximizes use of renewable energy and
10 energy-efficient technologies and systems;

11 (B) is cost-effective on a life-cycle basis;

12 (C) uses affordable, environmentally pref-
13 erable, and durable materials;

14 (D) enhances indoor environmental quality;

15 (E) protects and conserves water; and

16 (F) optimizes site potential.

17 (2) RENEWABLE ENERGY.—The term “renew-
18 able energy” means energy produced by solar, wind,
19 biomass, ocean, geothermal, or hydroelectric power.

20 (3) SCHOOL.—The term “school” means—

21 (A) an “elementary school” as that term is
22 defined in section 14101(14) of the Elementary
23 and Secondary Education Act of 1965 (20
24 U.S.C. 8801(14)),

1 (B) a “secondary school” as that term is
2 defined in section 14101(25) of the Elementary
3 and Secondary Education Act of 1965 (20
4 U.S.C. 8801(25)), or

5 (C) an elementary or secondary Indian
6 school funded by the Bureau of Indian Affairs.

7 (4) STATE EDUCATIONAL AGENCY.—The term
8 “State educational agency” has the same meaning
9 given such term in section 14101(28) of the Elemen-
10 tary and Secondary Education Act of 1965 (20
11 U.S.C. 8801(28)).

12 (5) STATE ENERGY OFFICE.—The term “State
13 energy office” means the State agency responsible
14 for developing State energy conservation plans under
15 section 362 of the Energy Policy and Conservation
16 Act (42 U.S.C. 6322), or, if no such agency exists,
17 a State agency designated by the Governor of the
18 State.

19 **SEC. 904. LOW INCOME COMMUNITY ENERGY EFFICIENCY**
20 **PILOT PROGRAM.**

21 (a) GRANTS.—The Secretary of Energy is authorized
22 to make grants to private, non-profit community develop-
23 ment organizations to improve energy efficiency, identify
24 and develop alternative renewable and distributed energy

1 supplies, and increase energy conservation in low income
2 rural and urban communities.

3 (b) PURPOSE OF GRANTS.—The Secretary may make
4 grants on a competitive basis to a community development
5 organization for—

6 (1) investments that develop alternative renew-
7 able and distributed energy supplies;

8 (2) energy efficiency projects and energy con-
9 servation programs;

10 (3) studies and other activities that improve en-
11 ergy efficiency in low income rural and urban com-
12 munities;

13 (4) planning and development assistance for in-
14 creasing the energy efficiency of buildings and facili-
15 ties; and

16 (5) technical and financial assistance to local
17 government and private entities on developing new
18 renewable and distributed sources of power or com-
19 bined heat and power generation.

20 (c) AUTHORIZATION OF APPROPRIATIONS.—For the
21 purposes of this section there are authorized to be appro-
22 priated to the Secretary of Energy an amount not to ex-
23 ceed \$10 million for fiscal year 2003 and each fiscal year
24 thereafter through fiscal year 2005.

1 **Subtitle B—Federal Energy**
 2 **Efficiency**

3 **SEC. 911. ENERGY MANAGEMENT REQUIREMENTS.**

4 (a) ENERGY REDUCTION GOALS.—Section 543(a)(1)
 5 of the National Energy Conservation Policy Act (42
 6 U.S.C. 8253(a)(1)) is amended to read as follows:

7 “(1) Subject to paragraph (2), each agency
 8 shall apply energy conservation measures to, and
 9 shall improve the design for the construction of, the
 10 Federal buildings of the agency (including each in-
 11 dustrial or laboratory facility) so that the energy
 12 consumption per gross square foot of the Federal
 13 buildings of the agency in calendar years 2002
 14 through 2011 is reduced, as compared with the en-
 15 ergy consumption per gross square foot of the Fed-
 16 eral buildings of the agency in calendar year 2000,
 17 by the percentage specified in the following table:

Calendar Year	Percentage reduction
2002	2
2003	4
2004	6
2005	8
2006	10
2007	12
2008	14
2009	16
2010	18
2011	20

18 (b) REVIEW AND REVISION OF ENERGY PERFORM-
 19 ANCE REQUIREMENT.—Section 543(a) of the National

1 Energy Conservation Policy Act (42 U.S.C. 8253(a)) is
2 further amended by adding at the end the following:

3 “(3) Not later than December 31, 2010, the
4 Secretary shall review the results of the implementa-
5 tion of the energy performance requirement estab-
6 lished under paragraph (1) and submit to Congress
7 recommendations concerning energy performance re-
8 quirements for calendar years 2012 through 2021.”.

9 (c) EXCLUSIONS.—Section 543(c)(1) of the National
10 Energy Conservation Policy Act (42 U.S.C. 8253(c)(1))
11 is amended to read as follows:

12 “(1)(A) An agency may exclude, from the en-
13 ergy performance requirement for a calendar year
14 established under subsection (a) and the energy
15 management requirement established under sub-
16 section (b), any Federal building or collection of
17 Federal buildings, if the head of the agency finds
18 that—

19 “(i) compliance with those requirements
20 would be impracticable;

21 “(ii) the agency has completed and sub-
22 mitted all federally required energy manage-
23 ment reports;

24 “(iii) the agency has achieved compliance
25 with the energy efficiency requirements of this

1 Act, the Energy Policy Act of 1992, Executives
2 Orders, and other federal law; and

3 “(iv) the agency has implemented all prac-
4 ticable, life-cycle cost-effective projects with re-
5 spect to the Federal building or collection of
6 Federal buildings to be excluded.

7 “(B) A finding of impracticability under sub-
8 paragraph (A)(i) shall be based on—

9 “(i) the energy intensiveness of activities
10 carried out in the Federal building or collection
11 of Federal buildings; or

12 “(ii) the fact that the Federal building or
13 collection of Federal buildings is used in the
14 performance of a national security function.”.

15 (d) REVIEW BY SECRETARY.—Section 543(c)(2) of
16 the National Energy Conservation Policy Act (42 U.S.C.
17 8253(c)(2)) is amended—

18 (1) by striking “impracticability standards” and
19 inserting “standards for exclusion”; and

20 (2) by striking “a finding of impracticability”
21 and inserting “the exclusion”.

22 (e) CRITERIA.—Section 543(c) of the National En-
23 ergy Conservation Policy Act (42 U.S.C. 8253(c)) is fur-
24 ther amended by adding at the end the following:

1 “(1) DEADLINE.—By October 1, 2004, all Fed-
2 eral buildings shall be metered or submetered in ac-
3 cordance with guidelines established by the Sec-
4 retary under paragraph (2).

5 “(2) GUIDELINES.—

6 “(A) IN GENERAL.—Not later than 180
7 days after the date of enactment of this sub-
8 section, the Secretary, in consultation with the
9 Department of Defense, the General Service
10 Administration and representatives from the
11 metering industry, energy services industry, na-
12 tional laboratories, universities and federal fa-
13 cility energy managers, shall establish guide-
14 lines for agencies to carry out paragraph (1).

15 “(B) REQUIREMENTS FOR GUIDELINES.—

16 The guidelines shall—

17 “(i) take into consideration—

18 “(I) the cost of metering and
19 submetering and the reduced cost of
20 operation and maintenance expected
21 to result from metering and sub-
22 metering;

23 “(II) the extent to which meter-
24 ing and submetering are expected to
25 result in increased potential for en-

1 energy management, increased potential
2 for energy savings and energy effi-
3 ciency improvement, and cost and en-
4 ergy savings due to utility contract
5 aggregation; and

6 “(III) the measurement and
7 verification protocols of the Depart-
8 ment of Energy;

9 “(ii) include recommendations con-
10 cerning the amount of funds and the num-
11 ber of trained personnel necessary to gath-
12 er and use the metering information to
13 track and reduce energy use;

14 “(iii) establish 1 or more dates, not
15 later than 1 year after the date of issuance
16 of the guidelines, on which the requirement
17 specified in paragraph (1) shall take effect;
18 and

19 “(iv) establish exclusions from the re-
20 quirement specified in paragraph (1) based
21 on the de minimus quantity of energy use
22 of a Federal building, industrial process, or
23 structure.

24 “(f) USE OF ENERGY CONSUMPTION DATA IN FED-
25 ERAL BUILDINGS.—

1 “(1) IN GENERAL.—Beginning not later than
2 January 1, 2003, each agency shall use, to the max-
3 imum extent practicable, for the purposes of efficient
4 use of energy and reduction in the cost of electricity
5 used in the Federal buildings of the agency, interval
6 consumption data that measure on a real-time or
7 daily basis consumption of electricity in the Federal
8 buildings of the agency.

9 “(2) PLAN.—As soon as practicable after the
10 date of enactment of this subsection, in a report
11 submitted by the agency under section 548(a), each
12 agency shall submit to the Secretary a plan describ-
13 ing how the agency will implement the requirement
14 of paragraph (1), including how the agency will des-
15 ignate personnel primarily responsible for achieving
16 the requirement.”.

17 **SEC. 913. FEDERAL BUILDING PERFORMANCE STANDARDS.**

18 (a) REVISED STANDARDS.—Section 305(a) of the
19 Energy Conservation and Production Act (42 U.S.C.
20 6834(a)) is amended—

21 (1) in paragraph (2)(A), by striking “CABO
22 Model Energy Code, 1992” and inserting “the 2000
23 International Energy Conservation Code”; and

24 (2) by adding at the end the following:

1 “(3) REVISED FEDERAL BUILDING ENERGY EF-
2 FICIENCY PERFORMANCE STANDARDS.—

3 “(A) IN GENERAL.—Not later than 1 year
4 after the date of enactment of this paragraph,
5 the Secretary of Energy shall establish, by rule,
6 revised Federal building energy efficiency per-
7 formance standards that require that—

8 “(i) new commercial buildings and
9 multifamily high rise residential buildings
10 be constructed so as to exceed, if cost-ef-
11 fective, the applicable Energy Star criteria
12 or the most recent ASHRAE Standard
13 90.1, by not less than 10 percent;

14 “(ii) new residential buildings (other
15 than those described in clause (i)) be con-
16 structed so as to exceed, if cost-effective,
17 the level of energy efficiency required
18 under the applicable Energy Star criteria
19 or the most recent version of the 2000
20 International Energy Conservation Code by
21 not less than 10 percent; and

22 “(iii) sustainable design principles are
23 applied to the siting, design, and construc-
24 tion of all new and replacement buildings.

1 “(B) ADDITIONAL REVISIONS.—Not later
2 than 1 year after the date of approval of
3 amendments to ASHRAE Standard 90.1 or the
4 2000 International Energy Conservation Code,
5 the Secretary of Energy shall determine, based
6 on the cost-effectiveness of the requirements
7 under the amendments, whether the revised
8 standards established under this paragraph
9 should be updated to reflect the amendments.

10 “(C) STATEMENT ON COMPLIANCE OF NEW
11 BUILDINGS.—In the budget request of the Fed-
12 eral agency for each fiscal year and each report
13 submitted by the Federal agency under section
14 548(a) of the National Energy Conservation
15 Policy Act (42 U.S.C. 8258(a)), the head of
16 each Federal agency shall include—

17 “(i) a list of all new Federal buildings
18 of the Federal agency; and

19 “(ii) a statement concerning whether
20 the Federal buildings meet or exceed the
21 revised standards established under this
22 paragraph, including a metering and com-
23 missioning component that is in compli-
24 ance with the measurement and

1 verification protocols of the Department of
2 Energy.

3 “(D) AUTHORIZATION OF APPROPRIA-
4 TIONS.—There are authorized to be appro-
5 priated such sums as are necessary to carry out
6 this paragraph and to implement the revised
7 standards established under this paragraph.”.

8 (b) ENERGY LABELING PROGRAM.—Section 305(a)
9 of the Energy Conservation and Production Act (42
10 U.S.C. 6834(a)) is further amended by adding at the end
11 the following:

12 “(e) ENERGY LABELING PROGRAM.—The Secretary
13 of Energy, in cooperation with the Administrator of the
14 Environmental Protection Agency, shall develop an energy
15 labeling program for new Federal buildings that exceed
16 the revised standards established under subsection (a)(3)
17 by 15 percent or more.”.

18 **SEC. 914. PROCUREMENT OF ENERGY EFFICIENT PROD-**
19 **UCTS.**

20 (a) REQUIREMENTS.—Part 3 of title V of the Na-
21 tional Energy Conservation Policy Act is amended by add-
22 ing at the end the following:

23 **“SEC. 552. FEDERAL PROCUREMENT OF ENERGY EFFI-**
24 **CIENT PRODUCTS.**

25 “(a) DEFINITIONS.—In this section:

1 “(1) ENERGY STAR PRODUCT.—The term ‘En-
2 ergy Star product’ means a product that is rated for
3 energy efficiency under an Energy Star program.

4 “(2) ENERGY STAR PROGRAM.—The term ‘En-
5 ergy Star program’ means the program established
6 by section 324A of the Energy Policy and Conserva-
7 tion Act.

8 “(3) EXECUTIVE AGENCY.—The term ‘executive
9 agency’ has the meaning given the term in section
10 4 of the Office of Federal Procurement Policy Act
11 (41 U.S.C. 403).

12 “(4) FEMP DESIGNATED PRODUCT.—The term
13 ‘FEMP designated product’ means a product that is
14 designated under the Federal Energy Management
15 Program of the Department of Energy as being
16 among the highest 25 percent of equivalent products
17 for energy efficiency.

18 “(b) PROCUREMENT OF ENERGY EFFICIENT PROD-
19 UCTS.—

20 “(1) REQUIREMENT.—To meet the require-
21 ments of an executive agency for an energy con-
22 suming product, the head of the executive agency
23 shall, except as provided in paragraph (2), procure—

24 “(A) an Energy Star product; or

25 “(B) a FEMP designated product.

1 “(2) EXCEPTIONS.—The head of an executive
2 agency is not required to procure an Energy Star
3 product or FEMP designated product under para-
4 graph (1) if—

5 “(A) an Energy Star product or FEMP
6 designated product is not cost effective over the
7 life cycle of the product; or

8 “(B) no Energy Star product or FEMP
9 designated product is reasonably available that
10 meets the requirements of the executive agency.

11 “(3) PROCUREMENT PLANNING.—The head of
12 an executive agency shall incorporate into the speci-
13 fications for all procurements involving energy con-
14 suming products and systems, and into the factors
15 for the evaluation of offers received for the procure-
16 ment, criteria for energy efficiency that are con-
17 sistent with the criteria used for rating Energy Star
18 products and for rating FEMP designated products.

19 “(c) LISTING OF ENERGY EFFICIENT PRODUCTS IN
20 FEDERAL CATALOGS.—Energy Star and FEMP des-
21 ignated products shall be clearly identified and promi-
22 nently displayed in any inventory or listing of products
23 by the General Services Administration or the Defense Lo-
24 gistics Agency.

1 (b) CONFORMING AMENDMENT.—The table of con-
2 tents in section 1(b) of the National Energy Conservation
3 Policy Act (42 U.S.C. 8201 note) is amended by inserting
4 after the item relating to section 551 the following:

“Sec. 552. Federal Government procurement of energy efficient products.”

5 (c) REGULATIONS.—Not later than 180 days after
6 the effective date specified in subsection (f), the Secretary
7 of Energy shall issue guidelines to carry out section 552
8 of the National Energy Conservation Policy Act (as added
9 by subsection (a)).

10 (d) DESIGNATION OF ENERGY STAR PRODUCTS.—
11 The Administrator of the Environmental Protection Agen-
12 cy and the Secretary of Energy shall expedite the process
13 of designating products as Energy Star products (as de-
14 fined in section 552 of the National Energy Conservation
15 Policy Act (as added by subsection (a))).

16 (e) DESIGNATION OF ELECTRIC MOTORS.—In the
17 case of electric motors of 1 to 500 horsepower, agencies
18 shall select only premium efficient motors that meet a
19 standard designated by the Secretary. The Secretary shall
20 designate such a standard within 120 days of the enact-
21 ment of this paragraph, after considering the rec-
22 ommendations of associated electric motor manufacturers
23 and energy efficiency groups.

24 (f) EFFECTIVE DATE.—Subsection (a) and the
25 amendment made by that subsection take effect on the

1 date that is 180 days after the date of enactment of this
2 Act.

3 **SEC. 915. COST SAVINGS FROM REPLACEMENT FACILITIES.**

4 Section 801(a) of the National Energy Conservation
5 Policy Act (42 U.S.C. 8287(a)) is amended by adding at
6 the end the following:

7 “(3)(A) In the case of an energy savings con-
8 tract or energy savings performance contract pro-
9 viding for energy savings through the construction
10 and operation of one or more buildings or facilities
11 to replace one or more existing buildings or facilities,
12 benefits ancillary to the purpose of such contract
13 under paragraph (1) may include savings resulting
14 from reduced costs of operation and maintenance at
15 such replacement buildings or facilities when com-
16 pared with costs of operation and maintenance at
17 the buildings or facilities being replaced.

18 “(B) Notwithstanding paragraph (2)(B), aggre-
19 gate annual payments by an agency under an energy
20 savings contract or energy savings performance con-
21 tract referred to in subparagraph (A) may take into
22 account (through the procedures developed pursuant
23 to this section) savings resulting from reduced costs
24 of operation and maintenance as described in sub-
25 paragraph (A).”.

1 **SEC. 916. REPEAL OF ENERGY SAVINGS PERFORMANCE**

2 **CONTRACT SUNSET.**

3 Section 801(c) of the National Energy Conservation
4 Policy Act (42 U.S.C. 8287(c)) is repealed.

5 **SEC. 917. ENERGY SAVINGS PERFORMANCE CONTRACT**

6 **DEFINITIONS.**

7 (a) **ENERGY SAVINGS.**—Section 804(2) of the Na-
8 tional Energy Conservation Policy Act (42 U.S.C.
9 8287c(2)) is amended to read as follows:

10 “(2) The term ‘energy savings’ means a reduc-
11 tion in the cost of energy or water, from a base cost
12 established through a methodology set forth in the
13 contract, used in either—

14 “(A) an existing federally owned building
15 or buildings or other federally owned facilities
16 as a result of—

17 “(i) the lease or purchase of operating
18 equipment, improvements, altered oper-
19 ation and maintenance, or technical serv-
20 ices;

21 “(ii) the increased efficient use of ex-
22 isting energy sources by cogeneration or
23 heat recovery, excluding any cogeneration
24 process for other than a federally owned
25 building or buildings or other federally
26 owned facilities; or

1 “(iii) the increased efficient use of ex-
2 isting water sources; or

3 “(B) a replacement facility under sec-
4 tion 801(a)(3).”.

5 (b) ENERGY SAVINGS CONTRACT.—Section 804(3) of
6 the National Energy Conservation Policy Act (42 U.S.C.
7 8287c(3)) is amended to read as follows:

8 “(3) The terms ‘energy savings contract’ and
9 ‘energy savings performance contract’ mean a con-
10 tract which provides for—

11 “(A) the performance of services for the
12 design, acquisition, installation, testing, oper-
13 ation, and, where appropriate, maintenance and
14 repair, of an identified energy or water con-
15 servation measure or series of measures at one
16 or more locations; or

17 “(B) energy savings through the construc-
18 tion and operation of one or more buildings or
19 facilities to replace one or more existing build-
20 ings or facilities.”.

21 (c) ENERGY OR WATER CONSERVATION MEASURE.—
22 Section 804(4) of the National Energy Conservation Pol-
23 icy Act (42 U.S.C. 8287c(4)) is amended to read as fol-
24 lows:

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

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

6 “(B) a water conservation measure that
7 improves water efficiency, is life cycle cost effec-
8 tive, and involves water conservation, water re-
9 cycling or reuse, more efficient treatment of
10 wastewater or stormwater, improvements in op-
11 eration or maintenance efficiencies, retrofit ac-
12 tivities or other related activities, not at a Fed-
13 eral hydroelectric facility.”.

14 **SEC. 918. REVIEW OF ENERGY SAVINGS PERFORMANCE**
15 **CONTRACT PROGRAM.**

16 Within 180 days after the date of the enactment of
17 this Act, the Secretary of Energy shall complete a review
18 of the Energy Savings Performance Contract program to
19 identify statutory, regulatory, and administrative obstacles
20 that prevent Federal agencies from fully utilizing the pro-
21 gram. In addition, this review shall identify all areas for
22 increasing program flexibility and effectiveness, including
23 audit and measurement verification requirements, ac-
24 counting for energy use in determining savings, con-
25 tracting requirements, and energy efficiency services cov-

1 ered. The Secretary shall report these findings to the
2 Committee on Energy and Commerce of the House of
3 Representatives and the Committee on Energy and Nat-
4 ural Resources of the Senate, and shall implement identi-
5 fied administrative and regulatory changes to increase
6 program flexibility and effectiveness to the extent that
7 such changes are consistent with statutory authority.

8 **SEC. 919. FEDERAL ENERGY BANK.**

9 Part 3 of title V of the National Energy Conservation
10 Policy Act is amended by adding at the end the following:

11 **“SEC. 553. FEDERAL ENERGY BANK.**

12 “(a) DEFINITIONS.—In this section:

13 “(1) BANK.—The term ‘Bank’ means the Fed-
14 eral Energy Bank established by subsection (b).

15 “(2) ENERGY OR WATER EFFICIENCY
16 PROJECT.—The term ‘energy or water efficiency
17 project’ means a project that assists a Federal agen-
18 cy in meeting or exceeding the energy or water effi-
19 ciency requirements of—

20 “(A) this part;

21 “(B) title VIII;

22 “(C) subtitle F of title I of the Energy
23 Policy Act of 1992 (42 U.S.C. 8262 et seq.); or

24 “(D) any applicable Executive order, in-
25 cluding Executive Order No. 13123.

1 “(3) FEDERAL AGENCY.—The term ‘Federal
2 agency’ means—

3 “(A) an Executive agency (as defined in
4 section 105 of title 5, United States Code);

5 “(B) the United States Postal Service;

6 “(C) Congress and any other entity in the
7 legislative branch; and

8 “(D) a Federal court and any other entity
9 in the judicial branch.

10 “(b) ESTABLISHMENT OF BANK.—

11 “(1) IN GENERAL.—There is established in the
12 Treasury of the United States a fund to be known
13 as the ‘Federal Energy Bank’, consisting of—

14 “(A) such amounts as are deposited in the
15 Bank under paragraph (2);

16 “(B) such amounts as are repaid to the
17 Bank under subsection (c)(2)(D); and

18 “(C) any interest earned on investment of
19 amounts in the Bank under paragraph (3).

20 “(2) DEPOSITS IN BANK.—

21 “(A) IN GENERAL.—Subject to the avail-
22 ability of appropriations and to subparagraph
23 (B), the Secretary of the Treasury shall deposit
24 in the Bank an amount equal to \$250,000,000

1 in fiscal year 2003 and in each fiscal year
2 thereafter.

3 “(B) MAXIMUM AMOUNT IN BANK.—De-
4 posits under subparagraph (A) shall cease be-
5 ginning with the fiscal year following the fiscal
6 year in which the amounts in the Bank (includ-
7 ing amounts on loan from the Bank) become
8 equal to or exceed \$1,000,000,000.

9 “(3) INVESTMENT OF AMOUNTS.—The Sec-
10 retary of the Treasury shall invest such portion of
11 the Bank as is not, in the judgment of the Sec-
12 retary, required to meet current withdrawals. Invest-
13 ments may be made only in interest-bearing obliga-
14 tions of the United States.

15 “(c) LOANS FROM THE BANK.—

16 “(1) IN GENERAL.—The Secretary of the
17 Treasury shall transfer from the Bank to the Sec-
18 retary such amounts as are appropriated to carry
19 out the loan program under paragraph (2).

20 “(2) LOAN PROGRAM.—

21 “(A) ESTABLISHMENT.—

22 “(i) IN GENERAL.—In accordance
23 with subsection (d), the Secretary, in con-
24 sultation with the Secretary of Defense,
25 the Administrator of General Services, and

1 the Director of the Office of Management
2 and Budget, shall establish a program to
3 make loans of amounts in the Bank to any
4 Federal agency that submits an application
5 satisfactory to the Secretary in order to
6 pay the costs of a project described in sub-
7 paragraph (C).

8 “(ii) COMMENCEMENT OF OPER-
9 ATIONS.—The Secretary may begin—

10 “(I) accepting applications for
11 loans from the Bank in fiscal year
12 2002; and

13 “(II) making loans from the
14 Bank in fiscal year 2003.

15 “(B) ENERGY SAVINGS PERFORMANCE
16 CONTRACTING FUNDING.—To the extent prac-
17 ticable, an agency shall not submit a project for
18 which energy performance contracting funding
19 is available and is acceptable to the Federal
20 agency under title VIII.

21 “(C) PURPOSES OF LOAN.—

22 “(i) IN GENERAL.—A loan from the
23 Bank may be used to pay—

24 “(I) the costs of an energy or
25 water efficiency project, or a renew-

1 able or alternative energy project, for
2 a new or existing Federal building (in-
3 cluding selection and design of the
4 project);

5 “(II) the costs of an energy me-
6 tering plan and metering equipment
7 installed pursuant to section 543(e) or
8 for the purpose of verification of the
9 energy savings under an energy sav-
10 ings performance contract under title
11 VIII; or

12 “(III) at the time of contracting,
13 the costs of cofunding of an energy
14 savings performance contract (includ-
15 ing a utility energy service agreement)
16 in order to shorten the payback period
17 of the project that is the subject of
18 the energy savings performance con-
19 tract.

20 “(ii) LIMITATION.—A Federal agency
21 may use not more than 10 percent of the
22 amount of a loan under subclause (I) or
23 (II) of clause (i) to pay the costs of admin-
24 istration and proposal development (includ-
25 ing data collection and energy surveys).

1 “(iii) RENEWABLE AND ALTERNATIVE
2 ENERGY PROJECTS.—Not more than 25
3 percent of the amount on loan from the
4 Bank at any time may be loaned for re-
5 newable energy and alternative energy
6 projects (as defined by the Secretary in ac-
7 cordance with applicable law (including
8 Executive Orders)).

9 “(D) REPAYMENTS.—

10 “(i) IN GENERAL.—Subject to clauses
11 (ii) through (iv), a Federal agency shall
12 repay to the Bank the principal amount of
13 a loan plus interest at a rate determined
14 by the President, in consultation with the
15 Secretary and the Secretary of the Treas-
16 ury.

17 “(ii) WAIVER OR REDUCTION OF IN-
18 TEREST.—The Secretary may waive or re-
19 duce the rate of interest required to be
20 paid under clause (i) if the Secretary de-
21 termines that payment of interest by a
22 Federal agency at the rate determined
23 under that clause is not required to fund
24 the operations of the Bank.

1 “(iii) DETERMINATION OF INTEREST
2 RATE.—The interest rate determined
3 under clause (i) shall be at a rate that is
4 sufficient to ensure that, beginning not
5 later than October 1, 2007, interest pay-
6 ments will be sufficient to fully fund the
7 operations of the Bank.

8 “(iv) INSUFFICIENCY OF APPROPRIA-
9 TIONS.—

10 “(I) REQUEST FOR APPROPRIA-
11 TIONS.—As part of the budget request
12 of the Federal agency for each fiscal
13 year, the head of each Federal agency
14 shall submit to the President a re-
15 quest for such amounts as are nec-
16 essary to make such repayments as
17 are expected to become due in the fis-
18 cal year under this subparagraph.

19 “(II) SUSPENSION OF REPAY-
20 MENT REQUIREMENT.—If, for any fis-
21 cal year, sufficient appropriations are
22 not made available to a Federal agen-
23 cy to make repayments under this
24 subparagraph, the Bank shall suspend
25 the requirement of repayment under

1 this subparagraph until such appro-
2 priations are made available.

3 “(E) FEDERAL AGENCY ENERGY BUDG-
4 ETS.—Until a loan is repaid, a Federal agency
5 budget submitted by the President to Congress
6 for a fiscal year shall not be reduced by the
7 value of energy savings accrued as a result of
8 any energy conservation measure implemented
9 using amounts from the Bank.

10 “(F) NO RESCISSION OR REPROGRAM-
11 MING.—A Federal agency shall not rescind or
12 reprogram loan amounts made available from
13 the Bank except as permitted under guidelines
14 issued under subparagraph (G).

15 “(G) GUIDELINES.—The Secretary shall
16 issue guidelines for implementation of the loan
17 program under this paragraph, including selec-
18 tion criteria, maximum loan amounts, and loan
19 repayment terms.

20 “(d) SELECTION CRITERIA.—

21 “(1) IN GENERAL.—The Secretary shall estab-
22 lish criteria for the selection of projects to be award-
23 ed loans in accordance with paragraph (2).

24 “(2) SELECTION CRITERIA.—

1 “(A) IN GENERAL.—The Secretary may
2 make loans from the Bank only for a project
3 that—

4 “(i) is technically feasible;

5 “(ii) is determined to be cost-effective
6 using life cycle cost methods established by
7 the Secretary;

8 “(iii) includes a measurement and
9 management component, based on the
10 measurement and verification protocols of
11 the Department of Energy, to—

12 “(I) commission energy savings
13 for new and existing Federal facilities;

14 “(II) monitor and improve energy
15 efficiency management at existing
16 Federal facilities; and

17 “(III) verify the energy savings
18 under an energy savings performance
19 contract under title VIII;

20 and

21 “(iv)(I) in the case of renewable en-
22 ergy or alternative energy project, has a
23 simple payback period of not more than 15
24 years; and

1 “(II) in the case of any other project,
2 has a simple payback period of not more
3 than 10 years.

4 “(B) PRIORITY.—In selecting projects, the
5 Secretary shall give priority to projects that—

6 “(i) are a component of a comprehen-
7 sive energy management project for a Fed-
8 eral facility; and

9 “(ii) are designed to significantly re-
10 duce the energy use of the Federal facility.

11 “(e) REPORTS AND AUDITS.—

12 “(1) REPORTS TO THE SECRETARY.—Not later
13 than 1 year after the completion of installation of a
14 project that has a cost of more than \$1,000,000,
15 and annually thereafter, a Federal agency shall sub-
16 mit to the Secretary a report that—

17 “(A) states whether the project meets or
18 fails to meet the energy savings projections for
19 the project; and

20 “(B) for each project that fails to meet the
21 energy savings projections, states the reasons
22 for the failure and describes proposed remedies.

23 “(2) AUDITS.—The Secretary may audit, or re-
24 quire a Federal agency that receives a loan from the
25 Bank to audit, any project financed with amounts

1 from the Bank to assess the performance of the
2 project.

3 “(3) REPORTS TO CONGRESS.—At the end of
4 each fiscal year, the Secretary shall submit to Con-
5 gress a report on the operations of the Bank, includ-
6 ing a statement of—

7 “(A) the total receipts by the Bank;

8 “(B) the total amount of loans from the
9 Bank to each Federal agency; and

10 “(C) the estimated cost and energy savings
11 resulting from projects funded with loans from
12 the Bank.

13 “(f) AUTHORIZATION OF APPROPRIATIONS.—There
14 are authorized to be appropriated to such sums as are nec-
15 essary to carry out this section.”

16 **SEC. 920. ENERGY AND WATER SAVING MEASURES IN CON-**
17 **GRESSIONAL BUILDINGS.**

18 (a) IN GENERAL.—Part 3 of title V of the National
19 Energy Conservation Policy Act is amended by adding at
20 the end:

21 **“SEC. 554. ENERGY AND WATER SAVINGS MEASURES IN**
22 **CONGRESSIONAL BUILDINGS.**

23 “(a) IN GENERAL.—The Architect of the Capitol—

24 “(1) shall develop, update, and implement a
25 cost-effective energy conservation and management

1 plan (referred to in this section as the “plan”) for
2 all facilities administered by the Congress (referred
3 to in this section as ‘congressional buildings’) to
4 meet the energy performance requirements for Fed-
5 eral buildings established under section 543(a)(1).

6 “(2) shall submit the plan to Congress, not
7 later than 180 days after the date of enactment of
8 this section.

9 “(b) PLAN REQUIREMENTS.—The plan shall
10 include—

11 “(1) a description of the life-cycle cost analysis
12 used to determine the cost-effectiveness of proposed
13 energy efficiency projects;

14 “(2) a schedule of energy surveys to ensure
15 complete surveys of all congressional buildings every
16 five years to determine the cost and payback period
17 of energy and water conservation measures;

18 “(3) a strategy for installation of life cycle cost
19 effective energy and water conservation measures;

20 “(4) the results of a study of the costs and ben-
21 efits of installation of submetering in congressional
22 buildings; and

23 “(5) information packages and ‘how-to’ guides
24 for each Member and employing authority of Con-

1 gress that detail simple, cost-effective methods to
2 save energy and taxpayer dollars in the workplace.

3 “(c) CONTRACTING AUTHORITY.—The Architect—

4 “(1) may contract with nongovernmental enti-
5 ties and use private sector capital to finance energy
6 conservation projects and meet energy performance
7 requirements; and

8 “(2) may use innovative contracting methods
9 that will attract private sector funding for the instal-
10 lation of energy efficient and renewable energy tech-
11 nology, such as energy savings performance con-
12 tracts described in title VIII.

13 “(d) CAPITOL VISITOR CENTER.—The Architect—

14 “(1) shall ensure that state-of-the-art energy ef-
15 ficiency and renewable energy technologies are used
16 in the construction and design of the Visitor Center;
17 and

18 “(2) shall include in the Visitor Center an ex-
19 hibit on the energy efficiency and renewable energy
20 measures used in congressional buildings.

21 “(e) ANNUAL REPORT.—The Architect shall submit
22 to Congress annually a report on congressional energy
23 management and conservation programs required under
24 this section that describes in detail—

1 “(1) energy expenditures and savings estimates
2 for each facility;

3 “(2) energy management and conservation
4 projects; and

5 “(3) future priorities to ensure compliance with
6 this section.”.

7 (b) REPEAL.—Section 310 of the Legislative Branch
8 Appropriations Act, 1999 (40 U.S.C. 166i), is repealed.

9 **Subtitle C—Industrial Efficiency**
10 **and Consumer Products**

11 **SEC. 921. VOLUNTARY COMMITMENTS TO REDUCE INDUS-**
12 **TRIAL ENERGY INTENSITY.**

13 (a) VOLUNTARY AGREEMENTS.—The Secretary of
14 Energy shall enter into voluntary agreements with one or
15 more persons in industrial sectors that consume signifi-
16 cant amounts of primary energy per unit of physical out-
17 put to reduce the energy intensity of their production ac-
18 tivities.

19 (b) GOAL.—Voluntary agreements under this section
20 shall have a goal of reducing energy intensity by not less
21 than 2.5 percent each year from 2002 through 2012.

22 (c) RECOGNITION.—The Secretary of Energy, in co-
23 operation with the Administrator of the Environmental
24 Protection Agency and other appropriate federal agencies,
25 shall develop mechanisms to recognize and publicize the

1 achievements of participants in voluntary agreements
2 under this section.

3 (d) DEFINITION.—In this section, the term “energy
4 intensity” means the primary energy consumed per unit
5 of physical output in an industrial process.

6 (e) TECHNICAL ASSISTANCE.—An entity that enters
7 into an agreement under this section and continues to
8 make a good faith effort to achieve the energy efficiency
9 goals specified in the agreement shall be eligible to receive
10 from the Secretary a grant or technical assistance as ap-
11 propriate to assist in the achievement of those goals.

12 (f) REPORT.—Not later than June 30, 2008 and
13 June 30, 2012, the Secretary shall submit to Congress a
14 report that evaluates the success of the voluntary agree-
15 ments, with independent verification of a sample of the
16 energy savings estimates provided by participating firms.

17 **SEC. 922. AUTHORITY TO SET STANDARDS FOR COMMERCIAL PRODUCTS.**
18

19 Part B of title III of the Energy Policy and Conserva-
20 tion Act (42 U.S.C. 6291 et seq.) is amended as follows:

21 (1) In the heading for such part, by inserting
22 “AND COMMERCIAL” after “CONSUMER”.

23 (2) In section 321(2), by inserting “or commer-
24 cial” after “consumer”.

1 (3) In paragraphs (4), (5), and (15) of section
2 321, by striking “consumer” each place it appears
3 and inserting “covered”.

4 (4) In section 322(a), by inserting “or commer-
5 cial” after “consumer” the first place it appears in
6 the material preceding paragraph (1).

7 (5) In section 322(b), by inserting “or commer-
8 cial” after “consumer” each place it appears.

9 (6) In section 322 (b)(1)(B) and (b)(2)(A), by
10 inserting “or per-business in the case of a commer-
11 cial product” after “per-household” each place it ap-
12 pears.

13 (7) In section 322 (b)(2)(A), by inserting “or
14 businesses in the case of commercial products” after
15 “households” each place it appears.

16 (8) In section 322 (B)(2)(C)—

17 (A) by striking “term” and inserting
18 “terms”; and

19 (B) by inserting “and ‘business’” after
20 “‘household’”.

21 (9) In section 323 (b)(1) (B) by inserting “or
22 commercial” after “consumer”.

1 **SEC. 923. ADDITIONAL DEFINITIONS.**

2 Section 321 of the Energy Policy and Conservation
3 Act (42 U.S.C. 6291) is amended by adding at the end
4 the following:

5 “(32) The term ‘battery charger’ means a de-
6 vice that charges batteries for consumer products.

7 “(33) The term ‘commercial refrigerator, freez-
8 er and refrigerator-freezer’ means a refrigerator,
9 freezer or refrigerator-freezer that—

10 “(A) is not a consumer product regulated
11 under this Act; and

12 “(B) incorporates most components in-
13 volved in the vapor-compression cycle and the
14 refrigerated compartment in a single package.

15 “(34) The term ‘external power supply’ means
16 an external power supply circuit that is used to con-
17 vert household electric current into either DC cur-
18 rent or lower-voltage AC current to operate a con-
19 sumer product.

20 “(35) The term ‘illuminated exit sign’ means a
21 sign that—

22 “(A) is designed to be permanently fixed in
23 place to identify an exit; and

24 “(B) consists of—

1 “(i) an electrically powered integral
2 light source that illuminates the legend
3 ‘EXIT’ and any directional indicators; and

4 “(ii) provides contrast between the
5 legend, any directional indicators, and the
6 background.

7 “(36)(A) Except as provided in subsection (B),
8 the term ‘low-voltage dry-type transformer’ means a
9 transformer that—

10 “(i) has an input voltage of 600 volts or
11 less;

12 “(ii) is air-cooled;

13 “(iii) does not use oil as a coolant; and

14 “(iv) is rated for operation at a frequency
15 of 60 Hertz.

16 “(B) The term ‘low-voltage dry-type trans-
17 former’ does not include—

18 “(i) transformers with multiple voltage
19 taps, with the highest voltage tap equaling at
20 least 20 percent more than the lowest voltage
21 tap;

22 “(ii) transformers that are not used in
23 general purpose applications, including trans-
24 formers commonly known as drive transformers,
25 rectifier transformers, autotransformers,

1 Uninterruptible Power System transformers,
2 impedance transformers, harmonic trans-
3 formers, regulating transformers, sealed and
4 nonventilating transformers, machine tool
5 transformers, welding transformers, grounding
6 transformers, or testing transformers; or

7 “(iii) any transformer excluded by the Sec-
8 retary by rule because such transformer is de-
9 signed for special applications and the applica-
10 tion of standards to such transformer would not
11 result in significant energy savings.

12 “(37) The term ‘standby mode’ means the low-
13 est amount of electric power used by a household ap-
14 pliance when not performing its active functions, as
15 defined on an individual product basis by the Sec-
16 retary.

17 “(38) The term ‘torchiere’ means a portable
18 electric lamp with a reflector bowl that directs light
19 upward so as to give indirect illumination.

20 “(39) The term ‘transformer’ means a device
21 consisting of 2 or more coils of insulated wire that
22 transfers alternating current by electromagnetic in-
23 duction from one coil to another to change the origi-
24 nal voltage or current value.

1 “(40) The term ‘unit heater’ means a self-con-
2 tained fan-type heater designed to be installed with-
3 in the heated space, except that such term does not
4 include a warm air furnace.”

5 **SEC. 924. ADDITIONAL TEST PROCEDURES.**

6 (a) **EXIT SIGNS.**—Section 323(b) of the Energy Pol-
7 icy and Conservation Act (42 U.S.C. 6293) is amended
8 by adding at the end the following:

9 “(9) Test procedures for illuminated exit signs
10 shall be the test method used under the Energy Star
11 program of the Environmental Protection Agency for
12 illuminated exit signs, as in effect on the date of en-
13 actment of this paragraph.

14 “(10) Test procedures for low voltage dry-type
15 distribution transformers shall be based on the
16 ‘Standard Test Method for Measuring the Energy
17 Consumption of Distribution Transformers’ pre-
18 scribed by the National Electrical Manufacturers As-
19 sociation (NEMA TP 2–1998). The Secretary may
20 review and revise this test procedure based on future
21 revisions to such standard test method.”

22 (b) **ADDITIONAL CONSUMER AND COMMERCIAL**
23 **PRODUCTS.**—Section 323 of the Energy Policy and Con-
24 servation Act (42 U.S.C. 6293) is further amended by
25 adding at the end the following:

1 “(f) **ADDITIONAL CONSUMER AND COMMERCIAL**
2 **PRODUCTS.**—The Secretary shall within 24 months after
3 the date of enactment of this subsection prescribe testing
4 requirements for suspended ceiling fans, refrigerated bot-
5 tled or canned beverage vending machines, commercial
6 unit heaters, and commercial refrigerators, freezers and
7 refrigerator-freezers. Such testing requirements shall be
8 based on existing test procedures used in industry to the
9 extent practical and reasonable. In the case of suspended
10 ceiling fans, such test procedures shall include efficiency
11 at both maximum output and at an output no more than
12 50 percent of the maximum output.”.

13 **SEC. 925. ENERGY LABELING.**

14 (a) **RULEMAKING ON EFFECTIVENESS OF CONSUMER**
15 **PRODUCT LABELING.**—Paragraph (2) of section 324(a) of
16 the Energy Policy and Conservation Act (42 U.S.C.
17 6294(a)(2)) is amended by adding at the end the fol-
18 lowing:

19 “(F) Not later than three months after the
20 date of enactment of this subparagraph, the
21 Commission shall initiate a rulemaking to con-
22 sider the effectiveness of the current consumer
23 products labeling program in assisting con-
24 sumers in making purchasing decisions and im-
25 proving energy efficiency and to consider

1 changes to the labeling rules that would im-
2 prove the effectiveness of consumer product la-
3 bels. Such rulemaking shall be completed within
4 15 months of the date of enactment of this sub-
5 paragraph.”.

6 (b) RULEMAKING ON LABELING FOR ADDITIONAL
7 PRODUCTS.—Section 324(a) of the Energy Policy and
8 Conservation Act (42 U.S.C. 6294(a)) is further amended
9 by adding at the end the following:

10 “(5) The Secretary shall within 6 months after
11 the date on which energy conservation standards are
12 prescribed by the Secretary for covered products re-
13 ferred to in subsections (u) and (v) of section 325,
14 and within 18 months of enactment of this para-
15 graph for products referred to in subsections (w)
16 through (y) of section 325, prescribe, by rule, label-
17 ing requirements for such products. Labeling re-
18 quirements adopted under this paragraph shall take
19 effect on the same date as the standards set pursu-
20 ant to sections 325(v) through (y).

21 **SEC. 926. ENERGY STAR PROGRAM.**

22 The Energy Policy and Conservation Act (42 U.S.C.
23 6201 and following) is amended by inserting after section
24 324 the following:

1 “ENERGY STAR PROGRAM.

2 “SEC. 324A. (a) IN GENERAL.—There is established
3 at the Department of Energy and the Environmental Pro-
4 tection Agency a program to identify and promote energy-
5 efficient products and buildings in order to reduce energy
6 consumption, improve energy security, and reduce pollu-
7 tion through labeling of products and buildings that meet
8 the highest energy efficiency standards. Responsibilities
9 under the program shall be divided between the Depart-
10 ment of Energy and the Environmental Protection Agency
11 consistent with the terms of agreements between the two
12 agencies. The Administrator and the Secretary shall—

13 “(1) promote Energy Star compliant tech-
14 nologies as the preferred technologies in the
15 marketplace for achieving energy efficiency and to re-
16 duce pollution;

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

19 “(3) preserve the integrity of the Energy Star
20 label; and

21 “(4) solicit the comments of interested parties
22 in establishing a new Energy Star product category
23 or in revising a product category, and upon adoption
24 of a new or revised product category provide an ex-

1 planation of the decision that responds to significant
2 public comments.”.

3 **SEC. 927. ENERGY CONSERVATION STANDARDS FOR CEN-**
4 **TRAL AIR CONDITIONERS AND HEAT PUMPS.**

5 Section 325(d) of the Energy Policy and Conserva-
6 tion Act (42 U.S.C. 6295(d)) is amended to read as fol-
7 lows:

8 “(1) The seasonal energy efficiency ratio of cen-
9 tral air conditioners and central air conditioning
10 heat pumps manufactured on or after January 23,
11 2006 shall be no less than 13.0.

12 “(2) The heating seasonal performance factor
13 of central air conditioning heat pumps manufactured
14 on or after January 23, 2006 shall be no less than
15 7.7.

16 “(3) This subsection shall not apply to a central
17 air conditioner or heat pump that—

18 “(A) has a rated cooling capacity equal to
19 or less than 30,000 Btu per hour;

20 “(B) has an outdoor or indoor unit having
21 at least two overall exterior dimensions or an
22 overall displacement that—

23 “(i) is substantially smaller than those
24 of other units that are currently installed

1 in site-built single family homes, and of a
2 similar cooling or heating capacity, and

3 “(ii) if increased would result in a sig-
4 nificant increase in the cost of installation
5 or would result in a significant loss in the
6 utility of the product to the consumer; and

7 “(3) is of a product type that was available for
8 purchase in the United States as of December 1,
9 2000.”.

10 **SEC. 928. ENERGY CONSERVATION STANDARDS FOR ADDI-**
11 **TIONAL CONSUMER AND COMMERCIAL PROD-**
12 **UCTS.**

13 Section 325 of the Energy Policy and Conservation
14 Act (42 U.S.C. 6295) is amended by adding at the end
15 the following:

16 “(u) **STANDBY MODE ELECTRIC ENERGY CONSUMP-**
17 **TION.—**

18 “(1) **INITIAL RULEMAKING.—**

19 “(A) The Secretary shall, within 18
20 months after the date of enactment of this sub-
21 section, prescribe by notice and comment, defi-
22 nitions of standby mode and test procedures for
23 the standby mode power use of battery chargers
24 and external power supplies. In establishing
25 these test procedures, the Secretary shall con-

1 sider, among other factors, existing test proce-
2 dures used for measuring energy consumption
3 in standby mode and assess the current and
4 projected future market for battery chargers
5 and external power supplies. This assessment
6 shall include estimates of the significance of po-
7 tential energy savings from technical improve-
8 ments to these products and suggested product
9 classes for standards. Prior to the end of this
10 time period, the Secretary shall hold a scoping
11 workshop to discuss and receive comments on
12 plans for developing energy conservation stand-
13 ards for standby mode energy use for these
14 products.

15 “(B) The Secretary shall, within 3 years
16 after the date of enactment of this subsection,
17 issue a final rule that determines whether en-
18 ergy conservation standards shall be promul-
19 gated for battery chargers and external power
20 supplies or classes thereof. For each product
21 class, any such standards shall be set at the
22 lowest level of standby energy use that—

23 (i) meets the criteria of subsections
24 (o), (p), (q), (r), (s) and (t); and

1 (ii) will result in significant overall
2 annual energy savings, considering both
3 standby mode and other operating modes.

4 “(2) DESIGNATION OF ADDITIONAL COVERED
5 PRODUCTS.—

6 “(A) Not later than 180 days after the
7 date of enactment of this subsection, the Sec-
8 retary shall publish for public comment and
9 public hearing a notice to determine whether
10 any noncovered products should be designated
11 as covered products for the purpose of insti-
12 tuting a rulemaking under this section to deter-
13 mine whether an energy conservation standard
14 restricting standby mode energy consumption,
15 should be promulgated; providing that any re-
16 striction on standby mode energy consumption
17 shall be limited to major sources of such con-
18 sumption.

19 “(B) In making the determinations pursu-
20 ant to subparagraph (A) of whether to des-
21 ignate new covered products and institute
22 rulemakings, the Secretary shall, among other
23 relevant factors and in addition to the criteria
24 in section 322(b), consider—

1 “(i) standby mode power consumption
2 compared to overall product energy con-
3 sumption; and

4 “(ii) the priority and energy savings
5 potential of standards which may be pro-
6 mulgated under this subsection compared
7 to other required rulemakings under this
8 section and the available resources of the
9 Department to conduct such rulemakings.

10 “(C) Not later than one year after the date
11 of enactment of this subsection, the Secretary
12 shall issue a determination of any new covered
13 products for which he intends to institute
14 rulemakings on standby mode pursuant to this
15 section and he shall state the dates by which he
16 intends to initiate those rulemakings.

17 “(3) REVIEW OF STANDBY ENERGY USE IN
18 COVERED PRODUCTS.—In determining pursuant to
19 section 323 whether test procedures and energy con-
20 servation standards pursuant to section 325 should
21 be revised, the Secretary shall consider for covered
22 products which are major sources of standby mode
23 energy consumption whether to incorporate standby
24 mode into such test procedures and energy conserva-
25 tion standards, taking into account, among other

1 relevant factors, the criteria for non-covered prod-
2 ucts in subparagraph (B) of this subsection.

3 “(4) RULEMAKING FOR STANDBY MODE.—

4 “(A) Any rulemaking instituted under this
5 subsection or for covered products under this
6 section which restricts standby mode power con-
7 sumption shall be subject to the criteria and
8 procedures for issuing energy conservation
9 standards set forth in section 325 and the cri-
10 teria set forth in paragraph 2(B) of this sub-
11 section.

12 “(B) No standard can be proposed for new
13 covered products or covered products in a
14 standby mode unless the Secretary has promul-
15 gated applicable test procedures for each prod-
16 uct pursuant to section 323.

17 “(C) The provisions of section 327 shall
18 apply to new covered products which are subject
19 to the rulemakings for standby mode after a
20 final rule has been issued.

21 (5) EFFECTIVE DATE.—Any standard promul-
22 gated under this subsection shall be applicable to
23 products manufactured or imported three years after
24 the date of promulgation.

1 (6) VOLUNTARY PROGRAMS TO REDUCE STAND-
2 BY MODE ENERGY USE.—The Secretary and the Ad-
3 ministrators shall collaborate and develop programs,
4 including programs pursuant to section 324A and
5 other voluntary industry agreements or codes of con-
6 duct, which are designed to reduce standby mode en-
7 ergy use.

8 “(v) SUSPENDED CEILING FANS, VENDING MA-
9 CHINES, UNIT HEATERS, AND COMMERCIAL REFRIG-
10 ERATORS, FREEZERS AND REFRIGERATOR-FREEZERS.—
11 The Secretary shall within 24 months after the date on
12 which testing requirements are prescribed by the Sec-
13 retary pursuant to section 323(f), prescribe, by rule, en-
14 ergy conservation standards for suspended ceiling fans, re-
15 frigerated bottled or canned beverage vending machines,
16 unit heaters, and commercial refrigerators, freezers and
17 refrigerator-freezers. In establishing standards under this
18 subsection, the Secretary shall use the criteria and proce-
19 dures contained in subsections (l) and (m). Any standard
20 prescribed under this subsection shall apply to products
21 manufactured 3 years after the date of publication of a
22 final rule establishing such standard.

23 “(w) ILLUMINATED EXIT SIGNS.—Within 18 months
24 after the date of enactment of this subsection, the Sec-
25 retary shall prescribe energy conservation standards for

1 illuminated exit signs in accordance with subsections (l)
2 and (m) and the Energy Star Program requirements for
3 exit signs prescribed by the Environmental Protection
4 Agency as in effect on the date of enactment of this sub-
5 section.

6 “(x) TORCHIERES.—Torchieres manufactured on or
7 after January 1, 2005—

8 “(1) shall consume not more than 190 watts of
9 power; and

10 “(2) shall not be capable of operating with
11 lamps that total more than 190 watts.

12 “(y) LOW VOLTAGE DRY-TYPE TRANSFORMERS.—
13 The efficiency of low voltage dry-type transformers manu-
14 factured on or after January 1, 2005 shall be the Class
15 I Efficiency Levels for low voltage dry-type transformers
16 specified in Table 4–2 of the ‘Guide for Determining En-
17 ergy Efficiency for Distribution Transformers’ published
18 by the National Electrical Manufacturers Association
19 (NEMA TP–1–1996), as in effect on the date of enact-
20 ment of this subsection.

1 **SEC. 929. CONSUMER EDUCATION ON ENERGY EFFICIENCY**
 2 **BENEFITS OF AIR CONDITIONING, HEATING,**
 3 **AND VENTILATION MAINTENANCE.**

4 Section 337 of the Energy Policy and Conservation
 5 Act (42 U.S.C. 6307) is amended by adding at the end
 6 the following:

7 “(c) HVAC MAINTENANCE.—(1) For the purpose of
 8 ensuring that installed air conditioning and heating sys-
 9 tems operate at their maximum rated efficiency levels, the
 10 Secretary shall, within 180 days of the date of enactment
 11 of this subsection, carry out a program to educate home-
 12 owners and small business owners concerning the energy
 13 savings resulting from properly conducted maintenance of
 14 air conditioning, heating, and ventilating systems.

15 “(2) The Secretary may carry out the program in co-
 16 operation with industry trade associations, industry mem-
 17 bers, and energy efficiency organizations.”.

18 **Subtitle D—Housing Efficiency**

19 **SEC. 931. CAPACITY BUILDING FOR ENERGY EFFICIENT, AF-**
 20 **FORDABLE HOUSING.**

21 Section 4(b) of the HUD Demonstration Act of 1993
 22 (42 U.S.C. 9816 note) is amended—

23 (1) in paragraph (1), by inserting before the
 24 semicolon at the end the following: “, including ca-
 25 pabilities regarding the provision of energy efficient,

1 affordable housing and residential energy conserva-
2 tion measures”; and

3 (2) in paragraph (2), by inserting before the
4 semicolon the following: “, including such activities
5 relating to the provision of energy efficient, afford-
6 able housing and residential energy conservation
7 measures that benefit low-income families”.

8 **SEC. 932. INCREASE OF CDBG PUBLIC SERVICES CAP FOR**
9 **ENERGY CONSERVATION AND EFFICIENCY**
10 **ACTIVITIES.**

11 Section 105(a)(8) of the Housing and Community
12 Development Act of 1974 (42 U.S.C. 5305(a)(8)) is
13 amended—

14 (1) by inserting “or efficiency” after “energy
15 conservation”;

16 (2) by striking “, and except that” and insert-
17 ing “; except that”; and

18 (3) by inserting before the period at the end the
19 following: “; and except that each percentage limita-
20 tion under this paragraph on the amount of assist-
21 ance provided under this title that may be used for
22 the provision of public services is hereby increased
23 by 10 percent, but such percentage increase may be
24 used only for the provision of public services con-
25 cerning energy conservation or efficiency”.

1 **SEC. 933. FHA MORTGAGE INSURANCE INCENTIVES FOR**
2 **ENERGY EFFICIENT HOUSING.**

3 (a) SINGLE FAMILY HOUSING MORTGAGE INSUR-
4 ANCE.—Section 203(b)(2) of the National Housing Act
5 (12 U.S.C. 1709(b)(2)) is amended, in the first undesig-
6 nated paragraph beginning after subparagraph (B)(iii)
7 (relating to solar energy systems)—

8 (1) by inserting “or paragraph (10)”; and

9 (2) by striking “20 percent” and inserting “30
10 percent”.

11 (b) MULTIFAMILY HOUSING MORTGAGE INSUR-
12 ANCE.—Section 207(c) of the National Housing Act (12
13 U.S.C. 1713(c)) is amended, in the second undesignated
14 paragraph beginning after paragraph (3) (relating to solar
15 energy systems and residential energy conservation meas-
16 ures), by striking “20 percent” and inserting “30 per-
17 cent”.

18 (c) COOPERATIVE HOUSING MORTGAGE INSUR-
19 ANCE.—Section 213(p) of the National Housing Act (12
20 U.S.C. 1715e(p)) is amended by striking “20 per centum”
21 and inserting “30 percent”.

22 (d) REHABILITATION AND NEIGHBORHOOD CON-
23 SERVATION HOUSING MORTGAGE INSURANCE.—Section
24 220(d)(3)(B)(iii) of the National Housing Act (12 U.S.C.
25 1715k(d)(3)(B)(iii)) is amended by striking “20 per cen-
26 tum” and inserting “30 percent”.

1 (e) LOW-INCOME MULTIFAMILY HOUSING MORT-
2 GAGE INSURANCE.—Section 221(k) of the National Hous-
3 ing Act (12 U.S.C. 1715l(k)) is amended by striking “20
4 per centum” and inserting “30 percent”.

5 (f) ELDERLY HOUSING MORTGAGE INSURANCE.—
6 The proviso at the end of section 213(c)(2) of the National
7 Housing Act (12 U.S.C. 1715v(e)(2)) is amended by strik-
8 ing “20 per centum” and inserting “30 percent”.

9 (g) CONDOMINIUM HOUSING MORTGAGE INSUR-
10 ANCE.—Section 234(j) of the National Housing Act (12
11 U.S.C. 1715y(j)) is amended by striking “20 per centum”
12 and inserting “30 percent”.

13 **SEC. 934. PUBLIC HOUSING CAPITAL FUND.**

14 Section 9(d)(1) of the United States Housing Act of
15 1937 (42 U.S.C. 1437g(d)(1)) is amended—

16 (1) in subparagraph (I), by striking “and” at
17 the end;

18 (2) in subparagraph (K), by striking the period
19 at the end and inserting “; and”; and

20 (3) by adding at the end the following new sub-
21 paragraph:

22 “(L) improvement of energy and water-use
23 efficiency by installing fixtures and fittings that
24 conform to the American Society of Mechanical
25 Engineers/American National Standards Insti-

1 tute standards A112.19.2–1998 and
2 A112.18.1–2000, or any revision thereto, appli-
3 cable at the time of installation, and by increas-
4 ing energy efficiency and water conservation by
5 such other means as the Secretary determines
6 are appropriate.”.

7 **SEC. 935. GRANTS FOR ENERGY-CONSERVING IMPROVE-**
8 **MENTS FOR ASSISTED HOUSING.**

9 Section 251(b)(1) of the National Energy Conserva-
10 tion Policy Act (42 U.S.C. 8231(1)) is amended—

11 (1) by striking “financed with loans” and in-
12 serting “assisted”;

13 (2) by inserting after “1959,” the following:
14 “which are eligible multifamily housing projects (as
15 such term is defined in section 512 of the Multi-
16 family Assisted Housing Reform and Affordability
17 Act of 1997 (42 U.S.C. 1437f note) and are subject
18 to a mortgage restructuring and rental assistance
19 sufficiency plans under such Act,”; and

20 (3) by inserting after the period at the end of
21 the first sentence the following new sentence: “Such
22 improvements may also include the installation of
23 energy and water conserving fixtures and fittings
24 that conform to the American Society of Mechanical
25 Engineers/American National Standards Institute

1 standards A112.19.2–1998 and A112.18.1–2000, or
2 any revision thereto, applicable at the time of instal-
3 lation.”.

4 **SEC. 936. NORTH AMERICAN DEVELOPMENT BANK.**

5 Part 2 of subtitle D of title V of the North American
6 Free Trade Agreement Implementation Act (22 U.S.C.
7 290m–290m–3) is amended by adding at the end the fol-
8 lowing:

9 **“SEC. 545. SUPPORT FOR CERTAIN ENERGY POLICIES.**

10 “Consistent with the focus of the Bank’s Charter on
11 environmental infrastructure projects, the Board members
12 representing the United States should use their voice and
13 vote to encourage the Bank to finance projects related to
14 clean and efficient energy, including energy conservation,
15 that prevent, control, or reduce environmental pollutants
16 or contaminants.”.

17 **DIVISION D—INTEGRATION OF**
18 **ENERGY POLICY AND CLI-**
19 **MATE CHANGE POLICY**

20 **TITLE X—CLIMATE CHANGE**
21 **POLICY FORMULATION**

22 **Subtitle A—Global Warming**

23 **SEC. 1001. SENSE OF CONGRESS ON GLOBAL WARMING.**

24 (a) FINDINGS.—The Congress makes the following
25 findings:

1 (1) Evidence continues to build that increases
2 in atmospheric concentrations of man-made green-
3 house gases are contributing to global climate
4 change.

5 (2) The Intergovernmental Panel on Climate
6 Change (IPCC) has concluded that “there is new
7 and stronger evidence that most of the warming ob-
8 served over the last 50 years is attributable to
9 human activities” and that the Earth’s average tem-
10 perature can be expected to rise between 2.5 and
11 10.4 degrees Fahrenheit in this century.

12 (3) The National Academy of Sciences con-
13 firmed the findings of the IPCC, stating that “the
14 IPCC’s conclusion that most of the observed warm-
15 ing of the last 50 years is likely to have been due
16 to the increase of greenhouse gas concentrations ac-
17 curately reflects the current thinking of the scientific
18 community on this issue” and that “there is general
19 agreement that the observed warming is real and
20 particularly strong within the past twenty years”.

21 (4) The IPCC has stated that in the last 40
22 years, the global average sea level has risen, ocean
23 heat content has increased, and snow cover and ice
24 extent have decreased, which threatens to inundate

1 low-lying island nations and coastal regions through-
2 out the world.

3 (5) The Environmental Protection Agency has
4 found that global warming may harm the United
5 States by altering crop yields, accelerating sea level
6 rise, and increasing the spread of tropical infectious
7 diseases.

8 (6) In 1992, the United States ratified the
9 United Nations Framework Convention of Climate
10 Change, done at New York on May 9, 1992, the ul-
11 timate objective of which is the “stabilization of
12 greenhouse gas concentrations in the atmosphere at
13 a level that would prevent dangerous anthropogenic
14 interference with the climate system”, and which
15 stated in part “the Parties to the Convention are to
16 implement policies with the aim of returning . . . to
17 their 1990 levels anthropogenic emissions of carbon
18 dioxide and other greenhouse gases.”

19 (7) There is a shared international responsi-
20 bility to address this problem, as industrial nations
21 are the largest historic and current emitters of
22 greenhouse gases and developing nations’ emissions
23 will significantly increase in the future.

24 (8) The United Nations Framework Convention
25 on Climate Change further states that “developed

1 country Parties should take the lead in combating
2 climate change and the adverse effects thereof”, as
3 these nations are the largest historic and current
4 emitters of greenhouse gases.

5 (9) Senate Resolution 98 of July 1997, which
6 expressed that developing nations, especially the
7 largest emitters, must also be included in any fu-
8 ture, binding climate change treaty and such a trea-
9 ty must not result in serious harm to the United
10 States economy, should not cause the United States
11 to abandon its shared responsibility to help find a
12 solution to the global climate change dilemma.

13 (10) American businesses need to know how
14 governments worldwide will respond to the threat of
15 global warming.

16 (11) The United States has benefitted and will
17 continue to benefit from investments in the research,
18 development and deployment of a range of clean en-
19 ergy and efficiency technologies that can mitigate
20 global warming and that can make the United
21 States economy more productive, bolster energy se-
22 curity, create jobs, and protect the environment.

23 (b) SENSE OF CONGRESS.—It is the sense of the
24 United States Congress that the United States should
25 demonstrate international leadership and responsibility in

1 mitigating the health, environmental, and economic
2 threats posed by global warming by:

3 (1) taking responsible action to ensure signifi-
4 cant and meaningful reductions in emissions of
5 greenhouse gases from all sectors;

6 (2) creating flexible international and domestic
7 mechanisms, including joint implementation, tech-
8 nology deployment, emissions trading and carbon se-
9 questration projects that will reduce, avoid, and se-
10 quester greenhouse gas emissions; and

11 (3) participating in international negotiations,
12 including putting forth a proposal at the next meet-
13 ing of the Conference of the Parties, with the objec-
14 tive of securing United States' participation in a re-
15 vised Kyoto Protocol or other future binding climate
16 change agreements in a manner that is consistent
17 with the environmental objectives of the Framework
18 Convention on Climate Change, that protects the
19 economic interests of the United States, and recog-
20 nizes the shared international responsibility for ad-
21 dressing climate change, including developing coun-
22 try participation.

1 **Subtitle B—Climate Change**
2 **Strategy**

3 **SEC. 1011. SHORT TITLE.**

4 This title may be cited as the “Climate Change Strat-
5 egy and Technology Innovation Act of 2002”.

6 **SEC. 1012. FINDINGS.**

7 Congress finds that—

8 (1) evidence continues to build that increases in
9 atmospheric concentrations of greenhouse gases are
10 contributing to global climate change;

11 (2) in 1992, the Senate ratified the United Na-
12 tions Framework Convention on Climate Change,
13 done at New York on May 9, 1992, the ultimate ob-
14 jective of which is the “stabilization of greenhouse
15 gas concentrations in the atmosphere at a level that
16 would prevent dangerous anthropogenic interference
17 with the climate system”;

18 (3) although science currently cannot determine
19 precisely what atmospheric concentrations are “dan-
20 gerous”, the current trajectory of greenhouse gas
21 emissions will lead to a continued rise in greenhouse
22 gas concentrations in the atmosphere, not stabiliza-
23 tion;

24 (4) the remaining scientific uncertainties call
25 for temperance of human actions, but not inaction;

1 (5) greenhouse gases are associated with a wide
2 range of human activities, including energy produc-
3 tion, transportation, agriculture, forestry, manufac-
4 turing, buildings, and other activities;

5 (6) the economic consequences of poorly de-
6 signed climate change response strategies, or of in-
7 action, may cost the global economy trillions of dol-
8 lars;

9 (7) a large share of this economic burden would
10 be borne by the United States;

11 (8) stabilization of greenhouse gas concentra-
12 tions in the atmosphere will require transformational
13 change in the global energy system and other emit-
14 ting sectors at an almost unimaginable level—a
15 veritable industrial revolution is required;

16 (9) such a revolution can occur only if the revo-
17 lution is preceded by research and development that
18 leads to bold technological breakthroughs;

19 (10) over the decade preceding the date of en-
20 actment of this Act—

21 (A) energy research and development
22 budgets in the public and private sectors have
23 declined precipitously and have not been fo-
24 cused on the climate change response challenge;
25 and

1 (B) the investments that have been made
2 have not been guided by a comprehensive strat-
3 egy;

4 (11) the negative trends in research and devel-
5 opment funding described in paragraph (10) must
6 be reversed with a focus on not only traditional en-
7 ergy research and development, but also bolder,
8 breakthrough research;

9 (12) much more progress could be made on the
10 issue of climate change if the United States were to
11 adopt a new approach for addressing climate change
12 that included, as an ultimate long-term goal—

13 (A) stabilization of greenhouse gas con-
14 centrations in the atmosphere at a level that
15 would prevent dangerous anthropogenic inter-
16 ference with the climate system; and

17 (B) a response strategy with 4 key ele-
18 ments consisting of—

19 (i) definition of interim emission miti-
20 gation targets coupled with specific mitiga-
21 tion approaches that cumulatively yield
22 stabilized atmospheric greenhouse gas con-
23 centrations;

24 (ii) a national commitment—

1 (I) to double energy research and
2 development by the United States
3 public and private sectors; and

4 (II) in carrying out such research
5 and development, to provide a high
6 degree of emphasis on bold, break-
7 through technologies that will make
8 possible a profound transformation of
9 the energy, transportation, industrial,
10 agricultural, and building sectors of
11 the United States;

12 (iii) climate adaptation research that
13 focuses on response actions necessary to
14 adapt to climate change that may have oc-
15 curred or may occur under any future cli-
16 mate change scenario; and

17 (iv) continued research, building on
18 the substantial scientific understanding of
19 climate change that exists as of the date of
20 enactment of this Act, that focuses on re-
21 solving the remaining scientific, technical,
22 and economic uncertainties, to aid in the
23 development of sound response strategies;
24 and

1 (13) inherent in each of the 4 key elements of
2 the response strategy is consideration of the inter-
3 national nature of the challenge, which will
4 require—

5 (A) establishment of joint climate response
6 strategies and joint research programs;

7 (B) assistance to developing countries and
8 countries in transition for building technical
9 and institutional capacities and incentives for
10 addressing the challenge; and

11 (C) promotion of public awareness of the
12 issue.

13 **SEC. 1013. PURPOSE.**

14 The purpose of this title is to implement the new ap-
15 proach described in section 1012(12) by developing a na-
16 tional focal point for climate change response through—

17 (1) the establishment of the National Office of
18 Climate Change Response within the Executive Of-
19 fice of the President to develop the United States
20 Climate Change Response Strategy that—

21 (A) incorporates the 4 key elements of that
22 new approach;

23 (B) is supportive of and integrated in the
24 overall energy, transportation, industrial, agri-

1 cultural, forestry, and environmental policies of
2 the United States;

3 (C) takes into account—

4 (i) the diversity of energy sources and
5 technologies;

6 (ii) supply-side and demand-side solu-
7 tions; and

8 (iii) national infrastructure, energy
9 distribution, and transportation systems;

10 (D) provides for the inclusion and equi-
11 table participation of Federal, State, tribal, and
12 local government agencies, nongovernmental or-
13 ganizations, academia, scientific bodies, indus-
14 try, the public, and other interested parties;

15 (E) incorporates new models of Federal-
16 State cooperation;

17 (F) defines a comprehensive energy tech-
18 nology research and development program
19 that—

20 (i) recognizes the important contribu-
21 tions that research and development pro-
22 grams in existence on the date of enact-
23 ment of this title make toward addressing
24 the climate change response challenge; and

1 (ii) includes an additional research
2 and development agenda that focuses on
3 the bold, breakthrough technologies that
4 are critical to the long-term stabilization of
5 greenhouse gas concentrations in the at-
6 mosphere;

7 (G) includes consideration of other efforts
8 to address critical environmental and health
9 concerns, including clean air, clean water, and
10 responsible land use policies; and

11 (H) incorporates initiatives to promote the
12 deployment of clean energy technologies devel-
13 oped in the United States and abroad;

14 (2) the establishment of the Interagency Task
15 Force, chaired by the Director of the White House
16 Office, to serve as the primary mechanism through
17 which the heads of Federal agencies work together
18 to develop and implement the Strategy;

19 (3) the establishment of the Office of Climate
20 Change Technology within the Department of
21 Energy—

22 (A) to manage, as its primary responsi-
23 bility, an innovative research and development
24 program that focuses on the bold, breakthrough
25 technologies that are critical to the long-term

1 stabilization of greenhouse gas concentrations
2 in the atmosphere; and

3 (B) to provide analytical support and data
4 to the White House Office, other agencies, and
5 the public;

6 (4) the establishment of an independent review
7 board—

8 (A) to review the Strategy and annually
9 assess United States and international progress
10 toward the goal of stabilization of greenhouse
11 gas concentrations in the atmosphere at a level
12 that would prevent dangerous anthropogenic in-
13 terference with the climate system; and

14 (B) to assess—

15 (i) the performance of each Federal
16 agency that has responsibilities under the
17 Strategy; and

18 (ii) the adequacy of the budget of
19 each such Federal agency to fulfill the re-
20 sponsibilities of the Federal agency under
21 the Strategy; and

22 (5) the establishment of offices in, or the car-
23 rying out of activities by, the Department of Agri-
24 culture, the Department of Transportation, the De-
25 partment of Commerce, the Environmental Protec-

1 tion Agency, and other Federal agencies as nec-
2 essary to carry out this title.

3 **SEC. 1014. DEFINITIONS.**

4 In this title:

5 (1) CLIMATE-FRIENDLY TECHNOLOGY.—The
6 term “climate-friendly technology” means any en-
7 ergy supply or end-use technology that, over the life
8 of the technology and compared to similar tech-
9 nology in commercial use as of the date of enact-
10 ment of this Act—

11 (A) results in reduced emissions of green-
12 house gases;

13 (B) may substantially lower emissions of
14 other pollutants; and

15 (C) may generate substantially smaller or
16 less hazardous quantities of solid or liquid
17 waste.

18 (2) DEPARTMENT.—The term “Department”
19 means the Department of Energy.

20 (3) DEPARTMENT OFFICE.—The term “Depart-
21 ment Office” means the Office of Climate Change
22 Technology of the Department established by section
23 1017(a).

1 (4) FEDERAL AGENCY.—The term “Federal
2 agency” has the meaning given the term “agency”
3 in section 551 of title 5, United States Code.

4 (5) GREENHOUSE GAS.—The term “greenhouse
5 gas” means—

6 (A) an anthropogenic gaseous constituent
7 of the atmosphere (including carbon dioxide,
8 methane, nitrous oxide, chlorofluorocarbons,
9 hydrofluorocarbons, perfluorocarbons, sulfur
10 hexafluoride, and tropospheric ozone) that ab-
11 sorbs and re-emits infrared radiation and influ-
12 ences climate; and

13 (B) an anthropogenic aerosol (such as
14 black soot) that absorbs solar radiation and in-
15 fluences climate.

16 (6) INTERAGENCY TASK FORCE.—The term
17 “Interagency Task Force” means the United States
18 Climate Change Response Interagency Task Force
19 established under section 1016(d).

20 (7) KEY ELEMENT.—The term “key element”,
21 with respect to the Strategy, means—

22 (A) definition of interim emission mitiga-
23 tion targets coupled with specific mitigation ap-
24 proaches that cumulatively result in stabiliza-
25 tion of greenhouse gas concentrations;

1 (B) a national commitment—

2 (i) to double energy research and de-
3 velopment by the United States public and
4 private sectors; and

5 (ii) in carrying out such research and
6 development, to provide a high degree of
7 emphasis on bold, breakthrough tech-
8 nologies that will make possible a profound
9 transformation of the energy, transpor-
10 tation, industrial, agricultural, and build-
11 ing sectors of the United States;

12 (C) climate adaptation research that fo-
13 cuses on response actions necessary to adapt to
14 climate change that may have occurred or may
15 occur under any future climate change scenario;
16 and

17 (D) research that focuses on resolving the
18 remaining scientific, technical, and economic
19 uncertainties associated with climate change to
20 the extent that those uncertainties bear on
21 strategies to achieve the long-term goal of sta-
22 bilization of greenhouse gas concentrations.

23 (8) QUALIFIED INDIVIDUAL.—

24 (A) IN GENERAL.—The term “qualified in-
25 dividual” means an individual who has dem-

1 onstrated expertise and leadership skills to
2 draw on other experts in diverse fields of knowl-
3 edge that are relevant to addressing the climate
4 change response challenge.

5 (B) FIELDS OF KNOWLEDGE.—The fields
6 of knowledge referred to in subparagraph (A)
7 are—

- 8 (i) the science of primary and sec-
9 ondary climate change impacts;
- 10 (ii) energy and environmental econom-
11 ics;
- 12 (iii) technology transfer and diffusion;
- 13 (iv) the social dimensions of climate
14 change;
- 15 (v) climate change adaptation strate-
16 gies;
- 17 (vi) fossil, nuclear, and renewable en-
18 ergy technology;
- 19 (vii) energy efficiency and energy con-
20 servation;
- 21 (viii) energy systems integration;
- 22 (ix) engineered and terrestrial carbon
23 sequestration;
- 24 (x) transportation, industrial, and
25 building sector concerns;

- 1 (xi) regulatory and market-based
2 mechanisms for addressing climate change;
3 (xii) risk and decision analysis;
4 (xiii) strategic planning; and
5 (xiv) the international implications of
6 climate change response strategies.

7 (9) REVIEW BOARD.—The term “Review
8 Board” means the United States Climate Change
9 Response Strategy Review Board established by sec-
10 tion 1019.

11 (10) SECRETARY.—The term “Secretary”
12 means the Secretary of Energy.

13 (11) STABILIZATION OF GREENHOUSE GAS CON-
14 CENTRATIONS.—The term “stabilization of green-
15 house gas concentrations” means the stabilization of
16 greenhouse gas concentrations in the atmosphere at
17 a level that would prevent dangerous anthropogenic
18 interference with the climate system, as con-
19 templated by the United Nations Framework Con-
20 vention on Climate Change, done at New York on
21 May 9, 1992.

22 (12) STRATEGY.—The term “Strategy” means
23 the United States Climate Change Response Strat-
24 egy developed under section 1015.

1 (6) be consistent with the goals of energy,
2 transportation, industrial, agricultural, forestry, en-
3 vironmental, and other relevant policies of the
4 United States;

5 (7) have a scope that considers the totality of
6 United States public, private, and public-private sec-
7 tor actions that bear on the long-term goal;

8 (8) be based on an evaluation of a wide range
9 of approaches for achieving the long-term goal, in-
10 cluding evaluation of—

11 (A) a variety of cost-effective Federal and
12 State policies, programs, standards, and incen-
13 tives;

14 (B) policies that integrate and promote in-
15 novative, market-based solutions in the United
16 States and in foreign countries; and

17 (C) participation in other international in-
18 stitutions, or in the support of international ac-
19 tivities, that are established or conducted to fa-
20 cilitate stabilization of greenhouse gas con-
21 centrations;

22 (9) in the final recommendations of the Strat-
23 egy, emphasize response strategies that achieve the
24 long-term goal and provide specific recommendations
25 concerning—

1 (A) measures determined to be appropriate
2 for short-term implementation, giving pref-
3 erence to cost-effective and technologically fea-
4 sible measures that will—

5 (i) produce measurable net reductions
6 in United States emissions that lead to-
7 ward achievement of the long-term goal;
8 and

9 (ii) minimize any adverse short-term
10 and long-term economic and social impacts
11 on the United States;

12 (B) the development of technologies that
13 have the potential for long-term
14 implementation—

15 (i) giving preference to technologies
16 that have the potential to reduce signifi-
17 cantly the overall cost of stabilization of
18 greenhouse gas concentrations; and

19 (ii) considering a full range of energy
20 sources, energy conversion and use tech-
21 nologies, and efficiency options;

22 (C) such changes in institutional and tech-
23 nology systems as are necessary to adapt to cli-
24 mate change in the short-term and the long-
25 term;

1 (D) such review, modification, and en-
2 hancement of the scientific, technical, and eco-
3 nomic research efforts of the United States,
4 and improvements to the data resulting from
5 research, as are appropriate to improve the ac-
6 curacy of predictions concerning climate change
7 and the economic and social costs and opportu-
8 nities relating to climate change; and

9 (E) changes that should be made to
10 project and grant evaluation criteria under
11 other Federal research and development pro-
12 grams so that those criteria do not inhibit de-
13 velopment of climate-friendly technologies;

14 (10) be developed in a manner that provides for
15 meaningful participation by, and consultation
16 among, Federal, State, tribal, and local government
17 agencies, nongovernmental organizations, academia,
18 scientific bodies, industry, the public, and other in-
19 terested parties in accordance with subsections
20 (b)(4)(C)(iv)(II) and (d)(3)(B)(iii) of section 1016;

21 (11) address how the United States should en-
22 gage State, tribal, and local governments in devel-
23 oping and carrying out a response to climate change;

24 (12) promote, to the maximum extent prac-
25 ticable, public awareness, outreach, and information-

1 sharing to further the understanding of the full
2 range of climate change-related issues;

3 (13) provide a detailed explanation of how the
4 measures recommended by the Strategy will ensure
5 that they do not result in serious harm to the econ-
6 omy of the United States;

7 (14) provide a detailed explanation of how the
8 measures recommended by the Strategy will achieve
9 the long-term goal of stabilization of greenhouse gas
10 concentrations;

11 (15) include any recommendations for legisla-
12 tive and administrative actions necessary to imple-
13 ment the Strategy;

14 (16) serve as a framework for climate change
15 response actions by all Federal agencies;

16 (17) recommend which Federal agencies are, or
17 should be, responsible for the various aspects of im-
18 plementation of the Strategy and any budgetary im-
19 plications;

20 (18) address how the United States should en-
21 gage foreign governments in developing an inter-
22 national response to climate change; and

23 (19) be subject to review by an independent re-
24 view board in accordance with section 1019.

1 (b) SUBMISSION TO CONGRESS.—Not later than 1
2 year after the date of enactment of this title, the President
3 shall submit to Congress the Strategy.

4 (c) UPDATING.—Not later than 2 years after the date
5 of submission of the Strategy to Congress under sub-
6 section (b), and at the end of each 2-year period there-
7 after, the President shall submit to Congress an updated
8 version of the Strategy.

9 (d) PROGRESS REPORTS.—Not later than 1 year
10 after the date of submission of the Strategy to Congress
11 under subsection (b), and at the end of each 1-year period
12 thereafter, the President shall submit to Congress a report
13 that—

14 (1) describes the progress on implementation of
15 the Strategy; and

16 (2) provides recommendations for improvement
17 of the Strategy and the implementation of the Strat-
18 egy.

19 (e) ALIGNMENT WITH ENERGY, TRANSPORTATION,
20 INDUSTRIAL, AGRICULTURAL, FORESTRY, AND OTHER
21 POLICIES.—The President, the Director of the White
22 House Office, the Secretary, and the other members of
23 the Interagency Task Force shall work together to align
24 the actions carried out under the Strategy and actions as-
25 sociated with the energy, transportation, industrial, agri-

1 cultural, forestry, and other relevant policies of the United
2 States so that the objectives of both the Strategy and the
3 policies are met without compromising the climate change-
4 related goals of the Strategy or the goals of the policies.

5 **SEC. 1016. NATIONAL OFFICE OF CLIMATE CHANGE RE-**
6 **SPONSE OF THE EXECUTIVE OFFICE OF THE**
7 **PRESIDENT.**

8 (a) ESTABLISHMENT.—

9 (1) IN GENERAL.—There is established, within
10 the Executive Office of the President, the National
11 Office of Climate Change Response.

12 (2) FOCUS.—The White House Office shall
13 have the focus of achieving the long-term goal of
14 stabilization of greenhouse gas concentrations while
15 minimizing adverse short-term and long-term eco-
16 nomic and social impacts.

17 (3) DUTIES.—Consistent with paragraph (2),
18 the White House Office shall—

19 (A) establish policies, objectives, and prior-
20 ities for the Strategy;

21 (B) in accordance with subsection (d), es-
22 tablish the Interagency Task Force to serve as
23 the primary mechanism through which the
24 heads of Federal agencies shall assist the Direc-

1 tor of the White House Office in developing and
2 implementing the Strategy;

3 (C) to the maximum extent practicable, en-
4 sure that the Strategy is based on objective,
5 quantitative analysis, drawing on the analytical
6 capabilities of Federal and State agencies, espe-
7 cially the Center;

8 (D) advise the President concerning nec-
9 essary changes in organization, management,
10 budgeting, and personnel allocation of Federal
11 agencies involved in climate change response ac-
12 tivities; and

13 (E) advise the President and notify a Fed-
14 eral agency if the policies and discretionary pro-
15 grams of the agency are not well aligned with,
16 or are not contributing effectively to, the long-
17 term goal of stabilization of greenhouse gas
18 concentrations.

19 (b) DIRECTOR OF THE WHITE HOUSE OFFICE.—

20 (1) IN GENERAL.—The White House Office
21 shall be headed by a Director, who shall report di-
22 rectly to the President.

23 (2) APPOINTMENT.—The Director of the White
24 House Office shall be a qualified individual ap-

1 pointed by the President, by and with the advice and
2 consent of the Senate.

3 (3) DUTIES OF THE DIRECTOR OF THE WHITE
4 HOUSE OFFICE.—

5 (A) STRATEGY.—In accordance with sec-
6 tion 1015, the Director of the White House Of-
7 fice shall coordinate the development and up-
8 dating of the Strategy.

9 (B) INTERAGENCY TASK FORCE.—The Di-
10 rector of the White House Office shall serve as
11 Chairperson of the Interagency Task Force.

12 (C) ADVISORY DUTIES.—

13 (i) CLIMATE, ENERGY, TRANSPOR-
14 TATION, INDUSTRIAL, AGRICULTURAL,
15 BUILDING, FORESTRY, AND OTHER PRO-
16 GRAMS.—The Director of the White House
17 Office, using an integrated perspective con-
18 sidering the totality of actions in the
19 United States, shall advise the President
20 and the heads of Federal agencies on—

21 (I) the extent to which United
22 States energy, transportation, indus-
23 trial, agricultural, forestry, building,
24 and other relevant programs are capa-
25 ble of producing progress on the long-

1 term goal of stabilization of green-
2 house gas concentrations; and

3 (II) the extent to which proposed
4 or newly created energy, transpor-
5 tation, industrial, agricultural, for-
6 estry, building, and other relevant
7 programs positively or negatively af-
8 fect the ability of the United States
9 to achieve the long-term goal of sta-
10 bilization of greenhouse gas con-
11 centrations.

12 (ii) TAX, TRADE, AND FOREIGN POLI-
13 CIES.—The Director of the White House
14 Office, using an integrated perspective con-
15 sidering the totality of actions in the
16 United States, shall advise the President
17 and the heads of Federal agencies on—

18 (I) the extent to which the
19 United States tax policy, trade policy,
20 and foreign policy are capable of pro-
21 ducing progress on the long-term goal
22 of stabilization of greenhouse gas con-
23 centrations; and

24 (II) the extent to which proposed
25 or newly created tax policy, trade pol-

1 icy, and foreign policy positively or
2 negatively affect the ability of the
3 United States to achieve the long-
4 term goal of stabilization of green-
5 house gas concentrations.

6 (iii) INTERNATIONAL TREATIES.—The
7 Secretary of State, acting in conjunction
8 with the Interagency Task Force and using
9 the analytical tools available to the White
10 House Office, shall provide to the Director
11 of the White House Office an opinion
12 that—

13 (I) specifies, to the maximum ex-
14 tent practicable, the economic and en-
15 vironmental costs and benefits of any
16 proposed international treaties or
17 components of treaties that have an
18 influence on greenhouse gas manage-
19 ment; and

20 (II) assesses the extent to which
21 the treaties advance the long-term
22 goal of stabilization of greenhouse gas
23 concentrations, while minimizing ad-
24 verse short-term and long-term eco-

1 nomic and social impacts and consid-
2 ering other impacts.

3 (iv) CONSULTATION.—

4 (I) WITH MEMBERS OF INTER-
5 AGENCY TASK FORCE.—To the extent
6 practicable and appropriate, the Di-
7 rector of the White House Office shall
8 consult with all members of the Inter-
9 agency Task Force and other inter-
10 ested parties before providing advice
11 to the President.

12 (II) WITH OTHER INTERESTED
13 PARTIES.—The Director of the White
14 House Office shall establish a process
15 for obtaining the meaningful partici-
16 pation of Federal, State, tribal, and
17 local government agencies, nongovern-
18 mental organizations, academia, sci-
19 entific bodies, industry, the public,
20 and other interested parties in the
21 formulation of advice to be provided
22 to the President.

23 (D) PUBLIC EDUCATION, AWARENESS,
24 OUTREACH, AND INFORMATION-SHARING.—The
25 Director of the White House Office, to the max-

1 imum extent practicable, shall promote public
2 awareness, outreach, and information-sharing
3 to further the understanding of the full range
4 of climate change-related issues.

5 (4) ANNUAL REPORTS.—The Director of the
6 White House Office, in consultation with the Inter-
7 agency Task Force and other interested parties,
8 shall prepare an annual report for submission by the
9 President to Congress that—

10 (A) assesses progress in implementation of
11 the Strategy;

12 (B) assesses progress, in the United States
13 and in foreign countries, toward the long-term
14 goal of stabilization of greenhouse gas con-
15 centrations;

16 (C) assesses progress toward meeting cli-
17 mate change-related international obligations;

18 (D) makes recommendations for actions by
19 the Federal Government designed to close any
20 gap between progress-to-date and the measures
21 that are necessary to achieve the long-term goal
22 of stabilization of greenhouse gas concentra-
23 tions; and

24 (E) addresses the totality of actions in the
25 United States that relate to the 4 key elements.

1 (5) ANALYSIS.—During development of the
2 Strategy, preparation of the annual reports sub-
3 mitted under paragraph (5), and provision of advice
4 to the President and the heads of Federal agencies,
5 the Director of the White House Office shall place
6 significant emphasis on the use of objective, quan-
7 titative analysis, taking into consideration any un-
8 certainties associated with the analysis.

9 (c) STAFF.—

10 (1) IN GENERAL.—The Director of the White
11 House Office shall employ a professional staff of not
12 more than 25 individuals to carry out the duties of
13 the White House Office.

14 (2) INTERGOVERNMENTAL PERSONNEL AND
15 FELLOWSHIPS.—The Director of the White House
16 Office may use the authority provided by the Inter-
17 governmental Personnel Act of 1970 (42 U.S.C.
18 4701 et seq.) and subchapter VI of chapter 33 of
19 title 5, United States Code, and fellowships, to ob-
20 tain staff from academia, scientific bodies, nonprofit
21 organizations, and national laboratories, for appoint-
22 ments of a limited term.

23 (d) INTERAGENCY TASK FORCE.—

1 (1) IN GENERAL.—The Director of the White
2 House Office shall establish the United States Cli-
3 mate Change Response Interagency Task Force.

4 (2) COMPOSITION.—The Interagency Task
5 Force shall be composed of—

6 (A) the Director of the White House Of-
7 fice, who shall serve as Chairperson;

8 (B) the Secretary of State;

9 (C) the Secretary;

10 (D) the Secretary of Commerce;

11 (E) the Secretary of the Treasury;

12 (F) the Secretary of Transportation;

13 (G) the Secretary of Agriculture;

14 (H) the Administrator of the Environ-
15 mental Protection Agency;

16 (I) the Administrator of the Agency for
17 International Development;

18 (J) the United States Trade Representa-
19 tive;

20 (K) the National Security Advisor;

21 (L) the Chairman of the Council of Eco-
22 nomic Advisers;

23 (M) the Chairman of the Council on Envi-
24 ronmental Quality;

1 (N) the Director of the Office of Science
2 and Technology Policy;

3 (O) the Chairperson of the Subcommittee
4 on Global Change Research (which performs
5 the functions of the Committee on Earth and
6 Environmental Sciences established by section
7 102 of the Global Change Research Act of 1990
8 (15 U.S.C. 2932)); and

9 (P) the heads of such other Federal agen-
10 cies as the Chairperson determines should be
11 members of the Interagency Task Force.

12 (3) STRATEGY.—

13 (A) IN GENERAL.—The Interagency Task
14 Force shall serve as the primary forum through
15 which the Federal agencies represented on the
16 Interagency Task Force jointly—

17 (i) assist the Director of the White
18 House Office in developing and updating
19 the Strategy; and

20 (ii) assist the Director of the White
21 House Office in preparing annual reports
22 under subsection (b)(5).

23 (B) REQUIRED ELEMENTS.—In carrying
24 out subparagraph (A), the Interagency Task
25 Force shall—

1 (i) take into account the long-term
2 goal and other requirements of the Strat-
3 egy specified in section 1015(a);

4 (ii) consult with State, tribal, and
5 local government agencies, nongovern-
6 mental organizations, academia, scientific
7 bodies, industry, the public, and other in-
8 terested parties; and

9 (iii) build consensus around a Strat-
10 egy that is based on strong scientific, tech-
11 nical, and economic analyses.

12 (4) WORKING GROUPS.—The Chairperson of
13 the Interagency Task Force may establish such topical
14 working groups as are necessary to carry out the duties
15 of the Interagency Task Force.

16 (e) PROVISION OF SUPPORT STAFF.—In accordance
17 with procedures established by the Chairperson of the
18 Interagency Task Force, the Federal agencies represented
19 on the Interagency Task Force shall provide staff from
20 the agencies to support information, data collection, and
21 analyses required by the Interagency Task Force.

22 (f) HEARINGS.—On request of the Chairperson, the
23 Interagency Task Force may hold such hearings, meet and
24 act at such times and places, take such testimony, and

1 receive such evidence as the Interagency Task Force con-
2 siders to be appropriate.

3 **SEC. 1017. TECHNOLOGY INNOVATION PROGRAM IMPLE-**
4 **MENTED THROUGH THE OFFICE OF CLIMATE**
5 **CHANGE TECHNOLOGY OF THE DEPARTMENT**
6 **OF ENERGY.**

7 (a) ESTABLISHMENT OF OFFICE OF CLIMATE
8 CHANGE TECHNOLOGY OF THE DEPARTMENT OF EN-
9 ERGY.—

10 (1) IN GENERAL.—There is established, within
11 the Department, the Office of Climate Change Tech-
12 nology.

13 (2) DUTIES.—The Department Office shall—

14 (A) manage an energy technology research
15 and development program that directly supports
16 the Strategy by—

17 (i) focusing on high-risk, bold, break-
18 through technologies that—

19 (I) have significant promise of
20 contributing to the national climate
21 change policy of long-term stabiliza-
22 tion of greenhouse gas concentrations
23 by—

24 (aa) mitigating the emis-
25 sions of greenhouse gases;

1 (bb) removing and seques-
2 tering greenhouse gases from
3 emission streams; or

4 (cc) removing and seques-
5 tering greenhouse gases from the
6 atmosphere;

7 (II) are not being addressed sig-
8 nificantly by other Federal programs;
9 and

10 (III) would represent a substan-
11 tial advance beyond technology avail-
12 able on the date of enactment of this
13 title;

14 (ii) forging fundamentally new re-
15 search and development partnerships
16 among various Department, other Federal,
17 and State programs, particularly between
18 basic science and energy technology pro-
19 grams, in cases in which such partnerships
20 have significant potential to affect the abil-
21 ity of the United States to achieve sta-
22 bilization of greenhouse gas concentrations
23 at the lowest possible cost;

24 (iii) forging international research and
25 development partnerships that are in the

1 interests of the United States and make
2 progress on stabilization of greenhouse gas
3 concentrations;

4 (iv) making available, through moni-
5 toring, experimentation, and analysis, data
6 that are essential to proving the technical
7 and economic viability of technology cen-
8 tral to addressing climate change; and

9 (v) transitioning research and develop-
10 ment programs to other program offices of
11 the Department once such a research and
12 development program crosses the threshold
13 of high-risk research and moves into the
14 realm of more conventional technology de-
15 velopment;

16 (B) prepare annual reports in accordance
17 with subsection (b)(6);

18 (C) identify the total contribution of all
19 Department programs to climate change re-
20 sponse;

21 (D) provide substantial analytical support
22 to the White House Office, particularly support
23 in the development of the Strategy and associ-
24 ated progress reporting; and

1 (E) advise the Secretary on climate
2 change-related issues, including necessary
3 changes in Department organization, manage-
4 ment, budgeting, and personnel allocation in the
5 programs involved in climate change response-
6 related activities.

7 (b) DIRECTOR OF THE DEPARTMENT OFFICE.—

8 (1) IN GENERAL.—The Department Office shall
9 be headed by a Director, who shall report directly to
10 the Secretary.

11 (2) APPOINTMENT.—The Director of the De-
12 partment Office shall be an employee of the Federal
13 Government who is a qualified individual appointed
14 by the President.

15 (3) TERM.—The Director of the Department
16 Office shall be appointed for a term of 4 years.

17 (4) VACANCIES.—A vacancy in the position of
18 the Director of the Department Office shall be filled
19 in the same manner as the original appointment was
20 made.

21 (5) DUTIES OF THE DIRECTOR OF THE DE-
22 PARTMENT OFFICE.—

23 (A) TECHNOLOGY DEVELOPMENT.—The
24 Director of the Department Office shall manage

1 the energy technology research and development
2 program described in subsection (a)(2)(A).

3 (B) STRATEGY.—The Director of the De-
4 partment Office shall support development of
5 the Strategy through the provision of staff and
6 analytical support.

7 (C) INTERAGENCY TASK FORCE.—Through
8 active participation in the Interagency Task
9 Force, the Director of the Department Office
10 shall—

11 (i) based on the analytical capabilities
12 of the Department Office, share analyses
13 of alternative climate change response
14 strategies with other members of the Inter-
15 agency Task Force to assist all members in
16 understanding—

17 (I) the scale of the climate
18 change response challenge; and

19 (II) how the actions of the Fed-
20 eral agencies of the members posi-
21 tively or negatively contribute to cli-
22 mate change solutions; and

23 (ii) determine how the energy
24 technology research and development
25 program described in subsection

1 (a)(2)(A) can be designed for max-
2 imum impact on the long-term goal of
3 stabilization of greenhouse gas con-
4 centrations.

5 (D) TOOLS, DATA, AND CAPABILITIES.—
6 The Director of the Department Office shall
7 foster the development of tools, data, and capa-
8 bilities to ensure that—

9 (i) the United States has a robust ca-
10 pability for evaluating alternative climate
11 change response scenarios; and

12 (ii) the Department Office provides
13 long-term analytical continuity during the
14 terms of service of successive Presidents.

15 (E) ADVISORY DUTIES.—The Director of
16 the Department Office shall advise the Sec-
17 retary on all aspects of climate change re-
18 sponse.

19 (6) ANNUAL REPORTS.—The Director of the
20 Department Office shall prepare an annual report
21 for submission by the Secretary to Congress and the
22 White House Office that—

23 (A) assesses progress toward meeting the
24 goals of the energy technology research and de-

1 development program described in subsection
2 (a)(2)(A);

3 (B) assesses the activities of the Depart-
4 ment Office;

5 (C) assesses the contributions of all energy
6 technology research and development programs
7 of the Department (including science programs)
8 to the long-term goal and other requirements of
9 the Strategy specified in section 1015(a); and

10 (D) makes recommendations for actions by
11 the Department and other Federal agencies to
12 address the components of technology develop-
13 ment that are necessary to support the Strat-
14 egy.

15 (7) ANALYSIS.—During development of the
16 Strategy, annual reports submitted under paragraph
17 (6), and advice to the Secretary, the Director of the
18 Department Office shall place significant emphasis
19 on the use of objective, quantitative analysis, taking
20 into consideration any associated uncertainties.

21 (c) STAFF.—The Director of the Department Office
22 shall employ a professional staff of not more than 25 indi-
23 viduals to carry out the duties of the Department Office.

24 (d) INTERGOVERNMENTAL PERSONNEL AND FEL-
25 LOWSHIPS.—The Department Office may use the author-

1 ity provided by the Intergovernmental Personnel Act of
 2 1970 (42 U.S.C. 4701 et seq.), subchapter VI of chapter
 3 33 of title 5, United States Code, and other Departmental
 4 personnel authorities, to obtain staff from academia, sci-
 5 entific bodies, nonprofit organizations, industry, and na-
 6 tional laboratories, for appointments of a limited term.

7 (e) RELATIONSHIP TO OTHER DEPARTMENT PRO-
 8 GRAMS.—Each project carried out by the Department Of-
 9 fice shall be—

10 (1) initiated only after consultation with 1 or
 11 more other appropriate program offices of the De-
 12 partment that support research and development in
 13 areas relating to the project;

14 (2) managed by the Department Office; and

15 (3) in the case of a project that reaches a suffi-
 16 cient level of maturity, with the concurrence of the
 17 Department Office and an appropriate office de-
 18 scribed in paragraph (1), transferred to the appro-
 19 priate office, along with the funds necessary to con-
 20 tinue the project to the point at which non-Federal
 21 funding can provide substantial support for the
 22 project.

23 (f) ANALYSIS OF STRATEGIC CLIMATE CHANGE RE-
 24 SPONSE.—

25 (1) IN GENERAL.—

1 (A) GOAL.—The Department Office shall
2 foster the development and application of ad-
3 vanced computational tools, data, and capabili-
4 ties that, together with the capabilities of other
5 federal agencies, support integrated assessment
6 of alternative climate change response scenarios
7 and implementation of the Strategy.

8 (B) PARTICIPATION AND SUPPORT.—
9 Projects supported by the Department Office
10 may include participation of, and be supported
11 by, other Federal agencies that have a role in
12 the development, commercialization, or transfer
13 of energy, transportation, industrial, agricul-
14 tural, forestry, or other climate change-related
15 technology.

16 (2) PROGRAMS.—

17 (A) IN GENERAL.—The Department Office
18 shall—

19 (i) develop and maintain core analyt-
20 ical competencies and complex, integrated
21 computational modeling capabilities that,
22 together with the capabilities of other fed-
23 eral agencies, are necessary to support the
24 design and implementation of the Strategy;
25 and

1 (ii) track United States and inter-
2 national progress toward the long-term
3 goal of stabilization of greenhouse gas con-
4 centrations.

5 (B) INTERNATIONAL CARBON DIOXIDE SE-
6 QUESTRATION MONITORING AND DATA PRO-
7 GRAM.—In consultation with Federal, State,
8 academic, scientific, private sector, nongovern-
9 mental, tribal, and international carbon capture
10 and sequestration technology programs, the De-
11 partment Office shall design and carry out an
12 international carbon dioxide sequestration moni-
13 toring and data program to collect, analyze, and
14 make available the technical and economic data
15 to ascertain—

16 (i) whether engineered sequestration
17 and terrestrial sequestration will be accept-
18 able technologies from regulatory, eco-
19 nomic, and international perspectives;

20 (ii) whether carbon dioxide seques-
21 tered in geological formations or ocean sys-
22 tems is stable and has inconsequential
23 leakage rates on a geologic time-scale; and

1 (iii) the extent to which forest, agri-
2 cultural, and other terrestrial systems are
3 suitable carbon sinks.

4 (3) AREAS OF EXPERTISE.—

5 (A) IN GENERAL.—The Department Office
6 shall develop and maintain expertise in inte-
7 grated assessment, modeling, and related capa-
8 bilities necessary—

9 (i) to understand the relationship be-
10 tween natural, agricultural, industrial, en-
11 ergy, and economic systems;

12 (ii) to design effective research and
13 development programs; and

14 (iii) to develop and implement the
15 Strategy.

16 (B) TECHNOLOGY TRANSFER AND DIFFU-
17 SION.—The expertise described in clause (i)
18 shall include knowledge of technology transfer
19 and technology diffusion in United States mar-
20 kets and foreign markets.

21 (4) DISSEMINATION OF INFORMATION.—The
22 Department Office shall ensure, to the maximum ex-
23 tent practicable, that technical and scientific knowl-
24 edge relating to greenhouse gas emission reduction,
25 avoidance, and sequestration is broadly disseminated

1 through publications, fellowships, and training pro-
2 grams.

3 (5) ASSESSMENTS.—In a manner consistent
4 with the Strategy, the Department shall conduct as-
5 sessments of deployment of climate-friendly tech-
6 nology.

7 (6) USE OF PRIVATE SECTOR FUNDING.—

8 (A) IN GENERAL.—The Department Office
9 shall create an operating model that allows for
10 collaboration, division of effort, and cost shar-
11 ing with industry on individual climate change
12 response projects.

13 (B) REQUIREMENTS.—Although cost shar-
14 ing in some cases may be appropriate, the De-
15 partment Office shall focus on long-term high-
16 risk research and development and should not
17 make industrial partnerships or cost sharing a
18 requirement, if such a requirement would bias
19 the activities of the Department Office toward
20 incremental innovations.

21 (C) REEVALUATION ON TRANSITION.—At
22 such time as any bold, breakthrough research
23 and development program reaches a sufficient
24 level of technological maturity such that the
25 program is transitioned to a program office of

1 the Department other than the Department Of-
2 fice, the cost-sharing requirements and criteria
3 applicable to the program should be reeval-
4 ated.

5 (D) PUBLICATION IN FEDERAL REG-
6 ISTER.—Each cost-sharing agreement entered
7 into under this subparagraph shall be published
8 in the Federal Register.

9 **SEC. 1018. ADDITIONAL OFFICES AND ACTIVITIES.**

10 The Secretary of Agriculture, the Secretary of Trans-
11 portation, the Secretary of Commerce, the Administrator
12 of the Environmental Protection Agency, and the heads
13 of other Federal agencies may establish such offices and
14 carry out such activities, in addition to those established
15 or authorized by this Act, as are necessary to carry out
16 this Act.

17 **SEC. 1019. UNITED STATES CLIMATE CHANGE RESPONSE**
18 **STRATEGY REVIEW BOARD.**

19 (a) ESTABLISHMENT.—There is established as an
20 independent establishment within the executive branch the
21 United States Climate Change Response Strategy Review
22 Board.

23 (b) MEMBERSHIP.—

24 (1) COMPOSITION.—The Review Board shall
25 consist of 11 members who shall be appointed, not

1 later than 90 days after the date of enactment of
2 this Act, by the President by and with the advice
3 and consent of the Senate, from among qualified in-
4 dividuals nominated by the National Academy of
5 Sciences in accordance with paragraph (2).

6 (2) NOMINATIONS.—Not later than 60 days
7 after the date of enactment of this Act, after taking
8 into strong consideration the guidance and rec-
9 ommendations of a broad range of scientific and
10 technical societies that have the capability of recom-
11 mending qualified individuals, the National Academy
12 of Sciences shall nominate for appointment to the
13 Review Board not fewer than 22 individuals who—

14 (A) are—

15 (i) qualified individuals; or

16 (ii) experts in a field of knowledge
17 specified in section 1014(9)(B); and

18 (B) as a group represent broad, balanced
19 expertise.

20 (3) PROHIBITION ON FEDERAL GOVERNMENT
21 EMPLOYMENT.—A member of the Review Board
22 shall not be an employee of the Federal Government.

23 (4) TERMS; VACANCIES.—

24 (A) TERMS.—

1 (i) IN GENERAL.—Subject to clause
2 (ii), each member of the Review Board
3 shall be appointed for a term of 4 years.

4 (ii) INITIAL TERMS.—

5 (I) COMMENCEMENT DATE.—The
6 term of each member initially ap-
7 pointed to the Review Board shall
8 commence 120 days after the date of
9 enactment of this title.

10 (II) TERMINATION DATE.—Of
11 the 11 members initially appointed to
12 the Review Board, 5 members shall be
13 appointed for a term of 2 years and 6
14 members shall be appointed for a
15 term of 4 years, to be designated by
16 the President at the time of appoint-
17 ment.

18 (B) VACANCIES.—

19 (i) IN GENERAL.—A vacancy on the
20 Review Board shall be filled in the manner
21 described in this subparagraph.

22 (ii) NOMINATIONS BY THE NATIONAL
23 ACADEMY OF SCIENCES.—Not later than
24 60 days after the date on which a vacancy

1 commences, the National Academy of
2 Sciences shall—

3 (I) after taking into strong con-
4 sideration the guidance and rec-
5 ommendations of a broad range of sci-
6 entific and technical societies that
7 have the capability of recommending
8 qualified individuals, nominate, from
9 among qualified individuals, not fewer
10 than 2 individuals to fill the vacancy;
11 and

12 (II) submit the names of the
13 nominees to the President.

14 (iii) SELECTION.—Not later than 30
15 days after the date on which the nomina-
16 tions under clause (ii) are submitted to the
17 President, the President shall select from
18 among the nominees an individual to fill
19 the vacancy.

20 (iv) SENATE CONFIRMATION.—An in-
21 dividual appointed to fill a vacancy on the
22 Review Board shall be appointed by and
23 with the advice and consent of the Senate.

24 (5) APPLICABILITY OF ETHICS IN GOVERNMENT
25 ACT OF 1978.—A member of the Review Board shall

1 be deemed to be an individual subject to the Ethics
2 in Government Act of 1978 (5 U.S.C. App.).

3 (6) CHAIRPERSON; VICE CHAIRPERSON.—The
4 members of the Review Board shall select a Chair-
5 person and a Vice Chairperson of the Review Board
6 from among the members of the Review Board.

7 (c) DUTIES.—

8 (1) IN GENERAL.—Not later than 180 days
9 after the date of submission of the initial Strategy
10 under section 1015(b), each updated version of the
11 Strategy under section 1015(c), and each progress
12 report under section 1015(d), the Review Board
13 shall submit to the President, Congress, and the
14 heads of Federal agencies as appropriate a report
15 assessing the adequacy of the Strategy or report.

16 (2) COMMENTS.—In reviewing the Strategy or
17 a report under paragraph (1), the Review Board
18 shall consider and comment on—

19 (A) the adequacy of effort and the appro-
20 priateness of focus of the totality of all public,
21 private, and public-private sector actions of the
22 United States with respect to the 4 key ele-
23 ments;

24 (B) the extent to which actions of the
25 United States, with respect to climate change,

1 complement or leverage international research
2 and other efforts designed to manage global
3 emissions of greenhouse gases, to further the
4 long-term goal of stabilization of greenhouse
5 gas concentrations;

6 (C) the funding implications of any rec-
7 ommendations made by the Review Board; and

8 (D)(i) the effectiveness with which each
9 Federal agency is carrying out the responsibil-
10 ities of the Federal agency with respect to the
11 short-term and long-term greenhouse gas man-
12 agement goals; and

13 (ii) the adequacy of the budget of each
14 such Federal agency to carry out those respon-
15 sibilities.

16 (3) ADDITIONAL RECOMMENDATIONS.—

17 (A) IN GENERAL.—Subject to subpara-
18 graph (B), the Review Board, at the request of
19 the President or Congress, may provide rec-
20 ommendations on additional climate change-re-
21 lated topics.

22 (B) SECONDARY DUTY.—The provision of
23 recommendations under subparagraph (A) shall
24 be a secondary duty to the primary duty of the
25 Review Board of providing independent review

1 of the Strategy and the reports under para-
2 graphs (1) and (2).

3 (d) POWERS.—

4 (1) HEARINGS.—

5 (A) IN GENERAL.—On request of the
6 Chairperson or a majority of the members of
7 the Review Board, the Review Board may hold
8 such hearings, meet and act at such times and
9 places, take such testimony, and receive such
10 evidence as the Review Board considers to be
11 appropriate.

12 (B) ADMINISTRATION OF OATHS.—Any
13 member of the Review Board may administer
14 an oath or affirmation to any witness that ap-
15 pears before the Review Board.

16 (2) PRODUCTION OF DOCUMENTS.—

17 (A) IN GENERAL.—On request of the
18 Chairperson or a majority of the members of
19 the Review Board, and subject to applicable
20 law, the Secretary or head of a Federal agency
21 represented on the Interagency Task Force, or
22 a contractor of such an agency, shall provide
23 the Review Board with such records, files, pa-
24 pers, data, and information as are necessary to

1 respond to any inquiry of the Review Board
2 under this Act.

3 (B) INCLUSION OF WORK IN PROGRESS.—

4 Subject to applicable law, information obtain-
5 able under subparagraph (A)—

6 (i) shall not be limited to final work
7 products; but

8 (ii) shall include draft work products
9 and documentation of work in progress.

10 (3) POSTAL SERVICES.—The Review Board
11 may use the United States mails in the same man-
12 ner and under the same conditions as other agencies
13 of the Federal Government.

14 (e) COMPENSATION OF MEMBERS.—A member of the
15 Review Board shall be compensated at a rate equal to the
16 daily equivalent of the annual rate of basic pay prescribed
17 for level IV of the Executive Schedule under section 5315
18 of title 5, United States Code, for each day (including
19 travel time) during which the member is engaged in the
20 performance of the duties of the Review Board.

21 (f) TRAVEL EXPENSES.—A member of the Review
22 Board shall be allowed travel expenses, including per diem
23 in lieu of subsistence, at rates authorized for an employee
24 of an agency under subchapter I of chapter 57 of title
25 5, United States Code, while away from the home or reg-

1 ular place of business of the member in the performance
2 of the duties of the Review Board.

3 (g) STAFF.—

4 (1) IN GENERAL.—The Chairperson of the Re-
5 view Board may, without regard to the provisions of
6 title 5, United States Code, regarding appointments
7 in the competitive service, appoint and terminate an
8 executive director and such other additional per-
9 sonnel as are necessary to enable the Review Board
10 to perform the duties of the Review Board.

11 (2) CONFIRMATION OF EXECUTIVE DIREC-
12 TOR.—The employment of an executive director shall
13 be subject to confirmation by the Review Board.

14 (3) COMPENSATION.—

15 (A) IN GENERAL.—Except as provided in
16 subparagraph (B), the Chairperson of the Re-
17 view Board may fix the compensation of the ex-
18 ecutive director and other personnel without re-
19 gard to the provisions of chapter 51 and sub-
20 chapter III of chapter 53 of title 5, United
21 States Code, relating to classification of posi-
22 tions and General Schedule pay rates.

23 (B) MAXIMUM RATE OF PAY.—The rate of
24 pay for the executive director and other per-
25 sonnel shall not exceed the rate payable for

1 level V of the Executive Schedule under section
2 5316 of title 5, United States Code.

3 (h) PROCUREMENT OF TEMPORARY AND INTERMIT-
4 TENT SERVICES.—The Chairperson of the Review Board
5 may procure temporary and intermittent services in ac-
6 cordance with section 3109(b) of title 5, United States
7 Code, at rates for individuals that do not exceed the daily
8 equivalent of the annual rate of basic pay prescribed for
9 level V of the Executive Schedule under section 5316 of
10 that title.

11 **SEC. 1020. AUTHORIZATION OF APPROPRIATIONS.**

12 (a) WHITE HOUSE OFFICE.—

13 (1) USE OF AVAILABLE APPROPRIATIONS.—
14 From funds made available to Federal agencies for
15 the fiscal year in which this Title is enacted, the
16 President shall provide such sums as are necessary
17 to carry out the duties of the White House Office
18 under this title until the date on which funds are
19 made available under paragraph (2).

20 (2) AUTHORIZATION OF APPROPRIATIONS.—

21 There is authorized to be appropriated to the White
22 House Office to carry out the duties of the White
23 House Office under this Title \$5,000,000 for each of
24 fiscal years 2003 through 2011, to remain available
25 through September 30, 2011.

1 (b) DEPARTMENT OFFICE.—

2 (1) USE OF AVAILABLE APPROPRIATIONS.—

3 From funds made available to Federal agencies for
4 the fiscal year in which this title is enacted, the
5 President shall provide such sums as are necessary
6 to carry out the duties of the Department Office
7 under this Title until the date on which funds are
8 made available under paragraph (2).

9 (2) AUTHORIZATION OF APPROPRIATIONS.—

10 There is authorized to be appropriated to the De-
11 partment Office to carry out the duties of the De-
12 partment Office under this title \$4,750,000,000 for
13 the period of fiscal years 2003 through 2011, to re-
14 main available through September 30, 2011.

15 (c) REVIEW BOARD.—

16 (1) USE OF AVAILABLE APPROPRIATIONS.—

17 From funds made available to Federal agencies for
18 the fiscal year in which this title is enacted, the
19 President shall provide such sums as are necessary
20 to carry out the duties of the Review Board under
21 this title until the date on which funds are made
22 available under paragraph (2).

23 (2) AUTHORIZATION OF APPROPRIATIONS.—

24 There is authorized to be appropriated to the Review
25 Board to carry out the duties of the Review Board

1 under this title \$3,000,000 for each of fiscal years
2 2003 through 2011, to remain available until ex-
3 pended.

4 (d) ADDITIONAL AMOUNTS.—Amounts authorized to
5 be appropriated under this section shall be in addition
6 to—

7 (1) amounts made available to carry out the
8 United States Global Change Research Program
9 under the Global Change Research Act of 1990 (15
10 U.S.C. 2921 et seq.); and

11 (2) amounts made available under other provi-
12 sions of law for energy research and development.

13 **Subtitle C—Science and** 14 **Technology Policy**

15 **SEC. 1031. GLOBAL CLIMATE CHANGE IN THE OFFICE OF** 16 **SCIENCE AND TECHNOLOGY POLICY.**

17 Section 101(b) of the National Science and Tech-
18 nology Policy, Organization, and Priorities Act of 1976
19 (42 U.S.C. 6601(b)) is amended—

20 (1) by redesignating paragraphs (7) through
21 (13) as paragraphs (8) through (14), respectively;
22 and

23 (2) by inserting after paragraph (6) the fol-
24 lowing:

1 “(6) improving efforts to understand, assess,
2 predict, mitigate, and respond to global climate
3 change;”.

4 **SEC. 1032. ESTABLISHMENT OF ASSOCIATE DIRECTOR FOR**
5 **GLOBAL CLIMATE CHANGE.**

6 Section 203 of the National Science and Technology
7 Policy, Organization, and Priorities Act of 1976 (42
8 U.S.C. 6612) is amended—

9 (1) by striking “four” in the second sentence
10 and inserting “five”; and

11 (2) by striking “title.” in the second sentence
12 and inserting “title, one of whom shall be respon-
13 sible for global climate change science and tech-
14 nology under the Office of Science and Technology
15 Policy.”.

16 **Subtitle D—Miscellaneous**
17 **Provisions**

18 **SEC. 1041. ADDITIONAL INFORMATION FOR REGULATORY**
19 **REVIEW.**

20 In each case that an agency prepares and submits
21 a Statement of Energy Effects pursuant to Executive
22 Order 13211 of May 18, 2001 (relating to actions con-
23 cerning regulations that significantly affect energy supply,
24 distribution, or use), or as part of compliance with Execu-
25 tive Order 12866 of September 30, 1993 (relating to regu-

1 latory planning and review) or its successor, the agency
2 shall also submit an estimate of the change in net annual
3 greenhouse gas emissions resulting from the proposed sig-
4 nificant energy action. In the case in which there is an
5 increase in net annual greenhouse gas emissions as a re-
6 sult of the proposed significant energy action, the agency
7 shall indicate what policies or measures will be undertaken
8 to mitigate or offset the increased emissions.

9 **SEC. 1042. GREENHOUSE GAS EMISSIONS FROM FEDERAL**
10 **FACILITIES.**

11 (a) **METHODOLOGY.**—

12 (1) **IN GENERAL.**—Not later than one year
13 after the date of enactment of this section, the Sec-
14 retary of Energy, Secretary of Agriculture, Secretary
15 of Commerce, and Administrator of the Environ-
16 mental Protection Agency shall publish a jointly de-
17 veloped methodology for preparing estimates of an-
18 nual net greenhouse gas emissions from all Federally
19 owned, leased, or operated facilities and emission
20 sources, including mobile sources.

21 (2) **INDIRECT AND OTHER EMISSIONS.**—The
22 methodology under paragraph (1) shall include emis-
23 sions resulting from any Federal procurement action
24 with an annual Federal expenditure of greater than
25 \$100 million, indirect emissions associated with Fed-

1 eral electricity consumption, and other emissions re-
2 sulting from Federal actions that the heads of the
3 agencies under paragraph (1) may jointly decide to
4 include in the estimates.

5 (b) PUBLICATION.—Not later than 18 months after
6 the date of enactment of this section, and annually there-
7 after, the Secretary of Energy shall publish an estimate
8 of annual net greenhouse gas emissions from all Federally
9 owned, leased, or operated facilities and emission sources,
10 using the methodology published under subsection (a).

11 **TITLE XI—GREENHOUSE GAS**
12 **DATABASE**

13 **SEC. 1101. DEFINITIONS.**

14 In this title:

15 (1) CONSENSUS.—The term “consensus” has
16 the meaning given that term in section 562(2) of
17 title 5, United States Code.

18 (2) DATABASE.—The term “database” means
19 the National Greenhouse Gas Database established
20 under section 1102.

21 (3) ENTITY.—The term “entity” means—

22 (A) a person located in the United States;

23 or

24 (B) a public or private entity, to the extent

25 that the entity operates in the United States.

1 (4) FACILITY.—The term “facility” means all
2 buildings, structures, or installations located on any
3 one or more of contiguous or adjacent property or
4 properties under common control of the same entity.

5 (5) GREENHOUSE GAS.—The term “greenhouse
6 gas” means—

7 (A) carbon dioxide;

8 (B) methane;

9 (C) nitrous oxide;

10 (D) hydrofluorocarbons;

11 (E) perfluorocarbons; and

12 (F) sulfur hexafluoride.

13 (6) DIRECT EMISSIONS.—The term “direct
14 emissions” means greenhouse gas emissions from a
15 source that is owned or controlled by an entity.

16 (7) INDIRECT EMISSIONS.—The term “indirect
17 emissions” means greenhouse gas emissions that are
18 a consequence of the activities of an entity but that
19 are emitted from sources owned or controlled by an-
20 other entity.

21 (8) CARBON SEQUESTRATION.—The term “se-
22 questration” means the capture, long-term separa-
23 tion, isolation, or removal of greenhouse gases from
24 the atmosphere, including through a biological or

1 geologic method such as reforestation or an under-
2 ground reservoir.

3 (9) INTERAGENCY TASK FORCE.—The term
4 “Interagency Task Force” means the Interagency
5 Task Force on Greenhouse Gas Database estab-
6 lished under section 1103.

7 (10) SECRETARY.—The term “Secretary”
8 means the Secretary of Commerce.

9 (11) NEGOTIATED RULEMAKING.—The term
10 “negotiated rulemaking” has the meaning given that
11 term in section 562(6) of title 5, United States
12 Code.

13 (12) NEGOTIATED RULEMAKING COMMITTEE.—
14 The term “negotiated rulemaking committee” has
15 the meaning given that term in section 562(7) of
16 title 5, United States Code.

17 **SEC. 1102. NATIONAL GREENHOUSE GAS DATABASE.**

18 (a) ESTABLISHMENT.—The Secretary, in consulta-
19 tion with the Interagency Task Force, shall establish, by
20 rule, a database to be known as the National Greenhouse
21 Gas Database to collect, verify, and analyze information
22 on—

23 (1) greenhouse gas emissions by entities located
24 in the United States; and

1 (2) greenhouse gas emission reductions by enti-
2 ties based in the United States.

3 (b) DATABASE COMPONENTS.—The database shall
4 consist of an inventory of greenhouse gas emissions and
5 a registry of greenhouse gas emission reductions.

6 (c) NEGOTIATED RULEMAKING.—

7 (1) STAKEHOLDER INVOLVEMENT IN DESIGN-
8 ING DATABASE REQUIRED.—The Secretary shall
9 carry out the responsibilities under this section
10 through the use of a negotiated rulemaking under
11 subchapter III of title 5, United States Code.

12 (2) USE OF CONSENSUS.—The Secretary shall
13 use the consensus of the negotiated rulemaking com-
14 mittee with respect to the database as the basis for
15 the rule proposed for notice and comment.

16 (3) DEADLINE.—If, on the date that is 1 year
17 after the date of publication of the notice under sec-
18 tion 564(a) of title 5, United States Code, with re-
19 gard to the negotiated rulemaking, the negotiated
20 rulemaking committee has not completed its work,
21 the Secretary, in consultation with the Interagency
22 Task Force, shall publish a notice of proposed rule-
23 making and issue a final rule without regard to this
24 subsection.

25 (d) REQUIRED ELEMENTS OF RULE.—

1 (1) MANDATORY REPORTING.—(A) The rule
2 under subsection (a) shall require each entity that
3 exceeds the greenhouse gas emissions threshold in
4 paragraph (2) to annually report to the Secretary,
5 for inclusion in the inventory component of the data-
6 base, the entity-wide emissions of greenhouse gases
7 in the previous calendar year.

8 (B) Each report submitted pursuant to the rule
9 shall include:

10 (i) direct emissions from stationary
11 sources;

12 (ii) direct emissions from mobile sources
13 owned or operated by a covered entity;

14 (iii) direct emissions from any land use ac-
15 tivities that release significant quantities of
16 greenhouse gases;

17 (iv) indirect emissions from outsourced ac-
18 tivities, contract manufacturing, wastes trans-
19 ferred from the control of an entity, and other
20 relevant instances, as determined to be prac-
21 ticable under the rule; and,

22 (v) indirect emissions from electricity,
23 heat, and steam, purchased from another enti-
24 ty, as determined to be practicable under the
25 rule.

1 (2) THRESHOLD FOR REPORTING.—An entity
2 shall not be required to make a report under para-
3 graph (1) unless the total greenhouse gas emissions
4 of the entity in the calendar year for reporting ex-
5 ceeds 1,000 metric tons of carbon dioxide equivalent,
6 or a greater level as determined by the rule.

7 (3) METHOD OF REPORTING.—The rule under
8 subsection (a) shall require that entity-wide emis-
9 sions shall be reported at the facility level.

10 (4) VERIFICATION.—The rule under subsection
11 (a) shall provide for objective and independent as-
12 sessment of whether a report submitted by an entity
13 accurately reflects the greenhouse gas emissions or
14 emission reductions of the entity.

15 (5) DATA QUALITY.—The rule under subsection
16 (a) shall establish procedures and protocols needed
17 to—

18 (A) prevent the reporting of some or all of
19 the same greenhouse gas emissions or emission
20 reductions by more than one reporting entity;

21 (B) provide for corrections to errors in
22 data submitted to the database;

23 (C) provide for adjustment to data by re-
24 porting entities that have had a significant or-
25 ganizational change (including mergers, acquisi-

1 tions, and divestiture), in order to maintain
2 comparability among data in the database over
3 time;

4 (D) provide for adjustments to reflect new
5 technologies or methods for measuring or calcu-
6 lating greenhouse gas emissions; and

7 (E) account for changes in registration of
8 ownership of emissions reductions resulting
9 from a voluntary private transaction between
10 reporting entities.

11 (6) AVAILABILITY OF DATA.—The rule under
12 subsection (a) shall require that information in the
13 database be published and made available in elec-
14 tronic format on the Internet, except in cases where
15 the chair determines that publishing or making
16 available the information would reveal a trade secret
17 or disclose information vital to national security.

18 (7) DATA INFRASTRUCTURE.—The rule under
19 subsection (a) shall ensure that the database estab-
20 lished by this Act shall utilize and be integrated with
21 existing data collection and reporting systems to the
22 maximum extent possible and avoid duplication of
23 such systems.

24 (8) RULE REVISION.—The Secretary, in con-
25 sultation with the Interagency Task Force, shall re-

1 view and revise the rule promulgated under sub-
2 section (a) every three years, to ensure that it is ef-
3 fective in covering as many sources of greenhouse
4 gases as is practicable.

5 (e) ADDITIONAL ISSUES TO BE CONSIDERED.—In
6 formulating its consensus with respect to the rule under
7 subsection (a), the negotiated rulemaking committee shall
8 consider the full range of additional issues involved in es-
9 tablishing an effective database, including the following:

10 (1) INDIRECT EMISSIONS.—The inclusion in the
11 database of information on indirect greenhouse gas
12 emissions, including types of emissions to be cov-
13 ered, types and levels of aggregation of emissions
14 data by a reporting entity, and thresholds for report-
15 ing.

16 (2) UNITS FOR REPORTING.—The appropriate
17 units for reporting each greenhouse gas, and wheth-
18 er to require reporting of emission efficiency rates
19 (including emissions per kilowatt-hour for electricity
20 generators) in addition to actual emissions of green-
21 house gases.

22 (3) REPORTING OF EMISSION BY FEDERAL FA-
23 CILITIES.—The inclusion in the database of emis-
24 sions and emission reductions from facilities owned
25 or operated by the United States.

1 (4) EMISSION REDUCTIONS AND SEQUESTRA-
2 TION.—The inclusion in the registry portion of the
3 database, on a voluntary basis, of information on
4 greenhouse gas emissions that were reduced or
5 avoided, and on carbon that was sequestered,
6 through any measures, including—

7 (A) agricultural activities, including man-
8 agement of crop lands, grazing lands, grass-
9 lands, and dry lands;

10 (B) forestry activities that increase carbon
11 sequestration stocks;

12 (C) improvement in efficiency of energy
13 production, including use of combined heat and
14 power;

15 (D) fuel switching or use of renewable
16 sources in energy production;

17 (E) improvements in end-use energy effi-
18 ciency, including improved vehicle fuel effi-
19 ciency;

20 (F) carbon sequestration for long-term
21 storage; and

22 (G) methane recovery.

23 (5) INCLUSION OF INTERNATIONAL EMISSION
24 REDUCTIONS.—The inclusion in the registry portion
25 of the database of emission reductions and seques-

1 tration projects carried out outside the United
2 States by entities based in the United States.

3 (6) COORDINATION WITH OTHER DATABASES
4 AND ENTITIES.—

5 (A) coordination and standardization be-
6 tween the database and other greenhouse gas
7 registries at the State or regional level;

8 (B) approaches to reconciling data and re-
9 ports under section 1605(b) of the Energy Pol-
10 icy Act of 1992 with the information in the
11 database, including any verification that may be
12 required; and

13 (C) use and integration of data and re-
14 ports prepared by the Environmental Protection
15 Agency under sections 103 and 821 of the
16 Clean Air Act, and related programs.

17 (7) PARTICIPATION BY FARMERS AND SMALL
18 BUSINESS.—Measures to facilitate the participation
19 of farmers and small business in voluntary reporting
20 of emission reductions to the registry.

21 (8) NON-FEDERAL OPERATION OF THE DATA-
22 BASE.—The reliability, cost-effectiveness and overall
23 potential for the operation of the database by a non-
24 profit organization.

1 (f) ENFORCEMENT.—The Attorney General may, at
2 the request of the Secretary, bring a civil action in United
3 States District Court against an entity that fails to comply
4 with a rule promulgated under this section, to impose a
5 civil penalty of not more than \$25,000 for each day that
6 the failure to comply continues.

7 (g) ANNUAL REPORT.—The Secretary shall publish
8 an annual report that—

9 (1) describes the total greenhouse gas emissions
10 and emission reductions reported to the database;
11 and

12 (2) provides entity-by-entity and sector-by-sec-
13 tor analyses of the emissions and emission reduc-
14 tions reported.

15 **SEC. 1103. INTERAGENCY TASK FORCE ON GREENHOUSE**
16 **GAS DATABASE.**

17 (a) ESTABLISHMENT AND MEMBERSHIP.—There is
18 established an Interagency Task Force on Greenhouse Gas
19 Database, which shall be composed of—

- 20 (1) the Secretary of Energy;
21 (2) the Secretary of Agriculture;
22 (3) the Secretary of the Interior;
23 (4) the Secretary of Commerce;
24 (5) the Secretary of Transportation;

1 (6) the Administrator of the Environmental
2 Protection Agency;

3 (7) the Director of the Office of Science and
4 Technology Policy in the Executive Office of the
5 President;

6 (8) the Director of the National Office of Cli-
7 mate Change Response in the Executive Office of
8 the President; and

9 (9) the Chairman of the Council on Environ-
10 mental Quality.

11 (b) CHAIR APPOINTMENT AND TERM.—

12 (1) INITIAL APPOINTMENT.—Not later than 60
13 days after the date of enactment of this title, the
14 President shall designate a chair of the Interagency
15 Task Force, who shall serve as Chair for not more
16 than 2 consecutive years, from among the Secretary
17 of Energy and the Administrator of the Environ-
18 mental Protection Agency.

19 (2) SUBSEQUENT APPOINTMENTS.—The posi-
20 tion of Chair shall alternate between the Secretary
21 of Energy and the Administrator of the Environ-
22 mental Protection Agency.

23 (c) DUTIES.—The Interagency Task Force shall reg-
24 ularly advise the Secretary and the Chair on the design,
25 operation, and improvement of the Database.

1 **SEC. 1104. MEASUREMENT AND VERIFICATION.**

2 (a) IN GENERAL.—The Chair, in cooperation with
3 the National Institute of Standards and Technology, shall
4 develop and promulgate—

5 (1) technologies and methods for measurement
6 and verification of greenhouse gas emissions and
7 emission reductions; and

8 (2) accounting and reporting standards for re-
9 ports under section 1102.

10 (b) BEST PRACTICES.—The technologies, methods,
11 and standards developed under paragraph (1) shall con-
12 form, to the maximum extent practicable, to the best prac-
13 tices that have the greatest support of experts in the field.

14 **DIVISION E—ENHANCING RE-**
15 **SEARCH, DEVELOPMENT, AND**
16 **TRAINING**

17 **TITLE XII—ENERGY RESEARCH**
18 **AND DEVELOPMENT PROGRAMS**

19 **SEC. 1201. SHORT TITLE.**

20 This division may be cited as the “Energy Science
21 and Technology Enhancement Act of 2002”.

22 **SEC. 1202. FINDINGS.**

23 The Congress finds the following:

24 (1) A coherent national energy strategy re-
25 quires an energy research and development program
26 that supports basic energy research and provides

1 mechanisms to develop, demonstrate, and deploy new
2 energy technologies in partnership with industry.

3 (2) An aggressive national energy research, de-
4 velopment, demonstration, and technology deploy-
5 ment program is an integral part of a national cli-
6 mate change strategy, because it can reduce—

7 (A) United States energy intensity by 1.9
8 percent per year from 1999 to 2020;

9 (B) United States energy consumption in
10 2020 by 8 quadrillion Btu from otherwise ex-
11 pected levels; and

12 (C) United States carbon dioxide emissions
13 from expected levels by 166 million metric tons
14 in carbon equivalent in 2020.

15 (3) An aggressive national energy research, de-
16 velopment, demonstration, and technology deploy-
17 ment program can help maintain domestic United
18 States production of energy, increase United States
19 hydrocarbon reserves by 14 percent, and lower nat-
20 ural gas prices by 20 percent, compared to estimates
21 for 2020.

22 (4) An aggressive national energy research, de-
23 velopment, demonstration, and technology deploy-
24 ment program is needed if United States suppliers

1 and manufacturers are to compete in future markets
2 for advanced energy technologies.

3 **SEC. 1203. DEFINITIONS.**

4 In this title:

5 (1) DEPARTMENT.—The term “Department”
6 means the Department of Energy.

7 (2) DEPARTMENTAL MISSION.—The term “de-
8 partmental mission” means any of the functions
9 vested in the Secretary of Energy by the Depart-
10 ment of Energy Organization Act (42 U.S.C. 7101
11 et seq.) or other law.

12 (3) INSTITUTION OF HIGHER EDUCATION.—The
13 term “institution of higher education” has the
14 meaning given that term in section 1201(a) of the
15 Higher Education Act of 1965 (20 U.S.C. 1141(a));

16 (4) NATIONAL LABORATORY.—The term “Na-
17 tional Laboratory” means any of the following multi-
18 purpose laboratories owned by the Department of
19 Energy—

20 (A) Argonne National Laboratory;

21 (B) Brookhaven National Laboratory;

22 (C) Idaho National Engineering and Envi-
23 ronmental Laboratory;

24 (D) Lawrence Berkeley National Labora-
25 tory;

1 (E) Lawrence Livermore National Labora-
2 tory;

3 (F) Los Alamos National Laboratory;

4 (G) National Energy Technology Labora-
5 tory;

6 (H) National Renewable Energy Labora-
7 tory;

8 (I) Oak Ridge National Laboratory;

9 (J) Pacific Northwest National Labora-
10 tory; or

11 (K) Sandia National Laboratory.

12 (5) SECRETARY.—The term “Secretary” means
13 the Secretary of Energy.

14 (6) TECHNOLOGY DEPLOYMENT.—The term
15 “technology deployment” means activities to pro-
16 mote acceptance and utilization of technologies in
17 commercial application, including activities under-
18 taken pursuant to section 7 of the Federal Non-
19 nuclear Energy Research and Development Act of
20 1974 (42 U.S.C. 5906) or section 6 of the Renew-
21 able Energy and Energy Efficiency Technology
22 Competitiveness Act of 1989 (42 U.S.C. 12007).

23 **SEC. 1204. CONSTRUCTION WITH OTHER LAWS.**

24 Except as otherwise provided in this title and title
25 XIV, the Secretary shall carry out the research, develop-

1 ment, demonstration, and technology deployment pro-
 2 grams authorized by this title in accordance with the
 3 Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.), the
 4 Federal Nonnuclear Research and Development Act of
 5 1974 (42 U.S.C. 5901 et seq.), the Energy Policy Act of
 6 1992 (42 U.S.C. 13201 et seq.), or any other Act under
 7 which the Secretary is authorized to carry out such activi-
 8 ties.

9 **Subtitle A—Energy Efficiency**

10 **SEC. 1211. ENHANCED ENERGY EFFICIENCY RESEARCH** 11 **AND DEVELOPMENT.**

12 (a) PROGRAM DIRECTION.—The Secretary shall con-
 13 duct balanced energy research, development, demonstra-
 14 tion, and technology deployment programs to enhance en-
 15 ergy efficiency in buildings, industry, power technologies,
 16 and transportation.

17 (b) PROGRAM GOALS.—

18 (1) ENERGY-EFFICIENT HOUSING.—The goal of
 19 the energy-efficient housing program shall be to de-
 20 velop, in partnership with industry, enabling tech-
 21 nologies (including lighting technologies), designs,
 22 production methods, and supporting activities that
 23 will, by 2010—

24 (A) cut the energy use of new housing by
 25 50 percent, and

1 (B) reduce energy use in existing homes by
2 30 percent.

3 (2) INDUSTRIAL ENERGY EFFICIENCY.—The
4 goal of the industrial energy efficiency program shall
5 be to develop, in partnership with industry, enabling
6 technologies, designs, production methods, and sup-
7 porting activities that will, by 2010, enable energy-
8 intensive industries such as the following industries
9 to reduce their energy intensity by at least 25 per-
10 cent:

11 (A) the wood product manufacturing in-
12 dustry;

13 (B) the pulp and paper industry;

14 (C) the petroleum and coal products manu-
15 facturing industry;

16 (D) the mining industry;

17 (E) the chemical manufacturing industry;

18 (F) the glass and glass product manufac-
19 turing industry;

20 (G) the iron and steel mills and ferroalloy
21 manufacturing industry;

22 (H) the primary aluminum production in-
23 dustry;

24 (I) the foundries industry; and

25 (J) U.S. agriculture.

1 (3) TRANSPORTATION ENERGY EFFICIENCY.—

2 The goal of the transportation energy efficiency pro-
3 gram shall be to develop, in partnership with indus-
4 try, technologies that will enable the achievement—

5 (A) by 2010, passenger automobiles with a
6 fuel economy of 80 miles per gallon;

7 (B) by 2010, light trucks (classes 1 and
8 2a) with a fuel economy of 60 miles per gallon;

9 (C) by 2010, medium trucks and buses
10 (classes 2b through 6 and class 8 transit buses)
11 with a fuel economy, in ton-miles per gallon,
12 that is three times that of year 2000 equivalent
13 vehicles; and

14 (D) by 2010, heavy trucks (classes 7 and
15 8) with a fuel economy, in ton-miles per gallon,
16 that is two times that of year 2000 equivalent
17 vehicles.

18 (4) ENERGY EFFICIENT DISTRIBUTED GENERA-
19 TION.—The goals of the energy efficient on-site gen-
20 eration program shall be to help remove environ-
21 mental and regulatory barriers to on-site, or distrib-
22 uted, generation and combined heat and power by
23 developing technologies by 2015 that achieve—

24 (A) electricity generating efficiencies great-
25 er than 40 percent for on-site generation tech-

1 nologies based upon natural gas, including fuel
2 cells, microturbines, reciprocating engines and
3 industrial gas turbines;

4 (B) combined heat and power total (elec-
5 tric and thermal) efficiencies of more than 85
6 percent;

7 (C) fuel flexibility to include hydrogen,
8 biofuels and natural gas;

9 (D) near zero emissions of pollutants that
10 form smog and acid rain;

11 (E) reduction of carbon dioxide emissions
12 by at least 40 percent;

13 (F) packaged system integration at end
14 user facilities providing complete services in
15 heating, cooling, electricity and air quality; and

16 (G) increased reliability for the consumer
17 and greater stability for the national electricity
18 grid.

19 (c) AUTHORIZATION OF APPROPRIATIONS.—There
20 are authorized to be appropriated to the Secretary for car-
21 rying out research, development, demonstration, and tech-
22 nology deployment activities under this subtitle—

23 (1) \$700,000,000 for fiscal year 2003;

24 (2) \$784,000,000 for fiscal year 2004;

25 (3) \$878,000,000 for fiscal year 2005; and

1 (4) \$983,000,000 for fiscal year 2006.

2 (d) LIMITATION ON USE OF FUNDS.—None of the
3 funds authorized to be appropriated in subsection (c) may
4 be used for the following programs of the Department—

5 (1) Weatherization Assistance Program;

6 (2) State Energy Program; or

7 (3) Federal Energy Management Program.

8 **SEC. 1212. ENERGY EFFICIENCY SCIENCE INITIATIVE.**

9 (a) ESTABLISHMENT AND AUTHORIZATION OF AP-
10 PROPRIATIONS.—From amounts authorized under section
11 1211(c), there are authorized to be appropriated not more
12 than \$50,000,000 in any fiscal year, for an Energy Effi-
13 ciency Science Initiative to be managed by the Assistant
14 Secretary in the Department with responsibility for energy
15 conservation under section 203(a)(9) of the Department
16 of Energy Organization Act (42 U.S.C. 7133(a)(9)), in
17 consultation with the Director of the Office of Science, for
18 grants to be competitively awarded and subject to peer re-
19 view for research relating to energy efficiency.

20 (b) REPORT.—The Secretary of Energy shall submit
21 to the Committee on Science and the Committee on Ap-
22 propriations of the United States House of Representa-
23 tives, and to the Committee on Energy and Natural Re-
24 sources and the Committee on Appropriations of the
25 United States Senate, an annual report on the activities

1 of the Energy Efficiency Science Initiative, including a de-
2 scription of the process used to award the funds and an
3 explanation of how the research relates to energy effi-
4 ciency.

5 **SEC. 1213. NEXT GENERATION LIGHTING INITIATIVE.**

6 (a) ESTABLISHMENT.—There is established in the
7 Department a Next Generation Lighting Initiative to re-
8 search, develop, and conduct demonstration activities on
9 advanced solid-state lighting technologies based on white
10 light emitting diodes.

11 (b) OBJECTIVES.—

12 (1) IN GENERAL.—The objectives of the initia-
13 tive shall be to develop, by 2011, advanced solid-
14 state lighting technologies based on white light emit-
15 ting diodes that, compared to incandescent and fluo-
16 rescent lighting technologies, are—

17 (A) longer lasting;

18 (B) more energy-efficient; and

19 (C) cost-competitive.

20 (2) INORGANIC WHITE LIGHT EMITTING
21 DIODE.—The objective of the initiative with respect
22 to inorganic white light emitting diodes shall be to
23 develop an inorganic white light emitting diode that
24 has an efficiency of 160 lumens per watt and a 10-
25 year lifetime.

1 (3) ORGANIC WHITE LIGHT EMITTING DIODE.—

2 The objective of the initiative with respect to organic
3 white light emitting diodes shall be to develop an or-
4 ganic white light emitting diode with an efficiency of
5 100 lumens per watt with a 5-year lifetime that—

6 (A) illuminates over a full color spectrum;

7 (B) covers large areas over flexible sur-
8 faces; and

9 (C) does not contain harmful pollutants
10 typical of fluorescent lamps such as mercury.

11 (c) CONSORTIUM.—

12 (1) IN GENERAL.—The Secretary shall initiate
13 and manage basic and manufacturing-related re-
14 search on advanced solid-state lighting technologies
15 based on white light emitting diodes for the initia-
16 tive, in cooperation with the Next Generation Light-
17 ing Initiative Consortium.

18 (2) COMPOSITION.—The consortium shall be
19 composed of firms, national laboratories, and other
20 entities so that the consortium is representative of
21 the United States solid state lighting research, devel-
22 opment, and manufacturing expertise as a whole.

23 (3) FUNDING.—The consortium shall be funded
24 by—

25 (A) participation fees; and

1 (B) grants provided under subsection
2 (e)(1).

3 (4) ELIGIBILITY.—To be eligible to receive a
4 grant under subsection (e)(1), the consortium
5 shall—

6 (A) enter into a consortium participation
7 agreement that—

8 (i) is agreed to by all participants;
9 and

10 (ii) describes the responsibilities of
11 participants, participation fees, and the
12 scope of research activities; and

13 (B) develop an annual program plan.

14 (5) INTELLECTUAL PROPERTY.—Participants in
15 the consortium shall have royalty-free nonexclusive
16 rights to use intellectual property derived from con-
17 sortium research conducted under subsection (e)(1).

18 (d) PLANNING BOARD.—

19 (1) IN GENERAL.—Not later than 90 days after
20 the establishment of the consortium, the Secretary
21 shall establish and appoint the members of a plan-
22 ning board, to be known as the “Next Generation
23 Lighting Initiative Planning Board”, to assist the
24 Secretary in carrying out this section.

1 (2) COMPOSITION.—The planning board shall
2 be composed of—

3 (A) 4 members from universities, national
4 laboratories, and other individuals with exper-
5 tise in advanced solid-state lighting and tech-
6 nologies based on white light emitting diodes;
7 and

8 (B) 3 members from a list of not less than
9 6 nominees from industry submitted by the con-
10 sortium.

11 (3) STUDY.—

12 (A) IN GENERAL.—Not later than 90 days
13 after the date on which the Secretary appoints
14 members to the planning board, the planning
15 board shall complete a study on strategies for
16 the development and implementation of ad-
17 vanced solid-state lighting technologies based on
18 white light emitting diodes.

19 (B) REQUIREMENTS.—The study shall de-
20 velop a comprehensive strategy to implement,
21 through the initiative, the use of white light
22 emitting diodes to increase energy efficiency
23 and enhance United States competitiveness.

24 (C) IMPLEMENTATION.—As soon as prac-
25 ticable after the study is submitted to the Sec-

1 retary, the Secretary shall implement the initia-
2 tive in accordance with the recommendations of
3 the planning board.

4 (4) TERMINATION.—The planning board shall
5 terminate upon completion of the study under para-
6 graph (3).

7 (e) GRANTS.—

8 (1) FUNDAMENTAL RESEARCH.—The Secretary,
9 through the consortium, shall make grants to con-
10 duct basic and manufacturing-related research re-
11 lated to advanced solid-state lighting technologies
12 based on white light emitting diode technologies.

13 (2) TECHNOLOGY DEVELOPMENT AND DEM-
14 ONSTRATION.—The Secretary shall enter into
15 grants, contracts, and cooperative agreements to
16 conduct or promote technology research, develop-
17 ment, or demonstration activities. In providing fund-
18 ing under this paragraph, the Secretary shall give
19 preference to participants in the consortium.

20 (3) CONTINUING ASSESSMENT.—The consor-
21 tium, in collaboration with the Secretary, shall for-
22 mulate annual operating and performance objectives,
23 develop technology roadmaps, and recommend re-
24 search and development priorities for the initiative.

25 The Secretary may also establish or utilize advisory

1 committees, or enter into appropriate arrangements
2 with the National Academy of Sciences, to conduct
3 periodic reviews of the initiative. The Secretary shall
4 consider the results of such assessment and review
5 activities in making funding decisions under para-
6 graphs (1) and (2) of this subsection.

7 (4) TECHNICAL ASSISTANCE.—The National
8 Laboratories shall cooperate with and provide tech-
9 nical assistance to persons carrying out projects
10 under the initiative.

11 (5) AUDITS.—

12 (A) IN GENERAL.—The Secretary shall re-
13 tain an independent, commercial auditor to de-
14 termine the extent to which funds made avail-
15 able under this section have been expended in
16 a manner that is consistent with the objectives
17 under subsection (b) and, in the case of funds
18 made available to the consortium, the annual
19 program plan of the consortium under sub-
20 section (c)(4)(B).

21 (B) REPORTS.—The auditor shall submit
22 to Congress, the Secretary, and the Comptroller
23 General of the United States an annual report
24 containing the results of the audit.

1 (6) APPLICABLE LAW.—Grants, contracts, and
2 cooperative agreements under this section shall not
3 be subject to the Federal Acquisition Regulation.

4 (f) PROTECTION OF INFORMATION.—Information ob-
5 tained by the Federal Government on a confidential basis
6 under this section shall be considered to constitute trade
7 secrets and commercial or financial information obtained
8 from a person and privileged or confidential under section
9 552(b)(4) of title 5, United States Code.

10 (g) AUTHORIZATION OF APPROPRIATIONS.—In addi-
11 tion to amounts authorized under section 1211(c), there
12 are authorized to be appropriated for activities under this
13 section \$50,000,000 for each of fiscal years 2003 through
14 2011.

15 (h) DEFINITIONS.—In this section:

16 (1) ADVANCED SOLID-STATE LIGHTING.—The
17 term “advanced solid-state lighting” means a
18 semiconducting device package and delivery system
19 that produces white light using externally applied
20 voltage.

21 (2) CONSORTIUM.—The term “consortium”
22 means the Next Generation Lighting Initiative Con-
23 sortium under subsection (c).

1 (3) INITIATIVE.—The term “initiative” means
2 the Next Generation Lighting Initiative established
3 under subsection (a).

4 (4) INORGANIC WHITE LIGHT EMITTING
5 DIODE.—The term “inorganic white light emitting
6 diode” means an inorganic semiconducting package
7 that produces white light using externally applied
8 voltage.

9 (5) ORGANIC WHITE LIGHT EMITTING DIODE.—
10 The term “organic white light emitting diode”
11 means an organic semiconducting compound that
12 produces white light using externally applied voltage.

13 (6) WHITE LIGHT EMITTING DIODE.—The term
14 “white light emitting diode” means—

15 (A) an inorganic white light emitting
16 diode; or

17 (B) an organic white light emitting diode.

18 **SEC. 1214. RAILROAD EFFICIENCY.**

19 (a) ESTABLISHMENT.—The Secretary shall, in co-
20 operation with the Secretaries of Transportation and De-
21 fense, and the Administrator of the Environmental Protec-
22 tion Agency, establish a public-private research partner-
23 ship involving the federal government, railroad carriers,
24 locomotive manufacturers, and the Association of Amer-
25 ican Railroads. The goal of the initiative shall include de-

1 veloping and demonstrating locomotive technologies that
2 increase fuel economy, reduce emissions, improve safety,
3 and lower costs.

4 (b) AUTHORIZATION OF APPROPRIATIONS.—There
5 are authorized to be appropriated to carry out the require-
6 ments of this section \$60,000,000 for fiscal year 2003 and
7 \$70,000,000 for fiscal year 2004.

8 **Subtitle B—Renewable Energy**

9 **SEC. 1221. ENHANCED RENEWABLE ENERGY RESEARCH** 10 **AND DEVELOPMENT.**

11 (a) PROGRAM DIRECTION.—The Secretary shall con-
12 duct balanced energy research, development, demonstra-
13 tion, and technology deployment programs to enhance the
14 use of renewable energy.

15 (b) PROGRAM GOALS.—

16 (1) WIND POWER.—The goals of the wind
17 power program shall be to develop, in partnership
18 with industry, a variety of advanced wind turbine
19 designs and manufacturing technologies that are
20 cost-competitive with fossil-fuel generated electricity,
21 with a focus on developing advanced low wind speed
22 technologies that, by 2007, will enable the expanding
23 utilization of widespread class 3 and 4 winds.

24 (2) PHOTOVOLTAICS.—The goal of the photo-
25 voltaic program shall be to develop, in partnership

1 with industry, total photovoltaic systems with in-
2 stalled costs of \$4000 per peak kilowatt by 2005
3 and \$2000 per peak kilowatt by 2015.

4 (3) SOLAR THERMAL ELECTRIC SYSTEMS.—The
5 goal of the solar thermal electric systems program
6 shall be to develop, in partnership with industry,
7 solar power technologies (including baseload solar
8 power) that are competitive with fossil-fuel gen-
9 erated electricity by 2015, by combining high-effi-
10 ciency and high-temperature receivers with advanced
11 thermal storage and power cycles.

12 (4) BIOMASS-BASED POWER SYSTEMS.—The
13 goal of the biomass program shall be to develop, in
14 partnership with industry, integrated power-gener-
15 ating systems, advanced conversion, and feedstock
16 technologies capable of producing electric power that
17 is cost-competitive with fossil-fuel generated elec-
18 tricity by 2010, together with the production of
19 fuels, chemicals, and other products under para-
20 graph (6).

21 (5) GEOTHERMAL ENERGY.—The goal of the
22 geothermal program shall be to develop, in partner-
23 ship with industry, technologies and processes based
24 on advanced hydrothermal systems and advanced

1 heat and power systems, including geothermal heat
2 pump technology, with a specific focus on—

3 (A) improving exploration and character-
4 ization technology to increase the probability of
5 drilling successful wells from 20 percent to 40
6 percent by 2006;

7 (B) reducing the cost of drilling by 2008
8 to an average cost of \$150 per foot; and

9 (C) developing enhanced geothermal sys-
10 tems technology with the potential to double the
11 useable geothermal resource base.

12 (6) BIOFUELS.—The goal of the biofuels pro-
13 gram shall be to develop, in partnership with indus-
14 try, advanced biochemical and thermochemical con-
15 version technologies capable of making liquid and
16 gaseous fuels from cellulosic feedstocks, that are
17 price-competitive with gasoline or diesel, in either in-
18 ternal combustion engines or fuel cell vehicles, by
19 2010.

20 (7) HYDROGEN-BASED ENERGY SYSTEMS.—The
21 goals of the hydrogen program shall be to support
22 research and development on technologies for pro-
23 duction, storage, and use of hydrogen, including fuel
24 cells and, specifically, fuel-cell vehicle development
25 activities under section 1211.

1 (8) HYDROPOWER.—The goal of the hydro-
2 power program shall be to develop, in partnership
3 with industry, a new generation of turbine tech-
4 nologies that are less damaging to fish and aquatic
5 ecosystems.

6 (9) ELECTRIC ENERGY SYSTEMS AND STOR-
7 AGE.—The goals of the electric energy and storage
8 program shall be to develop, in partnership with
9 industry—

10 (A) generators and transmission, distribu-
11 tion, and storage systems that combine high ca-
12 pacity with high efficiency;

13 (B) technologies to interconnect distributed
14 energy resources with electric power systems,
15 comply with any national interconnection stand-
16 ards, have a minimum 10-year useful life;

17 (C) advanced technologies to increase the
18 average efficiency of electric transmission facili-
19 ties in rural and remote areas, giving priority
20 for demonstrations to advanced transmission
21 technologies that are being or have been field
22 tested;

23 (D) the use of new transmission tech-
24 nologies, including composite conductor mate-
25 rials, advanced protection devices, controllers,

1 and other cost-effective methods and tech-
2 nologies;

3 (E) the use of superconducting materials
4 in power delivery equipment such as trans-
5 mission and distribution cables, transformers,
6 and generators;

7 (F) energy management technologies for
8 enterprises with aggregated loads and distrib-
9 uted generation, such as power parks;

10 (G) economic and system models to meas-
11 ure the costs and benefits of improved system
12 performance;

13 (H) hybrid distributed energy systems to
14 optimize two or more distributed or on-site gen-
15 eration technologies; and

16 (I) real-time transmission and distribution
17 system control technologies that provide for
18 continual exchange of information between gen-
19 eration, transmission, distribution, and end-user
20 facilities.

21 (c) SPECIAL PROJECTS.—In carrying out this sec-
22 tion, the Secretary shall demonstrate—

23 (1) the use of advanced wind power technology,
24 biomass, geothermal energy systems, and other re-

1 newable energy technologies to assist in delivering
2 electricity to rural and remote locations; and

3 (2) the combined use of wind power and coal
4 gasification technologies.

5 (d) FINANCIAL ASSISTANCE TO RURAL AREAS.—In
6 carrying out special projects under subsection (c), the Sec-
7 retary may provide financial assistance to rural electric
8 cooperatives and other rural entities.

9 (e) AUTHORIZATION OF APPROPRIATIONS.—There
10 are authorized to be appropriated to the Secretary for car-
11 rying out research, development, demonstration, and tech-
12 nology deployment activities under this subtitle—

13 (1) \$500,000,000 for fiscal year 2003;

14 (2) \$595,000,000 for fiscal year 2004;

15 (3) \$683,000,000 for fiscal year 2005; and

16 (4) \$733,000,000 for fiscal year 2006.

17 **SEC. 1222. BIOENERGY PROGRAMS.**

18 (a) PROGRAM DIRECTION.—The Secretary shall
19 carry out research, development, demonstration, and tech-
20 nology development activities related to bioenergy, includ-
21 ing programs under paragraphs (4) and (6) of section
22 1221(b).

23 (b) AUTHORIZATION OF APPROPRIATIONS.—

24 (1) BIOPOWER ENERGY SYSTEMS.—From
25 amounts authorized under section 1221(e), there are

1 authorized to be appropriated to the Secretary for
2 biopower energy systems—

- 3 (A) \$60,300,000 for fiscal year 2003;
- 4 (B) \$69,300,000 for fiscal year 2004;
- 5 (C) \$79,600,000 for fiscal year 2005; and
- 6 (D) \$86,250,000 for fiscal year 2006.

7 (2) BIOFUELS ENERGY SYSTEMS.—From
8 amounts authorized under section 1221(e), there are
9 authorized to be appropriated to the Secretary for
10 biofuels energy systems—

- 11 (A) \$57,500,000 for fiscal year 2003;
- 12 (B) \$66,125,000 for fiscal year 2004;
- 13 (C) \$76,000,000 for fiscal year 2005; and
- 14 (D) \$81,400,000 for fiscal year 2006.

15 (3) INTEGRATED BIOENERGY RESEARCH AND
16 DEVELOPMENT.—The Secretary may use funds au-
17 thorized under paragraph (1) or (2) for programs,
18 projects, or activities that integrate applications for
19 both biopower and biofuels, including cross-cutting
20 research and development in feedstocks and eco-
21 nomic analysis.

22 **SEC. 1223. HYDROGEN RESEARCH AND DEVELOPMENT.**

23 (a) SHORT TITLE.—This section may be cited as the
24 “Hydrogen Future Act of 2002”.

1 (b) PURPOSES.—Section 102(b) of the Spark M.
2 Matsunaga Hydrogen Research, Development, and Dem-
3 onstration Act of 1990 (42 U.S.C. 12401(b)) is amended
4 by striking paragraphs (2) and (3) and inserting the fol-
5 lowing:

6 “(2) to direct the Secretary to develop a pro-
7 gram of technology assessment, information trans-
8 fer, and education in which Federal agencies, mem-
9 bers of the transportation, energy, and other indus-
10 tries, and other entities may participate;

11 “(3) to develop methods of hydrogen production
12 that minimize production of greenhouse gases, in-
13 cluding developing—

14 “(A) efficient production from non-renew-
15 able resources; and

16 “(B) cost-effective production from renew-
17 able resources such as biomass, geothermal,
18 wind, and solar energy; and

19 “(4) to foster the use of hydrogen as a major
20 energy source, including developing the use of hydro-
21 gen in—

22 “(A) isolated villages, islands, and commu-
23 nities in which other energy sources are not
24 available or are very expensive; and

1 “(B) foreign economic development, to
2 avoid environmental damage from increased fos-
3 sil fuel use.”.

4 (c) REPORT TO CONGRESS.—Section 103 of the
5 Spark M. Matsunaga Hydrogen Research, Development,
6 and Demonstration Act of 1990 (42 U.S.C. 12402) is
7 amended—

8 (1) in subsection (a), by striking “January 1,
9 1999,” and inserting “1 year after the date of enact-
10 ment of the Hydrogen Future Act of 2002, and bi-
11 ennially thereafter,”;

12 (2) in subsection (b), by striking paragraphs
13 (1) and (2) and inserting the following:

14 “(1) an analysis of hydrogen-related activities
15 throughout the United States Government to iden-
16 tify productive areas for increased intragovernmental
17 collaboration;

18 “(2) recommendations of the Hydrogen Tech-
19 nical Advisory Panel established by section 108 for
20 any improvements in the program that are needed,
21 including recommendations for additional legislation;
22 and

23 “(3) to the extent practicable, an analysis of
24 State and local hydrogen-related activities.”; and

25 (3) by adding at the end the following:

1 “(c) COORDINATION PLAN.—The report under sub-
2 section (a) shall be based on a comprehensive coordination
3 plan for hydrogen energy prepared by the Secretary in
4 consultation with other Federal agencies.”.

5 (d) HYDROGEN RESEARCH AND DEVELOPMENT.—
6 Section 104 of the Spark M. Matsunaga Hydrogen Re-
7 search, Development, and Demonstration Act of 1990 (42
8 U.S.C. 12403) is amended—

9 (1) in subsection (b)(1), by striking “market-
10 place;” and inserting “marketplace, including foreign
11 markets, particularly where an energy infrastructure
12 is not well developed;”;

13 (2) in subsection (e), by striking “this chapter”
14 and inserting “this Act”;

15 (3) by striking subsection (g) and inserting the
16 following:

17 “(g) COST SHARING.—

18 “(1) INABILITY TO FUND ENTIRE COST.—The
19 Secretary shall not consider a proposal submitted by
20 a person from industry unless the proposal contains
21 a certification that—

22 “(A) reasonable efforts to obtain non-Fed-
23 eral funding in the amount necessary to pay
24 100 percent of the cost of the project have been
25 made; and

1 “(B) non-Federal funding in that amount
2 could not reasonably be obtained.

3 “(2) NON-FEDERAL SHARE.—

4 “(A) IN GENERAL.—The Secretary shall
5 require a commitment from non-Federal
6 sources of at least 25 percent of the cost of the
7 project.

8 “(B) REDUCTION OR ELIMINATION.—The
9 Secretary may reduce or eliminate the cost-
10 sharing requirement under subparagraph (A)
11 for the proposed research and development
12 project, including for technical analyses, eco-
13 nomic analyses, outreach activities, and edu-
14 cational programs, if the Secretary determines
15 that reduction or elimination is necessary to
16 achieve the objectives of this Act.

17 (4) in subsection (i), by striking “this chapter”
18 and inserting “this Act”.

19 (e) DEMONSTRATIONS.—Section 105 of the Spark M.
20 Matsunaga Hydrogen Research, Development, and Dem-
21 onstration Act of 1990 (42 U.S.C. 12404) is amended by
22 striking subsection (c) and inserting the following:

23 “(c) NON-FEDERAL SHARE.—

24 “(1) IN GENERAL.—Except as provided in para-
25 graph (2), the Secretary shall require a commitment

1 from non-Federal sources of at least 50 percent of
2 the costs directly relating to a demonstration project
3 under this section.

4 “(2) REDUCTION.—The Secretary may reduce
5 the non-Federal requirement under paragraph (1) if
6 the Secretary determines that the reduction is ap-
7 propriate considering the technological risks involved
8 in the project and is necessary to meet the objectives
9 of this Act.”.

10 (f) TECHNOLOGY TRANSFER.—Section 106 of the
11 Spark M. Matsunaga Hydrogen Research, Development,
12 and Demonstration Act of 1990 (42 U.S.C. 12405) is
13 amended—

14 (1) in subsection (a)—

15 (A) in the first sentence—

16 (i) by striking “The Secretary shall
17 conduct a program designed to accelerate
18 wider application” and inserting the fol-
19 lowing:

20 “(1) IN GENERAL.—The Secretary shall con-
21 duct a program designed to—

22 “(A) accelerate wider application”; and

23 (ii) by striking “private sector” and
24 inserting “private sector; and

1 “(B) accelerate wider application of hydro-
2 gen technologies in foreign countries to increase
3 the global market for the technologies and fos-
4 ter global economic development without harm-
5 ful environmental effects.”; and

6 (B) in the second sentence, by striking
7 “The Secretary” and inserting the following:

8 “(2) ADVICE AND ASSISTANCE.—The Sec-
9 retary”; and

10 (2) in subsection (b)—

11 (A) in paragraph (2), by redesignating
12 subparagraphs (A) through (D) as clauses (i)
13 through (iv), respectively, and indenting appro-
14 priately;

15 (B) by redesignating paragraphs (1) and
16 (2) as subparagraphs (A) and (B), respectively,
17 and indenting appropriately;

18 (C) by striking “The Secretary, in” and in-
19 serting the following:

20 “(1) IN GENERAL.—The Secretary, in”;

21 (D) by striking “The information” and in-
22 serting the following:

23 “(2) ACTIVITIES.—The information”; and

24 (E) in paragraph (1) (as designated by
25 subparagraph (C))—

1 (i) in subparagraph (A) (as redesignated by subparagraph (B)), by striking
2 “an inventory” and inserting “an update
3 of the inventory”; and

4 (ii) in subparagraph (B) (as redesignated by subparagraph (B)), by striking
5 “develop” and all that follows through “to
6 improve” and inserting “develop with the
7 National Aeronautics and Space Administration, the Department of Energy, other
8 Federal agencies as appropriate, and industry, an information exchange program
9 to improve”.

10 (g) TECHNICAL PANEL REVIEW.—

11 (1) IN GENERAL.—Section 108 of the Spark M.
12 Matsunaga Hydrogen Research, Development, and
13 Demonstration Act of 1990 (42 U.S.C. 12407) is
14 amended—

15 (A) in subsection (b)—

16 (i) by striking “(b) MEMBERSHIP.—
17 The technical panel shall be appointed”
18 and inserting the following:

19 “(b) MEMBERSHIP.—
20
21
22
23

1 “(1) IN GENERAL.—The technical panel shall
2 be comprised of not fewer than 9 nor more than 15
3 members appointed”;

4 (ii) by striking the second sentence
5 and inserting the following:

6 “(2) TERMS.—

7 “(A) IN GENERAL.—The term of a mem-
8 ber of the technical panel shall be not more
9 than 3 years.

10 “(B) STAGGERED TERMS.—The Secretary
11 may appoint members of the technical panel in
12 a manner that allows the terms of the members
13 serving at any time to expire at spaced intervals
14 so as to ensure continuity in the functioning of
15 the technical panel.

16 “(C) REAPPOINTMENT.—A member of the
17 technical panel whose term expires may be re-
18 appointed.”; and

19 (iii) by striking “The technical panel
20 shall have a chairman,” and inserting the
21 following:

22 “(3) CHAIRPERSON.—The technical panel shall
23 have a chairperson,”; and

24 (B) in subsection (d)—

1 (i) in the matter preceding paragraph
2 (1), by striking “the following items”;

3 (ii) in paragraph (1), by striking
4 “and” at the end;

5 (iii) in paragraph (2), by striking the
6 period at the end and inserting “; and”;
7 and

8 (iv) by adding at the end the fol-
9 lowing:

10 “(3) the plan developed by the interagency task
11 force under section 202(b) of the Hydrogen Future
12 Act of 1996.”.

13 (2) NEW APPOINTMENTS.—Not later than 180
14 days after the date of enactment of this Act, the
15 Secretary—

16 (A) shall review the membership composi-
17 tion of the Hydrogen Technical Advisory Panel;
18 and

19 (B) may appoint new members consistent
20 with the amendments made by subsection (a).

21 (h) AUTHORIZATION OF APPROPRIATIONS.—Section
22 109 of the Spark M. Matsunaga Hydrogen Research, De-
23 velopment, and Demonstration Act of 1990 (42 U.S.C.
24 12408) is amended—

25 (1) in paragraph (8), by striking “and”;

1 (2) in paragraph (9), by striking the period and
2 inserting a semicolon; and

3 (3) by adding at the end the following:

4 “(10) \$65,000,000 for fiscal year 2003;

5 “(11) \$70,000,000 for fiscal year 2004;

6 “(12) \$75,000,000 for fiscal year 2005; and

7 “(13) \$80,000,000 for fiscal year 2006.”.

8 (i) FUEL CELLS.—

9 (1) INTEGRATION OF FUEL CELLS WITH HY-
10 DROGEN PRODUCTION SYSTEMS.—Section 201 of the
11 Hydrogen Future Act of 1996 is amended—

12 (A) in subsection (a)—

13 (i) by striking “(a) Not later than 180
14 days after the date of enactment of this
15 section, and subject” and inserting “(a) IN
16 GENERAL.—Subject”; and

17 (B) by striking “with—” and all that fol-
18 lows and inserting “into Federal, State, and
19 local government facilities for stationary and
20 transportation applications.”;

21 (2) in subsection (b), by striking “gas is” and
22 inserting “basis”;

23 (3) in subsection (c)(2), by striking “systems
24 described in subsections (a)(1) and (a)(2)” and in-
25 serting “projects proposed”; and

1 (4) by striking subsection (d) and inserting the
2 following:

3 “(d) NON-FEDERAL SHARE.—

4 “(1) IN GENERAL.—Except as provided in para-
5 graph (2), the Secretary shall require a commitment
6 from non-Federal sources of at least 50 percent of
7 the costs directly relating to a demonstration project
8 under this section.

9 “(2) REDUCTION.—The Secretary may reduce
10 the non-Federal requirement under paragraph (1) if
11 the Secretary determines that the reduction is ap-
12 propriate considering the technological risks involved
13 in the project and is necessary to meet the objectives
14 of this Act.”.

15 (2) COOPERATIVE AND COST-SHARING AGREE-
16 MENTS; INTEGRATION OF TECHNICAL INFORMA-
17 TION.—Title II of the Hydrogen Future Act of 1996
18 (42 U.S.C. 12403 note; Public Law 104–271) is
19 amended by striking section 202 and inserting the
20 following:

21 **“SEC. 202. INTERAGENCY TASK FORCE.**

22 “(a) ESTABLISHMENT.—Not later than 120 days
23 after the date of enactment of this section, the Secretary
24 shall establish an interagency task force led by a Deputy

1 Assistant Secretary of the Department of Energy and
2 comprised of representatives of—

3 “(1) the Office of Science and Technology Pol-
4 icy;

5 “(2) the Department of Transportation;

6 “(3) the Department of Defense;

7 “(4) the Department of Commerce (including
8 the National Institute for Standards and Tech-
9 nology);

10 “(5) the Environmental Protection Agency;

11 “(6) the National Aeronautics and Space Ad-
12 ministration; and

13 “(7) other agencies as appropriate.

14 “(b) DUTIES.—

15 “(1) IN GENERAL.—The task force shall de-
16 velop a plan for carrying out this title.

17 “(2) FOCUS OF PLAN.—The plan shall focus on
18 development and demonstration of integrated sys-
19 tems and components for—

20 “(A) hydrogen production, storage, and
21 use in Federal, State, and local government
22 buildings and vehicles;

23 “(B) hydrogen-based infrastructure for
24 buses and other fleet transportation systems
25 that include zero-emission vehicles; and

1 “(C) hydrogen-based distributed power
2 generation, including the generation of com-
3 bined heat, power, and hydrogen.

4 **“SEC. 203. COOPERATIVE AND COST-SHARING AGREE-**
5 **MENTS.**

6 “The Secretary shall enter into cooperative and cost-
7 sharing agreements with Federal, State, and local agencies
8 for participation by the agencies in demonstrations at fa-
9 cilities administered by the agencies, with the aim of inte-
10 grating high efficiency hydrogen systems using fuel cells
11 into the facilities to provide immediate benefits and pro-
12 mote a smooth transition to hydrogen as an energy source.

13 **“SEC. 204. INTEGRATION AND DISSEMINATION OF TECH-**
14 **NICAL INFORMATION.**

15 “The Secretary shall—

16 “(1) integrate all the technical information that
17 becomes available as a result of development and
18 demonstration projects under this title;

19 “(2) make the information available to all Fed-
20 eral and State agencies for dissemination to all in-
21 terested persons; and

22 “(3) foster the exchange of generic, nonpropri-
23 etary information and technology developed under
24 this title among industry, academia, and Federal,
25 State, and local governments, to help the United

1 States economy attain the economic benefits of the
2 information and technology.

3 **“SEC. 205. AUTHORIZATION OF APPROPRIATIONS.**

4 “There are authorized to be appropriated, for activi-
5 ties under this title—

6 “(1) \$25,000,000 for fiscal year 2003;

7 “(2) \$30,000,000 for fiscal year 2004;

8 “(3) \$35,000,000 for fiscal year 2005; and

9 “(4) \$40,000,000 for fiscal year 2006.”.

10 **Subtitle C—Fossil Energy**

11 **SEC. 1231. ENHANCED FOSSIL ENERGY RESEARCH AND DE-**
12 **VELOPMENT.**

13 (a) PROGRAM DIRECTION.—The Secretary shall con-
14 duct a balanced energy research, development, demonstra-
15 tion, and technology deployment program to enhance fossil
16 energy.

17 (b) PROGRAM GOALS.—

18 (1) CORE FOSSIL RESEARCH AND DEVEL-
19 OPMENT.—The goals of the core fossil research
20 and development program shall be to reduce
21 emissions from fossil fuel use by developing
22 technologies, including precombustion tech-
23 nologies, by 2015 with the capability of
24 realizing—

1 (A) electricity generating efficiencies of 60
2 percent for coal and 75 percent for natural gas;

3 (B) combined heat and power thermal effi-
4 ciencies of more than 85 percent;

5 (C) fuels utilization efficiency of 75 per-
6 cent for the production of liquid transportation
7 fuels from coal;

8 (D) near zero emissions of mercury and of
9 emissions that form fine particles, smog, and
10 acid rain;

11 (E) reduction of carbon dioxide emissions
12 by at least 40 percent through efficiency im-
13 provements and 100 percent with sequestration;
14 and

15 (F) improved reliability, efficiency, reduc-
16 tions of air pollutant emissions, or reductions in
17 solid waste disposal requirements.

18 (2) OFFSHORE OIL AND NATURAL GAS RE-
19 SOURCES.—The goal of the offshore oil and natural
20 gas resources program shall be to develop tech-
21 nologies to—

22 (A) extract methane hydrates in coastal
23 waters of the United States, and

1 (B) develop natural gas and oil reserves in
2 the ultra-deepwater of the Central and Western
3 Gulf of Mexico.

4 (3) ONSHORE OIL AND NATURAL GAS RE-
5 SOURCES.—The goal of the onshore oil and natural
6 gas resources program shall be to advance the
7 science and technology available to domestic onshore
8 petroleum producers, particularly independent opera-
9 tors, through—

10 (A) advances in technology for exploration
11 and production of domestic petroleum re-
12 sources, particularly those not accessible with
13 current technology;

14 (B) improvement in the ability to extract
15 hydrocarbons from known reservoirs and classes
16 of reservoirs; and

17 (C) development of technologies and prac-
18 tices that reduce the threat to the environment
19 from petroleum exploration and production and
20 decrease the cost of effective environmental
21 compliance.

22 (4) TRANSPORTATION FUELS.—The goals of
23 the transportation fuels program shall be to increase
24 the price elasticity of oil supply and demand by fo-
25 cusing research on—

1 (A) reducing the cost of producing trans-
2 portation fuels from coal and natural gas; and

3 (B) indirect liquefaction of coal and bio-
4 mass.

5 (c) AUTHORIZATION OF APPROPRIATIONS.—

6 (1) IN GENERAL.—There are authorized to be
7 appropriated to the Secretary for carrying out re-
8 search, development, demonstration, and technology
9 deployment activities under this section—

10 (A) \$485,000,000 for fiscal year 2003;

11 (B) \$508,000,000 for fiscal year 2004;

12 (C) \$532,000,000 for fiscal year 2005; and

13 (D) \$558,000,000 for fiscal year 2006.

14 (2) LIMITS ON USE OF FUNDS.—

15 (A) None of the funds authorized in para-
16 graph (1) may be used for—

17 (i) Fossil energy environmental res-
18 toration;

19 (ii) Import/export authorization;

20 (iii) Program direction; or

21 (iv) General plant projects.

22 (B) COAL-BASED PROJECTS.—The coal-
23 based projects funded under this section shall
24 be consistent with the goals in subsection (b).

25 The program shall emphasize carbon capture

1 and sequestration technologies and gasification
2 technologies, including gasification combined
3 cycle, gasification fuel cells, gasification co-pro-
4 duction, hybrid gasification/combustion, or
5 other technology with the potential to address
6 the goals in subparagraphs (D) or (E) of sub-
7 section (b)(1).

8 **SEC. 1232. POWER PLANT IMPROVEMENT INITIATIVE.**

9 (a) PROGRAM DIRECTION.—The Secretary shall con-
10 duct a balanced energy research, development, demonstra-
11 tion, and technology deployment program to demonstrate
12 commercial applications of advanced lignite and coal-based
13 technologies applicable to new or existing power plants (in-
14 cluding co-production plants) that advance the efficiency,
15 environmental performance, and cost-competitiveness sub-
16 stantially beyond technologies that are in operation or
17 have been demonstrated by the date of enactment of this
18 subtitle.

19 (b) TECHNICAL MILESTONES.—

20 (1) IN GENERAL.—The Secretary shall set tech-
21 nical milestones specifying efficiency and emissions
22 levels that projects shall be designed to achieve. The
23 milestones shall become more restrictive over the life
24 of the program.

1 (2) 2010 EFFICIENCY MILESTONES.—The mile-
2 stones shall be designed to achieve by 2010 interim
3 thermal efficiency of—

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

5 Btu;

6 (B) 44 percent for coal of 7,000 to 9,000

7 Btu; and (C) 42 percent for coal of less than

8 7,000 Btu.

9 (3) 2020 EFFICIENCY MILESTONES.—The mile-
10 stones shall be designed to achieve by 2020 thermal
11 efficiency of—

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

13 Btu;

14 (B) 59 percent for coal of 7,000 to 9,000

15 Btu; and

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

17 Btu.

18 (4) EMISSIONS MILESTONES.—The milestones
19 shall include near zero emissions of mercury and
20 greenhouse gases and of emissions that form fine
21 particles, smog, and acid rain.

22 (5) REGIONAL AND QUALITY DIFFERENCES.—
23 The Secretary may consider regional and quality dif-
24 ferences in developing the efficiency milestones.

1 (c) PROJECT CRITERIA.—The demonstration activi-
2 ties proposed to be conducted at a new or existing coal-
3 based electric generation unit having a nameplate rating
4 of not less than 100 megawatts, excluding a co-production
5 plant, shall include at least one of the following—

6 (1) a means of recycling or reusing a significant
7 portion of coal combustion wastes produced by coal-
8 based generating units, excluding practices that are
9 commercially available by the date of enactment of
10 this subtitle;

11 (2) a means of capture and sequestering emis-
12 sions, including greenhouse gases, in a manner that
13 is more effective and substantially below the cost of
14 technologies that are in operation or that have been
15 demonstrated by the date of enactment of this sub-
16 title;

17 (3) a means of controlling sulfur dioxide and ni-
18 trogen oxide or mercury in a manner that improves
19 environmental performance beyond technologies that
20 are in operation or that have been demonstrated by
21 the date of enactment of this subtitle, and

22 (A) in the case of an existing unit, achieve
23 an overall thermal design efficiency improve-
24 ment compared to the efficiency of the unit as
25 operated, of not less than—

1 (i) 7 percent for coal of more than
2 9,000 Btu;

3 (ii) 6 percent for coal of 7,000 to
4 9,000 Btu; or

5 (iii) 4 percent for coal of less than
6 7,000 Btu; or

7 (B) in the case of a new unit, achieve the
8 efficiency milestones set for in subsection (b)
9 compared to the efficiency of a typical unit as
10 operated on the date of enactment of this sub-
11 title, before any retrofit, repowering, replace-
12 ment, or installation.

13 (d) STUDY.—The Secretary, in consultation with the
14 Administrator of the Environmental Protection Agency,
15 the Secretary of the Interior, and interested entities (in-
16 cluding coal producers, industries using coal, organiza-
17 tions to promote coal or advanced coal technologies, envi-
18 ronmental organizations, and organizations representing
19 workers), shall conduct an assessment that identifies per-
20 formance criteria that would be necessary for coal-based
21 technologies to meet, to enable future reliance on coal in
22 an environmentally sustainable manner for electricity gen-
23 eration, use as a chemical feedstock, and use as a trans-
24 portation fuel.

25 (e) AUTHORIZATION OF APPROPRIATIONS.—

1 (1) IN GENERAL.—There are authorized to be
2 appropriated to the Secretary for carrying out activi-
3 ties under this section \$200,000,000 for each of fis-
4 cal years 2003 through 2011.

5 (2) LIMITATION ON FUNDING OF PROJECTS.—
6 Eighty percent of the funding under this section
7 shall be limited to—

8 (A) carbon capture and sequestration tech-
9 nologies; or

10 (B) gasification technologies, including
11 gasification combined cycle, gasification fuel
12 cells, gasification co-production, or hybrid gas-
13 ification/combustion, or

14 (C) other technology either by itself or in
15 conjunction with other technologies has the po-
16 tential to achieve near zero emissions.

17 **SEC. 1233. RESEARCH AND DEVELOPMENT FOR ADVANCED**
18 **SAFE AND EFFICIENT COAL MINING TECH-**
19 **NOLOGIES.**

20 (a) ESTABLISHMENT.—The Secretary of Energy
21 shall establish a cooperative research partnership involving
22 appropriate Federal agencies, coal producers, including as-
23 sociations, equipment manufacturers, universities with
24 mining engineering departments, and other relevant enti-
25 ties to—

1 Unconventional Resource Technology Advisory Com-
2 mittee established under subsection (c).

3 (2) AWARD.—The term “award” means a coop-
4 erative agreement, contract, award or other types of
5 agreement as appropriate.

6 (3) DEEPWATER.—The term “deepwater”
7 means a water depth that is greater than 200 but
8 less than 1,500 meters.

9 (4) ELIGIBLE AWARD RECIPIENT.—The term
10 “eligible award recipient” includes—

11 (A) a research institution;

12 (B) an institution of higher education;

13 (C) a corporation; and

14 (D) a managing consortium formed among
15 entities described in subparagraphs (A) through
16 (C).

17 (5) INSTITUTION OF HIGHER EDUCATION.—The
18 term “institution of higher education” has the
19 meaning given the term in section 101 of the Higher
20 Education Act of 1965 (20 U.S.C. 1001).

21 (6) MANAGING CONSORTIUM.—The term “man-
22 aging consortium” means an entity that—

23 (A) exists as of the date of enactment of
24 this section;

1 (B)(i) is an organization described in sec-
2 tion 501(c)(3) of the Internal Revenue Code of
3 1986; and

4 (ii) is exempt from taxation under section
5 501(a) of that Code;

6 (C) is experienced in planning and man-
7 aging programs in natural gas or other petro-
8 leum exploration and production research, de-
9 velopment, and demonstration; and

10 (D) has demonstrated capabilities and ex-
11 perience in representing the views and priorities
12 of industry, institutions of higher education and
13 other research institutions in formulating com-
14 prehensive research and development plans and
15 programs.

16 (7) PROGRAM.—The term “program” means
17 the program of research, development, and dem-
18 onstration established under subsection (b)(1)(A).

19 (8) ULTRA-DEEPWATER.—The term “ultra-
20 deepwater” means a water depth that is equal to or
21 greater than 1,500 meters.

22 (9) ULTRA-DEEPWATER ARCHITECTURE.—The
23 term “ultra-deepwater architecture” means the inte-
24 gration of technologies to explore and produce nat-

1 ural gas or petroleum products located at ultra-deep-
2 water depths.

3 (10) ULTRA-DEEPWATER RESOURCE.—The
4 term “ultra-deepwater resource” means natural gas
5 or any other petroleum resource (including methane
6 hydrate) located in an ultra-deepwater area.

7 (11) UNCONVENTIONAL RESOURCE.—The term
8 “unconventional resource” means natural gas or any
9 other petroleum resource located in a formation on
10 physically or economically inaccessible land currently
11 available for lease for purposes of natural gas or
12 other petroleum exploration or production.

13 (b) ULTRA-DEEPWATER AND UNCONVENTIONAL EX-
14 PLORATION AND PRODUCTION PROGRAM.—

15 (1) ESTABLISHMENT.—

16 (A) IN GENERAL.—The Secretary shall es-
17 tablish a program of research into, and develop-
18 ment and demonstration of, ultra-deepwater re-
19 source and unconventional resource exploration
20 and production technologies.

21 (B) LOCATION; IMPLEMENTATION.—The
22 program under this subsection shall be carried
23 out—

- 1 (i) in areas on the outer Continental
2 Shelf that, as of the date of enactment of
3 this section, are available for leasing; and
4 (ii) on unconventional resources.

5 (2) COMPONENTS.—The program shall include
6 one or more programs for long-term research into—

- 7 (A) new deepwater ultra-deepwater re-
8 source and unconventional resource exploration
9 and production technologies; or
10 (B) environmental mitigation technologies
11 for production of ultra-deepwater resource and
12 unconventional resource.

13 (c) ADVISORY COMMITTEE.—

14 (1) ESTABLISHMENT.—Not later than 30 days
15 after the date of enactment of this section, the Sec-
16 retary shall establish an advisory committee to be
17 known as the “Ultra-Deepwater and Unconventional
18 Resource Technology Advisory Committee”.

19 (2) MEMBERSHIP.—

20 (A) COMPOSITION.—Subject to subpara-
21 graph (B), the advisory committee shall be com-
22 posed of 7 members appointed by the Secretary
23 that—

- 24 (i) have extensive operational knowl-
25 edge of and experience in the natural gas

1 and other petroleum exploration and pro-
2 duction industry; and

3 (ii) are not Federal employees or em-
4 ployees of contractors to a federal agency.

5 (B) EXPERTISE.—Of the members of the
6 advisory committee appointed under subpara-
7 graph (A)—

8 (i) at least 4 members shall have ex-
9 tensive knowledge of ultra-deepwater re-
10 source exploration and production tech-
11 nologies;

12 (ii) at least 3 members shall have ex-
13 tensive knowledge of unconventional re-
14 source exploration and production tech-
15 nologies.

16 (3) DUTIES.—The advisory committee shall ad-
17 vise the Secretary in the implementation of this sec-
18 tion.

19 (4) COMPENSATION.—A member of the advi-
20 sory committee shall serve without compensation but
21 shall receive travel expenses, including per diem in
22 lieu of subsistence, in accordance with applicable
23 provisions under subchapter I of chapter 57 of title
24 5, United States Code.

25 (d) AWARDS.—

1 (1) TYPES OF AWARDS.—

2 (A) ULTRA-DEEPWATER RESOURCES.—

3 (i) IN GENERAL.—The Secretary shall
4 make awards for research into, and devel-
5 opment and demonstration of, ultra-deep-
6 water resource exploration and production
7 technologies—

8 (I) to maximize the value of the
9 ultra-deepwater resources of the
10 United States;

11 (II) to increase the supply of
12 ultra-deepwater resources by lowering
13 the cost and improving the efficiency
14 of exploration and production of such
15 resources; and

16 (III) to improve safety and mini-
17 mize negative environmental impacts
18 of that exploration and production.

19 (ii) ULTRA-DEEPWATER ARCHITEC-
20 TURE.—In furtherance of the purposes de-
21 scribed in clause (i), the Secretary shall,
22 where appropriate, solicit proposals from a
23 managing consortium to develop and dem-
24 onstrate next-generation architecture for
25 ultra-deepwater resource production.

1 (B) UNCONVENTIONAL RESOURCES.—The
2 Secretary shall make awards—

3 (i) to carry out research into, and de-
4 velopment and demonstration of, tech-
5 nologies to maximize the value of uncon-
6 ventional resources; and

7 (ii) to develop technologies to
8 simultaneously—

9 (I) increase the supply of uncon-
10 ventional resources by lowering the
11 cost and improving the efficiency of
12 exploration and production of uncon-
13 ventional resources; and

14 (II) improve safety and minimize
15 negative environmental impacts of
16 that exploration and production.

17 (2) CONDITIONS.—An award made under this
18 subsection shall be subject to the following condi-
19 tions:

20 (A) MULTIPLE ENTITIES.—If an award re-
21 cipient is composed of more than one eligible
22 organization, the recipient shall provide a
23 signed contract, agreed to by all eligible organi-
24 zations comprising the award recipient, that de-
25 fines, in a manner that is consistent with all

1 applicable law in effect as of the date of the
2 contract, all rights to intellectual property for—

3 (i) technology in existence as of that
4 date; and

5 (ii) future inventions conceived and
6 developed using funds provided under the
7 award.

8 (B) COMPONENTS OF APPLICATION.—An
9 application for an award for a demonstration
10 project shall describe with specificity any in-
11 tended commercial applications of the tech-
12 nology to be demonstrated.

13 (C) COST SHARING.—Non-federal cost
14 sharing shall be in accordance with section
15 1403.

16 (e) PLAN AND FUNDING.—

17 (1) IN GENERAL.—The Secretary, and where
18 appropriate, a managing consortium under sub-
19 section (d)(1)(A)(ii), shall formulate annual oper-
20 ating and performance objectives, develop multi-year
21 technology roadmaps, and establish research and de-
22 velopment priorities for the funding of activities
23 under this section which will serve as guidelines for
24 making awards including cost-matching objectives.

1 (2) INDUSTRY INPUT.—In carrying out this
2 program, the Secretary shall promote maximum in-
3 dustry input through the use of managing consortia
4 or other organizations in planning and executing the
5 research areas and conducting workshops or reviews
6 to ensure that this program focuses on industry
7 problems and needs.

8 (f) AUDITING.—

9 (1) IN GENERAL.—The Secretary shall retain
10 an independent, commercial auditor to determine the
11 extent to which funds authorized by this section,
12 provided through a managing consortium, are ex-
13 pended in a manner consistent with the purposes of
14 this section.

15 (2) REPORTS.—The auditor retained under
16 paragraph (1) shall submit to the Secretary, and the
17 Secretary shall transmit to the appropriate congres-
18 sional committees, an annual report that describes—

19 (A) the findings of the auditor under para-
20 graph (1); and

21 (B) a plan under which the Secretary may
22 remedy any deficiencies identified by the audi-
23 tor.

1 (g) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated to the Secretary such
3 sums as may be necessary to carry out this section.

4 (h) TERMINATION OF AUTHORITY.—The authority
5 provided by this section shall terminate on September 30,
6 2009.

7 (i) SAVINGS PROVISION.—Nothing in this section is
8 intended to displace, duplicate or diminish any previously
9 authorized research activities of the Department of En-
10 ergy.

11 **SEC. 1235. RESEARCH AND DEVELOPMENT FOR NEW NAT-**
12 **URAL GAS TRANSPORTATION TECH-**
13 **NOLOGIES.**

14 The Secretary of Energy shall conduct a comprehen-
15 sive five-year program for research, development and dem-
16 onstration to improve the reliability, efficiency, safety and
17 integrity of the natural gas transportation and distribu-
18 tion infrastructure and for distributed energy resources
19 (including microturbines, fuel cells, advanced engine-gen-
20 erators, gas turbines, reciprocating engines, hybrid power
21 generation systems, and all ancillary equipment for dis-
22 patch, control and maintenance).

1 **SEC. 1236. AUTHORIZATION OF APPROPRIATIONS FOR OF-**
2 **FICE OF ARCTIC ENERGY.**

3 There are authorized to be appropriated to the Sec-
4 retary for the Office of Arctic Energy under section 3197
5 of the Floyd D. Spence National Defense Authorization
6 Act for Fiscal Year 2001 (Public Law 106–398) such
7 sums as may be necessary, but not to exceed \$25,000,000
8 for each of fiscal years 2003 through 2011.

9 **Subtitle D—Nuclear Energy**

10 **SEC. 1241. ENHANCED NUCLEAR ENERGY RESEARCH AND**
11 **DEVELOPMENT.**

12 (a) PROGRAM DIRECTION.—The Secretary shall con-
13 duct an energy research, development, demonstration, and
14 technology deployment program to enhance nuclear en-
15 ergy.

16 (b) PROGRAM GOALS.—The program shall—

17 (1) support research related to existing United
18 States nuclear power reactors to extend their life-
19 times and increase their reliability while optimizing
20 their current operations for greater efficiencies;

21 (2) examine advanced proliferation-resistant
22 and passively safe reactor designs, new reactor de-
23 signs with higher efficiency, lower cost, and im-
24 proved safety, proliferation-resistant and high burn-
25 up nuclear fuels, minimization of generation of ra-
26 dioactive materials, improved nuclear waste manage-

1 ment technologies, and improved instrumentation
2 science;

3 (3) attract new students and faculty to the nu-
4 clear sciences and nuclear engineering and related
5 fields (including health physics and nuclear and
6 radiochemistry) through—

7 (A) university-based fundamental research
8 for existing faculty and new junior faculty;

9 (B) support for the re-licensing of existing
10 training reactors at universities in conjunction
11 with industry; and

12 (C) completing the conversion of existing
13 training reactors with proliferation resistant
14 fuels that are low enriched and to adapt those
15 reactors to new investigative uses;

16 (4) maintain a national capability and infra-
17 structure to produce medical isotopes and ensure a
18 well trained cadre of nuclear medicine specialists in
19 partnership with industry;

20 (5) ensure that our nation has adequate capa-
21 bility to power future satellite and space missions;
22 and

23 (6) maintain, where appropriate through a
24 prioritization process, a balanced research infra-

1 structure so that future research programs can use
2 these facilities.

3 (c) AUTHORIZATION OF APPROPRIATIONS.—

4 (1) CORE NUCLEAR RESEARCH PROGRAMS.—

5 There are authorized to be appropriated to the Sec-
6 retary for carrying out research, development, dem-
7 onstration, and technology deployment activities
8 under subsection (b)(1) through (3)—

9 (A) \$100,000,000 for fiscal year 2003;

10 (B) \$110,000,000 for fiscal year 2004;

11 (C) \$120,000,000 for fiscal year 2005; and

12 (D) \$130,000,000 for fiscal year 2006.

13 (2) SUPPORTING NUCLEAR ACTIVITIES.—There

14 are authorized to be appropriated to the Secretary
15 for carrying out activities under subsection (b)(4)
16 through (6), as well as nuclear facilities management
17 and program direction—

18 (A) \$200,000,000 for fiscal year 2003;

19 (B) \$202,000,000 for fiscal year 2004;

20 (C) \$207,000,000 for fiscal year 2005; and

21 (D) \$212,000,000 for fiscal year 2006.

22 **SEC. 1242. UNIVERSITY NUCLEAR SCIENCE AND ENGINEER-**
23 **ING SUPPORT.**

24 (a) ESTABLISHMENT.—The Secretary shall support
25 a program to maintain the nation's human resource in-

1 vestment and infrastructure in the nuclear sciences and
2 engineering and related fields (including health physics
3 and nuclear and radiochemistry), consistent with depart-
4 mental missions related to civilian nuclear research and
5 development.

6 (b) DUTIES.—In carrying out the program under this
7 section, the Secretary shall—

8 (1) develop a graduate and undergraduate fel-
9 lowship program to attract new and talented stu-
10 dents;

11 (2) assist universities in recruiting and retain-
12 ing new faculty in the nuclear sciences and engineer-
13 ing through a Junior Faculty Research Initiation
14 Grant Program;

15 (3) support fundamental nuclear sciences and
16 engineering research through the Nuclear Engineer-
17 ing Education Research Program;

18 (4) encourage collaborative nuclear research be-
19 tween industry, national laboratories and universities
20 through the Nuclear Energy Research Initiative; and

21 (5) support communication and outreach re-
22 lated to nuclear science and engineering.

23 (c) MAINTAINING UNIVERSITY RESEARCH AND
24 TRAINING REACTORS AND ASSOCIATED INFRASTRUC-
25 TURE.—Activities under this section may include:

1 (1) converting research reactors to low-enrich-
2 ment fuels, upgrading operational instrumentation,
3 and sharing of reactors among universities;

4 (2) providing technical assistance, in collabora-
5 tion with the U.S. nuclear industry, in re-licensing
6 and upgrading training reactors as part of a student
7 training program;

8 (3) providing funding for reactor improvements
9 as part of a focused effort that emphasizes research,
10 training, and education.

11 (d) UNIVERSITY-NATIONAL LABORATORY INTER-
12 ACTIONS.—The Secretary shall develop—

13 (1) a sabbatical fellowship program for univer-
14 sity professors to spend extended periods of time at
15 National Laboratories in the areas of nuclear science
16 and technology; and

17 (2) a visiting scientist program in which Na-
18 tional Laboratory staff can spend time in academic
19 nuclear science and engineering departments. The
20 Secretary may provide for fellowships for students to
21 spend time at National Laboratories in the area of
22 nuclear science with a member of the Laboratory
23 staff acting as a mentor.

24 (e) OPERATING AND MAINTENANCE COSTS.—Fund-
25 ing for a research project provided under this section may

1 be used to offset a portion of the operating and mainte-
2 nance costs of a university research reactor used in the
3 research project, on a cost-shared basis with the univer-
4 sity.

5 (f) AUTHORIZATION OF APPROPRIATIONS.—From
6 amounts authorized under section 1241(c)(1), the fol-
7 lowing amounts are authorized for activities under this
8 section—

- 9 (1) \$33,000,000 for fiscal year 2003;
10 (2) \$37,900,000 for fiscal year 2004;
11 (3) \$43,600,000 for fiscal year 2005; and
12 (4) \$50,100,000 for fiscal year 2006.

13 **SEC. 1243. NUCLEAR ENERGY RESEARCH INITIATIVE.**

14 (a) ESTABLISHMENT.—The Secretary shall support
15 a Nuclear Energy Research Initiative for grants for re-
16 search relating to nuclear energy.

17 (b) AUTHORIZATION OF APPROPRIATIONS.—From
18 amounts authorized under section 1241(c), there are au-
19 thorized to be appropriated to the Secretary for activities
20 under this section such sums as are necessary for each
21 fiscal year.

22 **SEC. 1244. NUCLEAR ENERGY PLANT OPTIMIZATION PRO-**
23 **GRAM.**

24 (a) ESTABLISHMENT.—The Secretary shall support
25 a Nuclear Energy Plant Optimization Program for grants

1 to improve nuclear energy plant reliability, availability,
2 and productivity. Notwithstanding section 1403, the pro-
3 gram shall require industry cost-sharing of at least 50 per-
4 cent and be subject to annual review by the Nuclear En-
5 ergy Research Advisory Committee of the Department.

6 (b) AUTHORIZATION OF APPROPRIATIONS.—From
7 amounts authorized under section 1241(c), there are au-
8 thorized to be appropriated to the Secretary for activities
9 under this section such sums as are necessary for each
10 fiscal year.

11 **SEC. 1245. NUCLEAR ENERGY TECHNOLOGY DEVELOPMENT**
12 **PROGRAM.**

13 (a) ESTABLISHMENT.—The Secretary shall support
14 a Nuclear Energy Technology Development Program to
15 develop a technology roadmap to design and develop new
16 nuclear energy powerplants in the United States.

17 (b) GENERATION IV REACTOR STUDY.—The Sec-
18 retary shall, as part of the program under subsection (a),
19 also conduct a study of Generation IV nuclear energy sys-
20 tems, including development of a technology roadmap and
21 performance of research and development necessary to
22 make an informed technical decision regarding the most
23 promising candidates for commercial deployment. The
24 study shall examine advanced proliferation-resistant and
25 passively safe reactor designs, new reactor designs with

1 higher efficiency, lower cost and improved safety, pro-
2 liferation-resistant and high burn-up fuels, minimization
3 of generation of radioactive materials, improved nuclear
4 waste management technologies, and improved instrumen-
5 tation science. Not later than December 31, 2002, the Sec-
6 retary shall submit to Congress a report describing the
7 results of the study.

8 (c) AUTHORIZATION OF APPROPRIATIONS.—From
9 amounts authorized to be appropriated under section
10 1241(c), there are authorized to be appropriated to the
11 Secretary for activities under this section such sums as
12 are necessary for each fiscal year.

13 **Subtitle E—Fundamental Energy**
14 **Science**

15 **SEC. 1251. ENHANCED PROGRAMS IN FUNDAMENTAL EN-**
16 **ERGY SCIENCE.**

17 (a) PROGRAM DIRECTION.—The Secretary, acting
18 through the Office of Science, shall—

19 (1) conduct a comprehensive program of funda-
20 mental research, including research on chemical
21 sciences, physics, materials sciences, biological and
22 environmental sciences, geosciences, engineering
23 sciences, plasma sciences, mathematics, and ad-
24 vanced scientific computing;

1 (2) maintain, upgrade and expand the scientific
2 user facilities maintained by the Office of Science
3 and ensure that they are an integral part of the de-
4 partmental mission for exploring the frontiers of
5 fundamental science;

6 (3) maintain a leading-edge research capability
7 in the energy-related aspects of nanoscience and
8 nanotechnology, advanced scientific computing and
9 genome research; and

10 (4) ensure that its fundamental science pro-
11 grams, where appropriate, help inform the applied
12 research and development programs of the Depart-
13 ment.

14 (b) AUTHORIZATION OF APPROPRIATIONS.—There
15 are authorized to be appropriated to the Secretary for car-
16 rying out research, development, demonstration, and tech-
17 nology deployment activities under this subtitle—

18 (1) \$3,785,000,000 for fiscal year 2003;

19 (2) \$4,153,000,000 for fiscal year 2004;

20 (3) \$4,586,000,000 for fiscal year 2005; and

21 (4) \$5,000,000,000 for fiscal year 2006.

22 **SEC. 1252. NANOSCALE SCIENCE AND ENGINEERING RE-**
23 **SEARCH.**

24 (a) ESTABLISHMENT.—The Secretary, acting
25 through the Office of Science, shall support a program of

1 research and development in nanoscience and
2 nanoengineering consistent with the Department's statu-
3 tory authorities related to research and development. The
4 program shall include efforts to further the understanding
5 of the chemistry, physics, materials science and engineer-
6 ing of phenomena on the scale of 1 to 100 nanometers.

7 (b) DUTIES OF THE OFFICE OF SCIENCE.—In car-
8 rying out the program under this section, the Office of
9 Science shall—

10 (1) support both individual investigators and
11 multidisciplinary teams of investigators;

12 (2) pursuant to subsection (c), develop, plan,
13 construct, acquire, or operate special equipment or
14 facilities for the use of investigators conducting re-
15 search and development in nanoscience and
16 nanoengineering;

17 (3) support technology transfer activities to
18 benefit industry and other users of nanoscience and
19 nanoengineering; and

20 (4) coordinate research and development activi-
21 ties with industry and other federal agencies.

22 (c) NANOSCIENCE AND NANOENGINEERING RE-
23 SEARCH CENTERS AND MAJOR INSTRUMENTATION.—

24 (1) AUTHORIZATION.—From amounts author-
25 ized to be appropriated under section 1251(b), the

1 amounts specified under subsection (d)(2) shall, sub-
2 ject to appropriations, be available for projects to
3 develop, plan, construct, acquire, or operate special
4 equipment, instrumentation, or facilities for inves-
5 tigators conducting research and development in
6 nanoscience and nanoengineering.

7 (2) PROJECTS.—Projects under paragraph (1)
8 may include the measurement of properties at the
9 scale of 1 to 100 nanometers, manipulation at such
10 scales, and the integration of technologies based on
11 nanoscience or nanoengineering into bulk materials
12 or other technologies.

13 (3) FACILITIES.—Facilities under paragraph
14 (1) may include electron microcharacterization facili-
15 ties, microlithography facilities, scanning probe fa-
16 cilities and related instrumentation science.

17 (4) COLLABORATION.—The Secretary shall en-
18 courage collaborations among universities, labora-
19 tories and industry at facilities under this sub-
20 section. At least one facility under this subsection
21 shall have a specific mission of technology transfer
22 to other institutions and to industry.

23 (d) AUTHORIZATION OF APPROPRIATIONS.—

24 (1) TOTAL AUTHORIZATION.—From amounts
25 authorized to be appropriated under section 1251(b),

1 the following amounts are authorized for activities
2 under this section—

- 3 (A) \$270,000,000 for fiscal year 2003;
- 4 (B) \$290,000,000 for fiscal year 2004;
- 5 (C) \$310,000,000 for fiscal year 2005; and
- 6 (D) \$330,000,000 for fiscal year 2006.

7 (2) NANOSCIENCE AND NANOENGINEERING RE-
8 SEARCH CENTERS AND MAJOR INSTRUMENTA-
9 TION.—Of the amounts under paragraph (1), the
10 following amounts are authorized to carry out sub-
11 section (c)—

- 12 (A) \$135,000,000 for fiscal year 2003;
- 13 (B) \$150,000,000 for fiscal year 2004;
- 14 (C) \$120,000,000 for fiscal year 2005; and
- 15 (D) \$100,000,000 for fiscal year 2006.

16 **SEC. 1253. ADVANCED SCIENTIFIC COMPUTING FOR EN-**
17 **ERGY MISSIONS.**

18 (a) ESTABLISHMENT.—The Secretary, acting
19 through the Office of Science, shall support a program to
20 advance the Nation's computing capability across a diverse
21 set of grand challenge computationally based science prob-
22 lems related to departmental missions.

23 (b) DUTIES OF THE OFFICE OF SCIENCE.—In car-
24 rying out the program under this section, the Office of
25 Science shall—

1 (1) advance basic science through computation
2 by developing software to solve grand challenge
3 science problems on new generations of computing
4 platforms,

5 (2) enhance the foundations for scientific com-
6 puting by developing the basic mathematical and
7 computing systems software needed to take full ad-
8 vantage of the computing capabilities of computers
9 with peak speeds of 100 teraflops or more, some of
10 which may be unique to the scientific problem of in-
11 terest,

12 (3) enhance national collaboratory and net-
13 working capabilities by developing software to inte-
14 grate geographically separated researchers into ef-
15 fective research teams and to facilitate access to and
16 movement and analysis of large (petabyte) data sets,
17 and

18 (4) maintain a robust scientific computing
19 hardware infrastructure to ensure that the com-
20 puting resources needed to address DOE missions
21 are available; explore new computing approaches and
22 technologies that promise to advance scientific com-
23 puting.

1 (c) HIGH-PERFORMANCE COMPUTING ACT PRO-
2 GRAM.—Section 203(a) of the High-Performance Com-
3 puting Act of 1991 (15 U.S.C. 5523(a)) is amended—

4 (1) in paragraph (3), by striking “and”;

5 (2) in paragraph (4), by striking the period and
6 inserting “; and”; and

7 (3) by adding after paragraph (4) the following:

8 “(5) conduct an integrated program of research, de-
9 velopment, and provision of facilities to develop and
10 deploy to scientific and technical users the high-per-
11 formance computing and collaboration tools needed
12 to fulfill the statutory missions of the Department of
13 Energy in conducting basic and applied energy re-
14 search.”.

15 (d) COORDINATION WITH THE DOE NATIONAL NU-
16 CLEAR SECURITY AGENCY ACCELERATED STRATEGIC
17 COMPUTING INITIATIVE AND OTHER NATIONAL COM-
18 PUTING PROGRAMS.—The Secretary shall ensure that this
19 program, to the extent feasible, is integrated and con-
20 sistent with—

21 (1) the Accelerated Strategic Computing Initia-
22 tive of the National Nuclear Security Agency; and

23 (2) other national efforts related to advanced
24 scientific computing for science and engineering.

1 (e) AUTHORIZATION OF APPROPRIATIONS.—From
2 amounts authorized under section 1251(b), the following
3 amounts are authorized for activities under this section—

4 (1) \$285,000,000 for fiscal year 2003;

5 (2) \$300,000,000 for fiscal year 2004;

6 (3) \$310,000,000 for fiscal year 2005; and

7 (4) \$320,000,000 for fiscal year 2006.

8 **SEC. 1254. FUSION ENERGY SCIENCES PROGRAM AND**
9 **PLANNING.**

10 (a) OVERALL PLAN FOR FUSION ENERGY SCIENCES
11 PROGRAM.—

12 (1) IN GENERAL.—Not later than 6 months
13 after the date of enactment of this subtitle, the Sec-
14 retary, after consultation with the Fusion Energy
15 Sciences Advisory Committee, shall develop and
16 transmit to the Congress a plan to ensure a strong
17 scientific base for the Fusion Energy Sciences Pro-
18 gram within the Office of Science and to enable the
19 experiments described in subsections (b) and (c).

20 (2) OBJECTIVES OF PLAN.—The plan under
21 this subsection shall include as its objectives—

22 (A) to ensure that existing fusion research
23 facilities and equipment are more fully utilized
24 with appropriate measurements and control
25 tools;

1 (B) to ensure a strengthened fusion science
2 theory and computational base;

3 (C) to encourage and ensure that the selec-
4 tion of and funding for new magnetic and iner-
5 tial fusion research facilities is based on sci-
6 entific innovation and cost effectiveness;

7 (D) to improve the communication of sci-
8 entific results and methods between the fusion
9 science community and the wider scientific com-
10 munity;

11 (E) to ensure that adequate support is
12 provided to optimize the design of the magnetic
13 fusion burning plasma experiments referred to
14 in subsections (b) and (c); and

15 (F) to ensure that inertial confinement fu-
16 sion facilities are utilized to the extent prac-
17 ticable for the purpose of inertial fusion energy
18 research and development.

19 (b) PLAN FOR UNITED STATES FUSION EXPERI-
20 MENT.—

21 (1) IN GENERAL.—The Secretary, after con-
22 sultation with the Fusion Energy Sciences Advisory
23 Committee, shall develop a plan for construction in
24 the United States of a magnetic fusion burning plas-
25 ma experiment for the purpose of accelerating sci-

1 entific understanding of fusion plasmas. The Sec-
2 retary shall request a review of the plan by the Na-
3 tional Academy of Sciences and shall transmit the
4 plan and the review to the Congress by July 1,
5 2004.

6 (2) REQUIREMENTS OF PLAN.—The plan de-
7 scribed in paragraph (1) shall—

8 (A) address key burning plasma physics
9 issues; and

10 (B) include specific information on the sci-
11 entific capabilities of the proposed experiment,
12 the relevance of these capabilities to the goal of
13 practical fusion energy, and the overall design
14 of the experiment including its estimated cost
15 and potential construction sites.

16 (c) PLAN FOR PARTICIPATION IN AN INTER-
17 NATIONAL EXPERIMENT.—In addition to the plan de-
18 scribed in subsection (b), the Secretary, after consultation
19 with the Fusion Energy Sciences Advisory Committee,
20 may also develop a plan for United States participation
21 in an international burning plasma experiment for the
22 same purpose, whose construction is found by the Sec-
23 retary to be highly likely and where United States partici-
24 pation is cost-effective relative to the cost and scientific
25 benefits of a domestic experiment described in subsection

1 (b). If the Secretary elects to develop a plan under this
2 subsection, he shall include the information described in
3 subsection (b)(2), and an estimate of the cost of United
4 States participation in such an international experiment.
5 The Secretary shall request a review by the National
6 Academy of Sciences of a plan developed under this sub-
7 section, and shall transmit the plan and the review to the
8 Congress no later than July 1, 2004.

9 (d) AUTHORIZATION FOR RESEARCH AND DEVELOP-
10 MENT.—The Secretary, through the Office of Science,
11 may conduct any research and development necessary to
12 fully develop the plans described in this section.

13 (e) AUTHORIZATION OF APPROPRIATIONS.—From
14 amounts authorized under section 1251(b) for fiscal year
15 2003, \$335,000,000 are authorized for fiscal year 2003
16 for activities under this section and for activities of the
17 Fusion Energy Sciences Program.

18 **Subtitle F—Energy, Safety, and**
19 **Environmental Protection**

20 **SEC. 1261. CRITICAL ENERGY INFRASTRUCTURE PROTEC-**
21 **TION RESEARCH AND DEVELOPMENT.**

22 (a) IN GENERAL.—The Secretary shall carry out a
23 research, development, demonstration and technology de-
24 ployment program, in partnership with industry, on crit-
25 ical energy infrastructure protection, consistent with the

1 roles and missions outlined for the Secretary in Presi-
2 dential Decision Directive 63, entitled “Critical Infra-
3 structure Protection”. The program shall have the fol-
4 lowing goals:

5 (1) Increase the understanding of physical and
6 information system disruptions to the energy infra-
7 structure that could result in cascading or wide-
8 spread regional outages.

9 (2) Develop energy infrastructure assurance
10 “best practices” through vulnerability and risk as-
11 sessments.

12 (3) Protect against, mitigate the effect of, and
13 improve the ability to recover from disruptive inci-
14 dents within the energy infrastructure.

15 (b) PROGRAM SCOPE.—The program under sub-
16 section (a) shall include research, development, deploy-
17 ment, technology demonstration for—

18 (1) analysis of energy infrastructure inter-
19 dependencies to quantify the impacts of system
20 vulnerabilities in relation to each other;

21 (2) probabilistic risk assessment of the energy
22 infrastructure to account for unconventional and ter-
23 rorist threats;

24 (3) incident tracking and trend analysis tools to
25 assess the severity of threats and reported incidents

1 to the energy infrastructure; and (4) integrated
2 multi-sensor, warning and mitigation technologies to
3 detect, integrate, and localize events affecting the
4 energy infrastructure including real time control to
5 permit the reconfiguration of energy delivery sys-
6 tems.

7 (c) REGIONAL COORDINATION.—The program under
8 this section shall cooperate with Departmental activities
9 to promote regional coordination under section 102 of this
10 Act, to ensure that the technologies and assessments de-
11 veloped by the program are transferred in a timely manner
12 to State and local authorities, and to the energy indus-
13 tries.

14 (d) COORDINATION WITH INDUSTRY RESEARCH OR-
15 GANIZATIONS.—The Secretary may enter into grants, con-
16 tracts, and cooperative agreements with industry research
17 organizations to facilitate industry participation in re-
18 search under this section and to fulfill applicable cost-
19 sharing requirements.

20 (e) AUTHORIZATION OF APPROPRIATIONS.—There is
21 authorized to be appropriated to the Secretary to carry
22 out this section \$10,000,000 for each of fiscal years 2003
23 through 2006.

24 (f) CRITICAL ENERGY INFRASTRUCTURE FACILITY
25 DEFINED.—For purposes of this section, the term “crit-

1 ical energy infrastructure facility” means a physical or
2 cyber-based system or service for the generation, trans-
3 mission or distribution of electrical energy, or the produc-
4 tion, refining, transportation, or storage of petroleum, nat-
5 ural gas, or petroleum product, the incapacity or destruc-
6 tion of which would have a debilitating impact on the de-
7 fense or economic security of the United States. The term
8 shall not include a facility that is licensed by the Nuclear
9 Regulatory Commission under section 103 or 104b of the
10 Atomic Energy Act of 1954 (42 U.S.C. 2133 and
11 2134(b)).

12 **SEC. 1262. PIPELINE INTEGRITY, SAFETY, AND RELIABILITY**
13 **RESEARCH AND DEVELOPMENT.**

14 (a) IN GENERAL.—The Secretary of Transportation,
15 in coordination with the Secretary of Energy, shall develop
16 and implement an accelerated cooperative program of re-
17 search and development to ensure the integrity of natural
18 gas and hazardous liquid pipelines. This research and de-
19 velopment program shall include materials inspection tech-
20 niques, risk assessment methodology, and information sys-
21 tems surety.

22 (b) PURPOSE.—The purpose of the cooperative re-
23 search program shall be to promote research and develop-
24 ment to—

- 1 (1) ensure long-term safety, reliability and serv-
2 ice life for existing pipelines;
- 3 (2) expand capabilities of internal inspection
4 devices to identify and accurately measure defects
5 and anomalies;
- 6 (3) develop inspection techniques for pipelines
7 that cannot accommodate the internal inspection de-
8 vices available on the date of enactment;
- 9 (4) develop innovative techniques to measure
10 the structural integrity of pipelines to prevent pipe-
11 line failures;
- 12 (5) develop improved materials and coatings for
13 use in pipelines;
- 14 (6) improve the capability, reliability, and prac-
15 ticality of external leak detection devices;
- 16 (7) identify underground environments that
17 might lead to shortened service life;
- 18 (8) enhance safety in pipeline siting and land
19 use;
- 20 (9) minimize the environmental impact of pipe-
21 lines;
- 22 (10) demonstrate technologies that improve
23 pipeline safety, reliability, and integrity;
- 24 (11) provide risk assessment tools for opti-
25 mizing risk mitigation strategies; and

1 (12) provide highly secure information systems
2 for controlling the operation of pipelines.

3 (c) AREAS.—In carrying out this section, the Sec-
4 retary of Transportation, in coordination with the Sec-
5 retary of Energy, shall consider research and development
6 on natural gas, crude oil, and petroleum product pipelines
7 for—

8 (1) early crack, defect, and damage detection,
9 including real-time damage monitoring;

10 (2) automated internal pipeline inspection sen-
11 sor systems;

12 (3) land use guidance and set back manage-
13 ment along pipeline rights-of-way for communities;

14 (4) internal corrosion control;

15 (5) corrosion-resistant coatings;

16 (6) improved cathodic protection;

17 (7) inspection techniques where internal inspec-
18 tion is not feasible, including measurement of struc-
19 tural integrity;

20 (8) external leak detection, including portable
21 real-time video imaging technology, and the advance-
22 ment of computerized control center leak detection
23 systems utilizing real-time remote field data input;

24 (9) longer life, high strength, non-corrosive
25 pipeline materials;

1 (10) assessing the remaining strength of exist-
2 ing pipes;

3 (11) risk and reliability analysis models, to be
4 used to identify safety improvements that could be
5 realized in the near term resulting from analysis of
6 data obtained from a pipeline performance tracking
7 initiative;

8 (12) identification, monitoring, and prevention
9 of outside force damage, including satellite surveil-
10 lance; and

11 (13) any other areas necessary to ensuring the
12 public safety and protecting the environment.

13 (d) RESEARCH AND DEVELOPMENT PROGRAM
14 PLAN.—Within 240 days after the date of enactment of
15 this section, the Secretary of Transportation, in coordina-
16 tion with the Secretary of Energy and the Pipeline Integ-
17 rity Technical Advisory Committee, shall prepare and sub-
18 mit to the Congress a five-year program plan to guide ac-
19 tivities under this section. In preparing the program plan,
20 the Secretary shall consult with appropriate representa-
21 tives of the natural gas, crude oil, and petroleum product
22 pipeline industries to select and prioritize appropriate
23 project proposals. The Secretary may also seek the advice
24 of utilities, manufacturers, institutions of higher learning,
25 Federal agencies, the pipeline research institutions, na-

1 tional laboratories, State pipeline safety officials, environ-
2 mental organizations, pipeline safety advocates, and pro-
3 fessional and technical societies.

4 (e) IMPLEMENTATION.—The Secretary of Transpor-
5 tation shall have primary responsibility for ensuring the
6 five-year plan provided for in subsection (d) is imple-
7 mented as intended by this section. In carrying out the
8 research, development, and demonstration activities under
9 this section, the Secretary of Transportation and the Sec-
10 retary of Energy may use, to the extent authorized under
11 applicable provisions of law, contracts, cooperative agree-
12 ments, cooperative research and development agreements
13 under the Stevenson-Wydler Technology Innovation Act of
14 1980 (15 U.S.C. 3701 et seq.), grants, joint ventures,
15 other transactions, and any other form of agreement avail-
16 able to the Secretary consistent with the recommendations
17 of the Advisory Committee.

18 (f) REPORTS TO CONGRESS.—The Secretary of
19 Transportation shall report to the Congress annually as
20 to the status and results to date of the implementation
21 of the research and development program plan. The report
22 shall include the activities of the Departments of Trans-
23 portation and Energy, the natural laboratories, univer-
24 sities, and any other research organizations, including in-
25 dustry research organizations.

1 (g) PIPELINE INTEGRITY TECHNICAL ADVISORY
2 COMMITTEE.—

3 (1) ESTABLISHMENT.—The Secretary of Trans-
4 portation shall enter into appropriate arrangements
5 with the National Academy of Sciences to establish
6 and manage the Pipeline Integrity Technical Advi-
7 sory Committee for the purpose of advising the Sec-
8 retary of Transportation and the Secretary of En-
9 ergy on the development and implementation of the
10 research and development program plan under sub-
11 section (d). The Advisory Committee shall have an
12 ongoing role in evaluating the progress and results
13 of the research, development, and demonstration
14 carried out under this section.

15 (2) MEMBERSHIP.—The National Academy of
16 Sciences shall appoint the members of the Pipeline
17 Integrity Technical Advisory Committee after con-
18 sultation with the Secretary of Transportation and
19 the Secretary of Energy. Members appointed to the
20 Advisory Committee should have the necessary quali-
21 fications to provide technical contributions to the
22 purposes of the Advisory Committee.

23 (h) AUTHORIZATION OF APPROPRIATIONS.—

24 (1) There are authorized to be appropriated to
25 the Secretary of Transportation for carrying out this

1 section \$3,000,000, to be derived from user fees
2 under section 60301 of title 49, United States Code,
3 for each of the fiscal years 2003 through 2006.

4 (2) Of the amounts available in the Oil Spill Li-
5 ability Trust Fund established by section 9509 of
6 the Internal Revenue Code of 1986 (26 U.S.C.
7 9509), \$3,000,000 shall be transferred to the Sec-
8 retary of Transportation, as provided in appropria-
9 tion Acts, to carry out programs for detection, pre-
10 vention and mitigation of oil spills under this section
11 for each of the fiscal years 2003 through 2006.

12 (3) There are authorized to be appropriated to
13 the Secretary of Energy for carrying out this section
14 such sums as may be necessary for each of the fiscal
15 years 2003 through 2006.

16 **SEC. 1263. RESEARCH AND DEMONSTRATION FOR REMEDI-**
17 **ATION OF GROUNDWATER FROM ENERGY AC-**
18 **TIVITIES.**

19 (a) IN GENERAL.—The Secretary shall carry out a
20 research, development, demonstration, and technology de-
21 ployment program to improve methods for environmental
22 restoration of groundwater contaminated by energy activi-
23 ties, including oil and gas production, surface and under-
24 ground mining of coal, and in-situ extraction of energy
25 resources.

1 (b) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated to the Secretary to carry
3 out this section \$10,000,000 for each of fiscal years 2003
4 through 2006.

5 **TITLE XIII—CLIMATE CHANGE-**
6 **RELATED RESEARCH AND DE-**
7 **VELOPMENT**

8 **Subtitle A—Department of Energy**
9 **Programs**

10 **SEC. 1301. PROGRAM GOALS.**

11 The goals of the research, development, demonstra-
12 tion, and technology deployment programs under this sub-
13 title shall be to—

14 (1) provide a sound scientific understanding of
15 the human and natural forces that influence the
16 Earth's climate system, particularly those forces re-
17 lated to energy production and use;

18 (2) help mitigate climate change from human
19 activities related to energy production and use; and

20 (3) reduce, avoid, or sequester emissions of
21 greenhouse gases in furtherance of the goals of the
22 United National Framework Convention on Climate
23 Change, done at New York on May 9, 1992, in a
24 manner that does not result in serious harm to the
25 U.S. economy.

1 **SEC. 1302. DEPARTMENT OF ENERGY GLOBAL CHANGE**
2 **SCIENCE RESEARCH.**

3 (a) PROGRAM DIRECTION.—The Secretary, acting
4 through the Office of Science, shall conduct a comprehen-
5 sive research program to understand and address the ef-
6 fects of energy production and use on the global climate
7 system.

8 (b) PROGRAM ELEMENTS.—

9 (1) CLIMATE MODELING.—The Secretary
10 shall—

11 (A) conduct observational and analytical
12 research to acquire and interpret the data need-
13 ed to describe the radiation balance from the
14 surface of the Earth to the top of the atmos-
15 phere;

16 (B) determine the factors responsible for
17 the Earth's radiation balance and incorporate
18 improved understanding of such factors in cli-
19 mate models;

20 (C) improve the treatment of aerosols and
21 clouds in climate models;

22 (D) reduce the uncertainty in decade-to-
23 century model-based projections of climate
24 change; and

25 (E) increase the availability and utility of
26 climate change simulations to researchers and

1 policy makers interested in assessing the rela-
2 tionship between energy and climate change.

3 (2) CARBON CYCLE.—The Secretary shall—

4 (A) carry out field research and modeling
5 activities—

6 (i) to understand and document the
7 net exchange of carbon dioxide between
8 major terrestrial ecosystems and the at-
9 mosphere; or

10 (ii) to evaluate the potential of pro-
11 posed methods of carbon sequestration;

12 (B) develop and test carbon cycle models;

13 and

14 (C) acquire data and develop and test
15 models to simulate and predict the transport,
16 transformation, and fate of energy-related emis-
17 sions in the atmosphere.

18 (3) ECOLOGICAL PROCESSES.—The Secretary
19 shall carry out long-term experiments of the re-
20 sponse of intact terrestrial ecosystems to—

21 (A) alterations in climate and atmospheric
22 composition; or

23 (B) land-use changes that affect ecosystem
24 extent and function.

1 (4) INTEGRATED ASSESSMENT.—The Secretary
2 shall develop and improve methods and tools for in-
3 tegrated analyses of the climate change system from
4 emissions of aerosols and greenhouse gases to the
5 consequences of these emissions on climate and the
6 resulting effects of human-induced climate change
7 on economic and social systems, with emphasis on
8 critical gaps in integrated assessment modeling, in-
9 cluding modeling of technology innovation and diffu-
10 sion and the development of metrics of economic
11 costs of climate change and policies for mitigating or
12 adapting to climate change.

13 (c) AUTHORIZATION OF APPROPRIATIONS.—From
14 amounts authorized under section 1440(c), there are au-
15 thorized to be appropriated to the Secretary for carrying
16 out activities under this section—

- 17 (1) \$150,000,000 for fiscal year 2003;
18 (2) \$175,000,000 for fiscal year 2004;
19 (3) \$200,000,000 for fiscal year 2005; and
20 (4) \$230,000,000 for fiscal year 2006.

21 (d) LIMITATION ON FUNDS.—Funds authorized to be
22 appropriated under this section shall not be used for the
23 development, demonstration, or deployment of technology
24 to reduce, avoid, or sequester greenhouse gas emissions.

1 **SEC. 1303. AMENDMENTS TO THE FEDERAL NONNUCLEAR**
2 **RESEARCH AND DEVELOPMENT ACT OF 1974.**

3 Section 6 of the Federal Nonnuclear Energy Re-
4 search and Development Act of 1974 (42 U.S.C. 5905)
5 is amended—

6 (1) in subsection (a)—

7 (A) in paragraph (2), by striking “and” at
8 the end;

9 (B) in paragraph (3) by striking the period
10 at the end and inserting “, and”; and

11 (C) by adding at the end the following:

12 “(4) solutions to the effective management of
13 greenhouse gas emissions in the long term by the de-
14 velopment of technologies and practices designed
15 to—

16 “(A) reduce or avoid anthropogenic emis-
17 sions of greenhouse gases;

18 “(B) remove and sequester greenhouse
19 gases from emissions streams; and

20 “(C) remove and sequester greenhouse
21 gases from the atmosphere.”; and

22 (2) in subsection (b)—

23 (A) in paragraph (2), by striking “sub-
24 section (a)(1) through (3)” and inserting

25 “paragraphs (1) through (4) of subsection (a)”;
26 and

- 1 (B) in paragraph (3)—
- 2 (i) in subparagraph (R), by striking
- 3 “and” at the end;
- 4 (ii) in subparagraph (S), by striking
- 5 the period at the end and inserting “;
- 6 and”; and
- 7 (iii) by adding at the end the fol-
- 8 lowing:
- 9 “(T) to pursue a long-term climate tech-
- 10 nology strategy designed to demonstrate a vari-
- 11 ety of technologies by which stabilization of
- 12 greenhouse gases might be best achieved, in-
- 13 cluding accelerated research, development, dem-
- 14 onstration and deployment of—
- 15 “(i) renewable energy systems;
- 16 “(ii) advanced fossil energy tech-
- 17 nology;
- 18 “(iii) advanced nuclear power plant
- 19 design;
- 20 “(iv) fuel cell technology for residen-
- 21 tial, industrial and transportation applica-
- 22 tions;
- 23 “(v) carbon sequestration practices
- 24 and technologies, including agricultural

1 and forestry practices that store and se-
2 quester carbon;

3 “(vi) efficient electrical generation,
4 transmission and distribution technologies;
5 and

6 “(vii) efficient end use energy tech-
7 nologies.”.

8 **Subtitle B—Department of**
9 **Agriculture Programs**

10 **SEC. 1311. CARBON SEQUESTRATION BASIC AND APPLIED**
11 **RESEARCH.**

12 (a) BASIC RESEARCH.—

13 (1) IN GENERAL.—The Secretary of Agriculture
14 shall carry out research in the areas of soil science
15 that promote understanding of—

16 (A) the net sequestration of organic carbon
17 in soil; and

18 (B) net emissions of other greenhouse
19 bases from agriculture.

20 (2) Agricultural Research Service.—The Sec-
21 retary of Agriculture, acting through the Agricul-
22 tural Research Service, shall collaborate with other
23 Federal agencies in developing data and carrying out
24 research addressing soil carbon fluxes (losses and
25 gains) and net emissions of methane and nitrous

1 oxide from cultivation and animal management ac-
2 tivities.

3 (3) COOPERATIVE STATE RESEARCH EXTEN-
4 SION AND EDUCATION SERVICE.—

5 (A) IN GENERAL.—The Secretary of Agri-
6 culture, acting through the Cooperative State
7 Research Extension and Education Service,
8 shall establish a competitive grant program to
9 carry out research on the matters described in
10 paragraph (1) in land grant universities and
11 other research institutions.

12 (B) CONSULTATION ON RESEARCH TOP-
13 ICS.—Before issuing a request for proposals for
14 basic research under paragraph (1), the Coop-
15 erative State Research, Education, and Exten-
16 sion Service shall consult with the Agricultural
17 Research Service to ensure that proposed re-
18 search areas are complementary with and do
19 not duplicate research projects underway at the
20 Agricultural Research Service or other Federal
21 agencies.

22 (b) APPLIED RESEARCH.—

23 (1) IN GENERAL.—The Secretary of Agriculture
24 shall carry out applied research in the areas of soil

1 science, agronomy, agricultural economics and other
2 agricultural sciences to—

3 (A) promote understanding of—

4 (i) how agricultural and forestry prac-
5 tices affect the sequestration of organic
6 and inorganic carbon in soil and net emis-
7 sions of other greenhouse gases;

8 (ii) how changes in soil carbon pools
9 are cost-effectively measured, monitored,
10 and verified; and

11 (iii) how public programs and private
12 market approaches can be devised to incor-
13 porate carbon sequestration in a broader
14 societal greenhouse gas emission reduction
15 effort;

16 (B) develop methods for establishing base-
17 lines for measuring the quantities of carbon and
18 other greenhouse gases sequestered; and

19 (C) evaluate leakage and performance
20 issues.

21 (2) REQUIREMENTS.—To the maximum extent
22 practicable, applied research under paragraph (1)
23 shall—

24 (A) draw on existing technologies and
25 methods; and

1 (B) strive to provide methodologies that
2 are accessible to a nontechnical audience.

3 (3) MINIMIZATION OF ADVERSE ENVIRON-
4 MENTAL IMPACTS.—All applied research under para-
5 graph (1) shall be conducted with an emphasis on
6 minimizing adverse environmental impacts.

7 (4) NATURAL RESOURCES CONSERVATION
8 SERVICE.—The Secretary of Agriculture, acting
9 through the Natural Resources Conservation Service,
10 shall collaborate with other Federal agencies, includ-
11 ing the National Institute of Standards and Tech-
12 nology, in developing new measuring techniques and
13 equipment or adapting existing techniques and
14 equipment to enable cost-effective and accurate mon-
15 itoring and verification, for a wide range of agricul-
16 tural and forestry practices, of—

17 (A) changes in soil carbon content in agri-
18 cultural soils, plants, and trees; and

19 (B) net emissions of other greenhouse
20 gases.

21 (5) COOPERATIVE STATE RESEARCH EXTEN-
22 SION AND EDUCATION SERVICE.—

23 (A) IN GENERAL.—The Secretary of Agri-
24 culture, acting through the Cooperative State
25 Research Extension and Education Service,

1 shall establish a competitive grant program to
2 encourage research on the matters described in
3 paragraph (1) by land grant universities and
4 other research institutions.

5 (B) CONSULTATION ON RESEARCH TOP-
6 ICS.—Before issuing a request for proposals for
7 applied research under paragraph (1), the Co-
8 operative State Research, Education, and Ex-
9 tension Service shall consult with the National
10 Resources Conservation Service and the Agri-
11 cultural Research Service to ensure that pro-
12 posed research areas are complementary with
13 and do not duplicate research projects under-
14 way at the Agricultural Research Service or
15 other Federal agencies.

16 (c) RESEARCH CONSORTIA.—

17 (1) IN GENERAL.—The Secretary of Agriculture
18 may designate not more than 2 research consortia to
19 carry out research projects under this section, with
20 the requirement that the consortia propose to con-
21 duct basic, research under subsection (a) and ap-
22 plied research under subsection (b).

23 (2) SELECTION.—The consortia shall be se-
24 lected in a competitive manner by the Cooperative
25 State Research, Education, and Extension Service.

1 (3) ELIGIBLE CONSORTIUM PARTICIPANTS.—

2 Entities eligible to participate in a consortium
3 include—

4 (A) land grant colleges and universities;

5 (B) private research institutions;

6 (C) State geological surveys;

7 (D) agencies of the Department of Agri-
8 culture;

9 (E) research centers of the National Aero-
10 nautics and Space Administration and the De-
11 partment of Energy;

12 (F) other Federal agencies;

13 (G) representatives of agricultural busi-
14 nesses and organizations with demonstrated ex-
15 pertise in these areas; and

16 (H) representatives of the private sector
17 with demonstrated expertise in these areas.

18 (4) RESERVATION OF FUNDING.—If the Sec-
19 retary of Agriculture designates 1 or 2 consortia, the
20 Secretary of Agriculture shall reserve for research
21 projects carried out by the consortium or consortia
22 not more than 25 percent of the amounts made
23 available to carry out this section for a fiscal year.

24 (d) STANDARDS OF PRECISION.—

1 (1) CONFERENCE.—Not later than 3 years
2 after the date of enactment of this subtitle, the Sec-
3 retary of Agriculture, acting through the Agricul-
4 tural Research Service and in consultation with the
5 Natural Resources Conservation Service, shall con-
6 vene a conference of key scientific experts on carbon
7 sequestration and measurement techniques from var-
8 ious sectors (including the government, academic,
9 and private sectors) to—

10 (A) discuss and establish benchmark
11 standards of precision for measuring soil carbon
12 content and net emissions of other greenhouse
13 gases;

14 (B) designate packages of measurement
15 techniques and modeling approaches to achieve
16 a level of precision agreed on by the partici-
17 pants in the conference; and

18 (C) evaluate results of analyses on base-
19 line, permanence, and leakage issues.

20 (2) REPORT.—Not later than 180 days after
21 the conclusion of the conference under paragraph
22 (1), the Secretary of Agriculture shall submit to the
23 Committee on Agriculture of the House of Rep-
24 resentatives and the Committee on Agriculture, Nu-

1 trition, and Forestry of the Senate a report on the
2 results of the conference.

3 (e) AUTHORIZATION OF APPROPRIATIONS.—

4 (1) IN GENERAL.—There are authorized to be
5 appropriated to carry out this section \$25,000,000
6 for each of fiscal years 2003 through 2006.

7 (2) ALLOCATION.—Of the amounts made avail-
8 able to carry out this section for a fiscal year, at
9 least 50 percent shall be allocated for competitive
10 grants by the Cooperative State Research, Edu-
11 cation, and Extension Service.

12 **SEC. 1312. CARBON SEQUESTRATION DEMONSTRATION**
13 **PROJECTS AND OUTREACH.**

14 (a) DEMONSTRATION PROJECTS.—

15 (1) DEVELOPMENT OF MONITORING PRO-
16 GRAMS.—

17 (A) IN GENERAL.—The Secretary of Agri-
18 culture, acting through the Natural Resources
19 Conservation Service and in cooperation with
20 local extension agents, experts from land grant
21 universities, and other local agricultural or con-
22 servation organizations, shall develop user-
23 friendly, programs that combine measurement
24 tools and modeling techniques into integrated
25 packages to monitor the carbon sequestering

1 benefits of conservation practices and net
2 changes in greenhouse gas emissions.

3 (B) BENCHMARK LEVELS OF PRECISION.—

4 The programs developed under subparagraph
5 (A) shall strive to achieve benchmark levels of
6 precision in measurement in a cost-effective
7 manner.

8 (2) PROJECTS.—

9 (A) IN GENERAL.—The Secretary of Agri-
10 culture, acting through the Farm Service Agen-
11 cy, shall establish a program under which
12 projects use the monitoring programs developed
13 under paragraph (1) to demonstrate the feasi-
14 bility of methods of measuring, verifying, and
15 monitoring—

16 (i) changes in organic carbon content
17 and other carbon pools in agricultural
18 soils, plants, and trees; and

19 (ii) net changes in emissions of other
20 greenhouse gases.

21 (B) EVALUATION OF IMPLICATIONS.—The
22 projects under subparagraph (A) shall include
23 evaluation of the implications for reassessed
24 baselines, carbon or other greenhouse gas leak-
25 age, and permanence of sequestration.

1 (C) SUBMISSION OF PROPOSALS.—Pro-
2 posals for projects under subparagraph (A)
3 shall be submitted by the appropriate agency of
4 each State, in cooperation with interested local
5 jurisdictions and State agricultural and con-
6 servation organizations.

7 (D) LIMITATION.—Not more than 10
8 projects under subparagraph (A) may be ap-
9 proved in conjunction with applied research
10 projects under section 1331(b) until benchmark
11 measurement and assessment standards are es-
12 tablished under section 1331(d).

13 (b) OUTREACH.—

14 (1) IN GENERAL.—The Cooperative State Re-
15 search Extension and Education Service shall widely
16 disseminate information about the economic and en-
17 vironmental benefits that can be generated by adop-
18 tion of conservation practices (including benefits
19 from increased sequestration of carbon and reduced
20 emission of other greenhouse gases.

21 (2) PROJECT RESULTS.—The Cooperative State
22 Research Extension and Education Service shall in-
23 form farmers, ranchers, and State agricultural and
24 energy offices in each State of—

1 (A) the results of demonstration projects
2 under subsection (a)(2) in the State; and

3 (B) the ways in which the methods dem-
4 onstrated in the projects might be applicable to
5 the operations of those farmers and ranchers.

6 (3) POLICY OUTREACH.—On a periodic basis,
7 the Cooperative State Research Extension and Edu-
8 cation Service shall disseminate information on the
9 police nexus between global climate change mitiga-
10 tion strategies and agriculture, so that farmers and
11 ranchers may better understand the global implica-
12 tions of the activities of farmers and ranchers.

13 (c) AUTHORIZATION OF APPROPRIATIONS.—

14 (1) IN GENERAL.—There are authorized to be
15 appropriated to carry out this section \$10,000,000
16 for each of fiscal years 2003 through 2006.

17 (2) ALLOCATION.—Of the amounts made avail-
18 able to carry out this section for a fiscal year, at
19 least 50 percent shall be allocated for demonstration
20 projects under subsection (a)(2).

21 SUBTITLE C—CLEAN ENERGY TECHNOLOGY EXPORTS

22 PROGRAM

23 **SEC. 1321. CLEAN ENERGY TECHNOLOGY EXPORTS PRO-**
24 **GRAM.**

25 (a) DEFINITIONS.—In this section:

1 (1) CLEAN ENERGY TECHNOLOGY.—The term
2 “clean energy technology” means an energy supply
3 or end-use technology that, over its lifecycle and
4 compared to a similar technology already in commer-
5 cial use in developing countries, countries in transi-
6 tion, and other partner countries—

7 (A) emits substantially lower levels of pol-
8 lutants or greenhouse gases; and

9 (B) may generate substantially smaller or
10 less toxic volumes of solid or liquid waste.

11 (2) INTERAGENCY WORKING GROUP.—The term
12 “interagency working group” means the Interagency
13 Working Group on Clean Energy Technology Ex-
14 ports established under subsection (b).

15 (b) INTERAGENCY WORKING GROUP.—

16 (1) ESTABLISHMENT.—Not later than 90 days
17 after the date of enactment of this section, the Sec-
18 retary of Energy, the Secretary of Commerce, and
19 the Administrator of the U.S. Agency for Inter-
20 national Development shall jointly establish a Inter-
21 agency Working Group on Clean Energy Technology
22 Exports. The interagency working group will focus
23 on opening and expanding energy markets and
24 transferring clean energy technology to the devel-
25 oping countries, countries in transition, and other

1 partner countries that are expected to experience,
2 over the next 20 years, the most significant growth
3 in energy production and associated greenhouse gas
4 emissions, including through technology transfer
5 programs under the Framework Convention on Cli-
6 mate Change, other international agreements, and
7 relevant Federal efforts.

8 (2) MEMBERSHIP.—The interagency working
9 group shall be jointly chaired by representatives ap-
10 pointed by the agency heads under paragraph (1)
11 and shall also include representatives from the De-
12 partment of State, the Department of Treasury, the
13 Environmental Protection Agency, the Export-Im-
14 port Bank, the Overseas Private Investment Cor-
15 poration, the Trade and Development Agency, and
16 other federal agencies as deemed appropriate by all
17 three agency heads under paragraph (1).

18 (3) DUTIES.—The interagency working group
19 shall—

20 (A) analyze technology, policy, and market
21 opportunities for international development,
22 demonstration, and deployment of clean energy
23 technology;

24 (B) investigate issues associated with
25 building capacity to deploy clean energy tech-

1 nology in developing countries, countries in
2 transition, and other partner countries,
3 including—

4 (i) energy-sector reform;

5 (ii) creation of open, transparent, and
6 competitive markets for energy tech-
7 nologies;

8 (iii) availability of trained personnel
9 to deploy and maintain the technology; and

10 (iv) demonstration and cost-buydown
11 mechanisms to promote first adoption of
12 the technology;

13 (C) examine relevant trade, tax, inter-
14 national, and other policy issues to assess what
15 policies would help open markets and improve
16 U.S. clean energy technology exports in support
17 of the following areas:

18 (i) enhancing energy innovation and
19 cooperation, including energy sector and
20 market reform, capacity building, and fi-
21 nancing measures;

22 (ii) improving energy end-use effi-
23 ciency technologies, including buildings and
24 facilities, vehicle, industrial, and co-genera-
25 tion technology initiatives; and

1 (iii) promoting energy supply tech-
2 nologies, including fossil, nuclear, and re-
3 newable technology initiatives.

4 (D) establish an advisory committee involv-
5 ing the private sector and other interested
6 groups on the export and deployment of clean
7 energy technology;

8 (E) monitor each agency's progress to-
9 wards meeting goals in the 5-year strategic
10 plan submitted to Congress pursuant to the En-
11 ergy and Water Development Appropriations
12 Act, 2001, and the Energy and Water Develop-
13 ment Appropriations Act, 2002;

14 (F) make recommendations to heads of ap-
15 propriate Federal agencies on ways to stream-
16 line federal programs and policies improve each
17 agency's role in the international development,
18 demonstration, and deployment of clean energy
19 technology;

20 (G) make assessments and recommenda-
21 tions regarding the distinct technological, mar-
22 ket, regional, and stakeholder challenges nec-
23 essary to carry out the program; and

24 (H) recommend conditions and criteria
25 that will help ensure that United States funds

1 promote sound energy policies in participating
2 countries while simultaneously opening their
3 markets and exporting United States energy
4 technology.

5 (c) FEDERAL SUPPORT FOR CLEAN ENERGY TECH-
6 NOLOGY TRANSFER.—Notwithstanding any other provi-
7 sion of law, each federal agency or government corporation
8 carrying out an assistance program in support of the ac-
9 tivities of United States persons in the environment or en-
10 ergy sector of a developing country, country in transition,
11 or other partner country shall support, to the maximum
12 extent practicable, the transfer of United States clean en-
13 ergy technology as part of that program.

14 (d) ANNUAL REPORT.—Not later than April 1, 2002,
15 and each year thereafter, the Interagency Working Group
16 shall submit a report to Congress on its activities during
17 the preceding calendar year. The report shall include a
18 description of the technology, policy, and market opportu-
19 nities for international development, demonstration, and
20 deployment of clean energy technology investigated by the
21 Interagency Working Group in that year, as well as any
22 policy recommendations to improve the expansion of clean
23 energy markets and U.S. clean energy technology exports.

24 (e) REPORT ON USE OF FUNDS.—Not later than Oc-
25 tober 1, 2002, and each year thereafter, the Secretary of

1 State, in consultation with other federal agencies, shall
2 submit a report to Congress indicating how United States
3 funds appropriated for clean energy technology exports
4 and other relevant federal programs are being directed in
5 a manner that promotes sound energy policy commitments
6 in developing countries, countries in transition, and other
7 partner countries, including efforts pursuant to multi-lat-
8 eral environmental agreements.

9 (f) AUTHORIZATION OF APPROPRIATIONS.—There
10 are authorized to be appropriated to the departments,
11 agencies, and entities of the United States described in
12 subsection (b) such sums as may be necessary to support
13 the transfer of clean energy technology, consistent with
14 the subsidy codes of the World Trade Organization, as
15 part of assistance programs carried out by those depart-
16 ments, agencies, and entities in support of activities of
17 United States persons in the energy sector of a developing
18 country, country in transition, or other partner country.

19 **SEC. 1322. INTERNATIONAL ENERGY TECHNOLOGY DE-**
20 **PLOYMENT PROGRAM.**

21 (a) IN GENERAL.—Section 1608 of the Energy Policy
22 Act of 1992 (42 U.S.C. 13387) is amended by striking
23 subsection (l) and inserting the following:

24 “(l) INTERNATIONAL ENERGY TECHNOLOGY DE-
25 PLOYMENT PROGRAM.—

1 “(1) DEFINITIONS.—In this subsection:

2 “(A) INTERNATIONAL ENERGY DEPLOY-
3 MENT PROJECT.—The term “international en-
4 ergy deployment project” means a project to
5 construct an energy production facility outside
6 the United States—

7 “(i) the output of which will be con-
8 sumed outside the United States; and

9 “(ii) the deployment of which will re-
10 sult in a greenhouse gas reduction per unit
11 of energy produced when compared to the
12 technology that would otherwise be
13 implemented—

14 “(I) 10 percentage points or
15 more, in the case of a unit placed in
16 service before January 1, 2010;

17 “(II) 20 percentage points or
18 more, in the case of a unit placed in
19 service after December 31, 2009, and
20 before January 1, 2020; or

21 “(III) 30 percentage points or
22 more, in the case of a unit placed in
23 service after December 31, 2019, and
24 before January 1, 2030.

1 “(B) QUALIFYING INTERNATIONAL EN-
2 ERGY DEPLOYMENT PROJECT.—The term
3 “qualifying international energy deployment
4 project” means an international energy deploy-
5 ment project that—

6 “(i) is submitted by a United States
7 firm to the Secretary in accordance with
8 procedures established by the Secretary by
9 regulation;

10 “(ii) uses technology that has been
11 successfully developed or deployed in the
12 United States;

13 “(iii) meets the criteria of subsection
14 (k);

15 “(iv) is approved by the Secretary,
16 with notice of the approval being published
17 in the Federal Register; and

18 “(v) complies with such terms and
19 conditions as the Secretary establishes by
20 regulation.

21 “(C) UNITED STATES.—For purposes of
22 this paragraph, the term “United States”, when
23 used in a geographical sense, means the 50
24 States, the District of Columbia, Puerto Rico,
25 Guam, the Virgin Islands, American Samoa,

1 and the Commonwealth of the Northern Mar-
2 iana Islands.

3 “(2) PILOT PROGRAM FOR FINANCIAL ASSIST-
4 ANCE.—

5 “(A) IN GENERAL.—Not later than 180
6 days after the date of enactment of this sub-
7 section, the Secretary shall, by regulation, pro-
8 vide for a pilot program for financial assistance
9 for qualifying international energy deployment
10 projects.

11 “(B) SELECTION CRITERIA.—After con-
12 sultation with the Secretary of State, the Sec-
13 retary of Commerce, and the United States
14 Trade Representative, the Secretary shall select
15 projects for participation in the program based
16 solely on the criteria under this title and with-
17 out regard to the country in which the project
18 is located.

19 “(C) FINANCIAL ASSISTANCE.—

20 “(i) IN GENERAL.—A United States
21 firm that undertakes a qualifying inter-
22 national energy deployment project that is
23 selected to participate in the pilot program
24 shall be eligible to receive a loan or a loan
25 guarantee from the Secretary.

1 “(ii) RATE OF INTEREST.—The rate
2 of interest of any loan made under clause
3 (i) shall be equal to the rate for Treasury
4 obligations then issued for periods of com-
5 parable maturities.

6 “(iii) AMOUNT.—The amount of a
7 loan or loan guarantee under clause (i)
8 shall not exceed 50 percent of the total
9 cost of the qualified international energy
10 deployment project.

11 “(iv) DEVELOPED COUNTRIES.—
12 Loans or loan guarantees made for
13 projects to be located in a developed coun-
14 try, as listed in Annex I of the United Na-
15 tions Framework Convention on Climate
16 Change, shall require at least a 50 percent
17 contribution towards the total cost of the
18 loan or loan guarantee by the host country.

19 “(v) DEVELOPING COUNTRIES.—
20 Loans or loan guarantees made for
21 projects to be located in a developing coun-
22 try (those countries not listed in Annex I
23 of the United Nations Framework Conven-
24 tion on Climate Change) shall require at
25 least a 10 percent contribution towards the

1 total cost of the loan or loan guarantee by
2 the host country.

3 “(vi) CAPACITY BUILDING RE-
4 SEARCH.—Proposals made for projects to
5 be located in a developing country may in-
6 clude a research component intended to
7 build technological capacity within the host
8 country. Such research must be related to
9 the technologies being deployed and must
10 involve both an institution in the host
11 country and an industry, university or na-
12 tional laboratory participant from the
13 United States. The host institution shall
14 contribute at least 50 percent of funds pro-
15 vided for the capacity building research.

16 “(D) COORDINATION WITH OTHER PRO-
17 GRAMS.—A qualifying international energy de-
18 ployment project funded under this section shall
19 not be eligible as a qualifying clean coal tech-
20 nology under section 415 of the Clean Air Act
21 (42 U.S.C. 7651n).

22 “(E) REPORT.—Not later than 5 years
23 after the date of enactment of this subsection,
24 the Secretary shall submit to the President a
25 report on the results of the pilot projects.

1 “(F) RECOMMENDATION.—Not later than
 2 60 days after receiving the report under sub-
 3 paragraph (E), the President shall submit to
 4 Congress a recommendation, based on the re-
 5 sults of the pilot projects as reported by the
 6 Secretary of Energy, concerning whether the fi-
 7 nancial assistance program under this section
 8 should be continued, expanded, reduced, or
 9 eliminated.

10 “(3) AUTHORIZATION OF APPROPRIATIONS.—
 11 There are authorized to be appropriated to the Sec-
 12 retary carry out this section \$100,000,000 for each
 13 of fiscal years 2003 through 2011, to remain avail-
 14 able until expended.”.

15 **Subtitle D—Climate Change**
 16 **Science and Information**

17 **PART I—AMENDMENTS TO THE GLOBAL CHANGE**

18 **RESEARCH ACT OF 1990**

19 **SEC. 1331. AMENDMENT OF GLOBAL CHANGE RESEARCH**
 20 **ACT OF 1990.**

21 Except as otherwise expressly provided, whenever in
 22 this subtitle an amendment or repeal is expressed in terms
 23 of an amendment to, or repeal of, a section or other provi-
 24 sion, the reference shall be considered to be made to a

1 section or other provision of the Global Change Research
2 Act of 1990 (15 U.S.C. 2921 et seq.).

3 **SEC. 1332. CHANGES IN DEFINITIONS.**

4 Paragraph (1) of section 2 (15 U.S.C. 2921) is
5 amended by striking “Earth and” inserting “Climate
6 and”.

7 **SEC. 1333. CHANGE IN COMMITTEE NAME.**

8 Section 102 (15 U.S.C. 2932) is amended—

9 (1) by striking “EARTH AND” in the section
10 heading and inserting “CLIMATE AND”; and

11 (2) by striking “Earth and” in subsection (a)
12 and inserting “Climate and”.

13 **SEC. 1334. CHANGE IN NATIONAL GLOBAL CHANGE RE-**
14 **SEARCH PLAN.**

15 Section 104 (15 U.S.C. 2934) is amended—

16 (1) by adding at the end of subsection (c) the
17 following:

18 “(6) Methods for integrating information to
19 provide predictive tools for planning and decision
20 making by governments, communities and the pri-
21 vate sector.”;

22 (2) by inserting “local, State, and Federal” be-
23 fore “policy makers” in subsection (d)(3);

24 (3) by striking “and” in subsection (d)(2);

1 (4) by striking “change.” in subsection (d)(3)
2 and inserting “change; and”;

3 (5) by adding at the end of subsection (d) the
4 following:

5 “(4) establish a common assessment and mod-
6 eling framework that may be used in both research
7 and operations to predict and assess the vulner-
8 ability of natural and managed ecosystems and of
9 human society in the context of other environmental
10 and social changes.”; and

11 (6) by adding at the end the following:

12 “(g) STRATEGIC PLAN; REVISED IMPLEMENTATION
13 PLAN.—The Chairman of the Council, through the Com-
14 mittee, shall develop a strategic plan for the United States
15 Global Climate Change Research Program for the 10-year
16 period beginning in 2002 and submit the plan to the Con-
17 gress within 180 days after the date of enactment of the
18 Global Climate Change Act of 2002. The Chairman,
19 through the Committee, shall also submit a revised imple-
20 mentation plan under subsection (a).”.

21 **SEC. 1335. INTEGRATED PROGRAM OFFICE.**

22 Section 105 (15 U.S.C. 2935) is amended—

23 (1) by redesignating subsections (a), (b), and
24 (c) as subsections (b), (c), and (d), respectively; and

1 (2) inserting before subsection (b), as redesignig-
2 nated, the following:

3 “(a) INTEGRATED PROGRAM OFFICE.—

4 “(1) ESTABLISHMENT.—There is established in
5 the Office of Science and Technology Policy an inte-
6 grated program office for the global change research
7 program.

8 “(2) ORGANIZATION.—The integrated program
9 office established under paragraph (1) shall be head-
10 ed by the associate director with responsibility for
11 climate change science and technology and shall in-
12 clude a representative from each Federal agency
13 participating in the global change research program.

14 “(3) FUNCTION.—The integrated program of-
15 fice shall—

16 “(A) manage, working in conjunction with
17 the Committee, interagency coordination and
18 program integration of global change research
19 activities and budget requests;

20 “(B) ensure that the activities and pro-
21 grams of each Federal agency or department
22 participating in the program address the goals
23 and objectives identified in the strategic re-
24 search plan and interagency implementation
25 plans;

1 “(C) ensure program and budget rec-
2 ommendations of the Committee are commu-
3 nicated to the President and are integrated into
4 the climate change action strategy;

5 “(D) review, solicit, and identify, and allo-
6 cate funds for, partnership projects that ad-
7 dress critical research objectives or operational
8 goals of the program, including projects that
9 would fill research gaps identified by the pro-
10 gram, and for which project resources are
11 shared among at least 2 agencies participating
12 in the program; and

13 “(E) review and provide recommendations
14 on, in conjunction with the Committee, all an-
15 nual appropriations requests from Federal
16 agencies or departments participating in the
17 program.

18 “(4) GRANT AUTHORITY.—The Integrated Pro-
19 gram Office may authorize 1 or more of the depart-
20 ments or agencies participating in the program to
21 enter into contracts and make grants, using funds
22 appropriated for use by the Office of Science and
23 Technology Policy for the purpose of carrying out
24 the responsibilities of that Office.

1 (1) by striking “Weather and climate change
2 affect” in paragraph (1) and inserting “Weather, cli-
3 mate change, and long-term weather fluctuations af-
4 fect public safety, environmental security, human
5 health,”;

6 (2) by striking “climate” in paragraph (2) and
7 inserting “climate, including seasonal and decadal
8 fluctuations,”;

9 (3) by striking “changes.” in paragraph (5) and
10 inserting “changes and providing free exchange of
11 meteorological data.”; and

12 (4) by adding at the end the following:

13 “(7) The present rate of advance in research
14 and development is inadequate and new develop-
15 ments must be incorporated rapidly into services for
16 the benefit of the public.

17 “(8) The United States lacks adequate infra-
18 structure and research to meet national climate
19 monitoring and prediction needs.”.

20 **SEC. 1343. TOOLS FOR REGIONAL PLANNING.**

21 Section 5(d) (15 U.S.C. 2904(d)) is amended—

22 (1) by redesignating paragraphs (4) through
23 (9) as paragraphs (5) through (10), respectively;

24 (2) by inserting after paragraph (3) the fol-
25 lowing:

1 “(4) methods for improving modeling and pre-
2 dictive capabilities and developing assessment meth-
3 ods to guide national, regional, and local planning
4 and decision-making on land use, water hazards, and
5 related issues;”;

6 (3) by inserting “sharing,” after “collection,” in
7 paragraph (5), as redesignated;

8 (4) by striking “experimental” each place it ap-
9 pears in paragraph (9), as redesignated;

10 (5) by striking “preliminary” in paragraph
11 (10), as redesignated;

12 (6) by striking “this Act,” the first place it ap-
13 pears in paragraph (10), as redesignated, and insert-
14 ing “the Global Climate Change Act of 2002,”; and

15 (7) by striking “this Act,” the second place it
16 appears in paragraph (10), as redesignated, and in-
17 serting “that Act,”.

18 **SEC. 1344. AUTHORIZATION OF APPROPRIATIONS.**

19 Section 9 (15 U.S.C. 2908) is amended—

20 (1) by striking “1979,” and inserting “2002,”;

21 (2) by striking “1980,” and inserting “2003,”;

22 (3) by striking “1981,” and inserting “2004,”;

23 and

24 (4) by striking “\$25,500,000” and inserting
25 “\$75,500,000”.

1 **SEC. 1345. NATIONAL CLIMATE SERVICE PLAN.**

2 The Act (15 U.S.C. 2901 et seq.) is amended by in-
3 serting after section 5 the following:

4 **“SEC. 6. NATIONAL CLIMATE SERVICE PLAN.**

5 “Within one year after the date of enactment of the
6 Global Climate Change Act of 2002, the Secretary of Com-
7 merce shall submit to the Senate Committee on Com-
8 merce, Science, and Transportation and the House
9 Science Committee a plan of action for a National Climate
10 Service under the National Climate Program. The plan
11 shall set forth recommendations and funding estimates
12 for—

13 “(1) a national center for operational climate
14 monitoring and predicting with the functional capac-
15 ity to monitor and adjust observing systems as nec-
16 essary to reduce bias;

17 “(2) the design, deployment, and operation of
18 an adequate national climate observing system that
19 builds upon existing environmental monitoring sys-
20 tems and closes gaps in coverage by existing sys-
21 tems;

22 “(3) the establishment of a national coordinated
23 modeling strategy, including a national climate mod-
24 eling center to provide a dedicated capability for
25 high-end climate modeling and a regular schedule of

1 projections on a long and short term time schedules
2 and at a range of spatial scales;

3 “(4) improvements in modeling and assessment
4 capabilities needed to integrate information to pre-
5 dict regional and local climate changes and impacts;

6 “(5) in coordination with the private sector, im-
7 proving the capacity to assess the impacts of pre-
8 dicted and projected climate changes and variations;

9 “(6) a program for long term stewardship,
10 quality control, development of relevant climate
11 products, and efficient access to all relevant climate
12 data, products, and critical model simulations; and

13 “(7) mechanisms to coordinate among Federal
14 agencies, State, and local government entities and
15 the academic community to ensure timely and full
16 sharing and dissemination of climate information
17 and services.”.

18 **SEC. 1346. REPORTING ON TRENDS.**

19 (a) **ATMOSPHERIC MONITORING AND VERIFICATION**
20 **PROGRAM.**—The Secretary of Commerce, in coordination
21 with relevant Federal agencies, shall, as part of the Na-
22 tional Climate Service, establish an atmospheric moni-
23 toring and verification program utilizing aircraft, satellite,
24 ground sensors, and modeling capabilities to monitor,
25 measure, and verify atmospheric greenhouse gas levels,

1 dates, and emissions. Where feasible, the program shall
2 measure emissions from identified sources participating in
3 the reporting system for verification purposes. The pro-
4 gram shall use measurements and standards that are con-
5 sistent with those utilized in the greenhouse gas measure-
6 ment and reporting system established under subsection
7 (a) and the registry established under section 1102.

8 (b) ANNUAL REPORTING.—The Secretary of Com-
9 merce shall issue an annual report that identifies green-
10 house emissions and trends on a local, regional, and na-
11 tional level. The report shall also identify emissions or re-
12 ductions attributable to individual or multiple sources cov-
13 ered by the greenhouse gas measurement and reporting
14 system established under section 1102.

15 **PART III—OCEAN AND COASTAL OBSERVING**

16 **SYSTEM**

17 **SEC. 1351. OCEAN AND COASTAL OBSERVING SYSTEM.**

18 (a) ESTABLISHMENT.—The President, through the
19 National Ocean Research Leadership Council, established
20 by section 7902(a) of title 10, United States Code, shall
21 establish and maintain an integrated ocean and coastal ob-
22 serving system that provides for long-term, continuous,
23 and real-time observations of the oceans and coasts for
24 the purposes of—

1 (1) understanding, assessing and responding to
2 human-induced and natural processes of global
3 change;

4 (2) improving weather forecasts and public
5 warnings;

6 (3) strengthening national security and military
7 preparedness;

8 (4) enhancing the safety and efficiency of ma-
9 rine operations;

10 (5) supporting efforts to restore the health of
11 and manage coastal and marine ecosystems and liv-
12 ing resources;

13 (6) monitoring and evaluating the effectiveness
14 of ocean and coastal environmental policies;

15 (7) reducing and mitigating ocean and coastal
16 pollution; and

17 (8) providing information that contributes to
18 public awareness of the state and importance of the
19 oceans.

20 (b) COUNCIL FUNCTIONS.—In addition to its respon-
21 sibilities under section 7902(a) of such title, the Council
22 shall be responsible for planning and coordinating the ob-
23 serving system and in carrying out this responsibility
24 shall—

1 (1) develop and submit to the Congress, within
2 6 months after the date of enactment of this Act, a
3 plan for implementing a national ocean and coastal
4 observing system that—

5 (A) uses an end-to end engineering and de-
6 velopment approach to develop a system design
7 and schedule for operational implementation;

8 (B) determines how current and planned
9 observing activities can be integrated in a cost-
10 effective manner;

11 (C) provides for regional and concept dem-
12 onstration projects;

13 (D) describes the role and estimated budg-
14 et of each Federal agency in implementing the
15 plan;

16 (E) contributes, to the extent practicable,
17 to the National Global Change Research Plan
18 under section 104 of the Global Change Re-
19 search Act of 1990 (15 U.S.C. 2934); and

20 (F) makes recommendations for coordina-
21 tion of ocean observing activities of the United
22 States with those of other nations and inter-
23 national organizations;

24 (2) serve as the mechanism for coordinating
25 Federal ocean observing requirements and activities;

1 (3) work with academic, State, industry and
2 other actual and potential users of the observing sys-
3 tem to make effective use of existing capabilities and
4 incorporate new technologies;

5 (4) approve standards and protocols for the ad-
6 ministration of the system, including—

7 (A) a common set of measurements to be
8 collected and distributed routinely and by uni-
9 form methods;

10 (B) standards for quality control and as-
11 sessment of data;

12 (C) design, testing and employment of
13 forecast models for ocean conditions;

14 (D) data management, including data
15 transfer protocols and archiving; and

16 (E) designation of coastal ocean observing
17 regions; and

18 (5) in consultation with the Secretary of State,
19 provide representation at international meetings on
20 ocean observing programs and coordinate relevant
21 Federal activities with those of other nations.

22 (c) SYSTEM ELEMENTS.—The integrated ocean and
23 coastal observing system shall include the following ele-
24 ments:

1 (1) A nationally coordinated network of regional
2 coastal ocean observing systems that measure and
3 disseminate a common set of ocean observations and
4 related products in a uniform manner and according
5 to sound scientific practice, but that are adapted to
6 local and regional needs.

7 (2) Ocean sensors for climate observations, in-
8 cluding the Arctic Ocean and sub-polar seas.

9 (3) Coastal, relocatable, and cabled sea floor
10 observatories.

11 (4) Broad bandwidth communications that are
12 capable of transmitting high volumes of data from
13 open ocean locations at low cost and in real time.

14 (5) Ocean data management and assimilation
15 systems that ensure full use of new sources of data
16 from space-borne and in situ sensors.

17 (6) Focused research programs.

18 (7) Technology development program to develop
19 new observing technologies and techniques, including
20 data management and dissemination.

21 (8) Public outreach and education.

22 **SEC. 1352. AUTHORIZATION OF APPROPRIATIONS.**

23 For development and implementation of an inte-
24 grated ocean and coastal observation system under this
25 title, including financial assistance to regional coastal

1 ocean observing systems, there are authorized to be appro-
2 priated \$235,000,000 in fiscal year 2003, \$315,000,000
3 in fiscal year 2004, \$390,000,000 in fiscal year 2005, and
4 \$445,000,000 in fiscal year 2006.

5 **Subtitle E—Climate Change**
6 **Technology**

7 **SEC. 1361. NIST GREENHOUSE GAS FUNCTIONS.**

8 Section 2(c) of the National Institute of Standards
9 and Technology Act (15 U.S.C. 272(c) is amended—

10 (1) striking “and” after the semicolon in para-
11 graph (21);

12 (2) by redesignating paragraph (22) as para-
13 graph (23); and

14 (3) by inserting after paragraph (21) the fol-
15 lowing:

16 “(22) perform research to develop enhanced
17 measurements, calibrations, standards, and tech-
18 nologies which will enable the reduced production in
19 the United States of greenhouse gases associated
20 with global warming, including carbon dioxide, meth-
21 ane, nitrous oxide, ozone, perfluorocarbons,
22 hydrofluorocarbons, and sulphur hexafluoride; and”.

1 **SEC. 1362. DEVELOPMENT OF NEW MEASUREMENT TECH-**
2 **NOLOGIES.**

3 (a) IN GENERAL.—The Secretary of Commerce shall
4 initiate a program to develop, with technical assistance
5 from appropriate Federal agencies, innovative standards
6 and measurement technologies (including technologies to
7 measure carbon changes due to changes in land use cover)
8 to calculate—

9 (1) greenhouse gas emissions and reductions
10 from agriculture, forestry, and other land use prac-
11 tices;

12 (2) non-carbon dioxide greenhouse gas emis-
13 sions from transportation;

14 (3) greenhouse gas emissions from facilities or
15 sources using remote sensing technology; and

16 (4) any other greenhouse gas emission or reduc-
17 tions for which no accurate or reliable measurement
18 technology exists.

19 **SEC. 1363. ENHANCED ENVIRONMENTAL MEASUREMENTS**
20 **AND STANDARDS.**

21 The National Institute of Standards and Technology
22 Act (15 U.S.C. 271 et seq.) is amended—

23 (1) by redesignating sections 17 through 32 as
24 sections 18 through 33, respectively; and

25 (2) by inserting after section 16 the following:

1 **“SEC. 17. CLIMATE CHANGE STANDARDS AND PROCESSES.**

2 “(a) IN GENERAL.—The Director shall establish
3 within the Institute a program to perform and support re-
4 search on global climate change standards and processes,
5 with the goal of providing scientific and technical knowl-
6 edge applicable to the reduction of greenhouse gases (as
7 defined in section 4 of the Global Climate Change Act of
8 2002).

9 “(b) RESEARCH PROGRAM.—

10 “(1) IN GENERAL.—The Director is authorized
11 to conduct, directly or through contracts or grants,
12 a global climate change standards and processes re-
13 search program.

14 “(2) RESEARCH PROJECTS.—The specific con-
15 tents and priorities of the research program shall be
16 determined in consultation with appropriate Federal
17 agencies, including the Environmental Protection
18 Agency, the National Oceanic and Atmospheric Ad-
19 ministration, and the National Aeronautics and
20 Space Administration. The program generally shall
21 include basic and applied research—

22 “(A) to develop and provide the enhanced
23 measurements, calibrations, data, models, and
24 reference material standards which will enable
25 the monitoring of greenhouse gases;

1 “(B) to assist in establishing of a baseline
2 reference point for future trading in greenhouse
3 gases and the measurement of progress in emis-
4 sions reduction;

5 “(C) that will be exchanged internationally
6 as scientific or technical information which has
7 the stated purpose of developing mutually rec-
8 ognized measurements, standards, and proce-
9 dures for reducing greenhouse gases; and

10 “(D) to assist in developing improved in-
11 dustrial processes designed to reduce or elimi-
12 nated greenhouse gases.

13 “(c) NATIONAL MEASUREMENT LABORATORIES.—

14 “(1) IN GENERAL.—In carrying out this sec-
15 tion, the Director shall utilize the collective skills of
16 the National Measurement Laboratories of the Na-
17 tional Institute of Standards and Technology to im-
18 prove the accuracy of measurements that will permit
19 better understanding and control of these industrial
20 chemical processes and result in the reduction or
21 elimination of greenhouse gases.

22 “(2) MATERIAL, PROCESS, AND BUILDING RE-
23 SEARCH.—The National Measurement Laboratories
24 shall conduct research under this subsection that
25 includes—

1 “(A) developing material and manufac-
2 turing processes which are designed for energy
3 efficiency and reduced greenhouse gas emissions
4 into the environment;

5 “(B) developing environmentally-friendly,
6 ‘green’ chemical processes to be used by indus-
7 try; and

8 “(C) enhancing building performance with
9 a focus in developing standards or tools which
10 will help incorporate low or no-emission tech-
11 nologies into building designs.

12 “(3) STANDARDS AND TOOLS.—The National
13 Measurement Laboratories shall develop standards
14 and tools under this subsection that include software
15 to assist designers in selecting alternate building
16 materials, performance data on materials, artificial
17 intelligence-aided design procedures for building sub-
18 systems and ‘smart buildings’, and improved test
19 methods and rating procedures for evaluating the
20 energy performance of residential and commercial
21 appliances and products.

22 “(d) NATIONAL VOLUNTARY LABORATORY ACCREDI-
23 TATION PROGRAM.—The Director shall utilize the Na-
24 tional Voluntary Laboratory Accreditation Program under
25 this section to establish a program to include specific cali-

1 bration or test standards and related methods and proto-
2 cols assembled to satisfy the unique needs for accredita-
3 tion in measuring the production of greenhouse gases. In
4 carrying out this subsection the Director may cooperate
5 with other departments and agencies of the Federal Gov-
6 ernment, State and local governments, and private organi-
7 zations.”.

8 **SEC. 1364. TECHNOLOGY DEVELOPMENT AND DIFFUSION.**

9 (a) **ADVANCED TECHNOLOGY PROGRAM COMPETI-**
10 **TIONS.**—The Director of the National Institute of Stand-
11 ards and Technology, through the Advanced Technology
12 Program, may hold a portion of the Institute’s competi-
13 tions in thematic areas, selected after consultation with
14 industry, academics, and other Federal Agencies, designed
15 to develop and commercialize enabling technologies to ad-
16 dress global climate change by significantly reducing
17 greenhouse gas emissions and concentrations in the at-
18 mosphere.

19 (b) **MANUFACTURING EXTENSION PARTNERSHIP**
20 **PROGRAM FOR “GREEN” MANUFACTURING.**—The Direc-
21 tor of the National Institute of Standards and Technology,
22 through the Manufacturing Extension Partnership Pro-
23 gram, may develop a program to support the implementa-
24 tion of new “green” manufacturing technologies and tech-
25 niques by the more than 380,000 small manufacturers.

1 **Subtitle F—Climate Adaptation**
2 **and Hazards Prevention**

3 **PART I—ASSESSMENT AND ADAPTATION**

4 **SEC. 1371. REGIONAL CLIMATE ASSESSMENT AND ADAPTA-**
5 **TION PROGRAM.**

6 (a) IN GENERAL.—The President shall establish
7 within the Department of Commerce a National Climate
8 Change Vulnerability and Adaptation Program for re-
9 gional impacts related to increasing concentrations of
10 greenhouse gases in the atmosphere and climate varia-
11 bility.

12 (b) COORDINATION.—In designing such program the
13 Secretary shall consult with the Federal Emergency Man-
14 agement Agency, the Environmental Protection Agency,
15 the Army Corps of Engineers, the Department of Trans-
16 portation, and other appropriate Federal, State, and local
17 government entities.

18 (c) VULNERABILITY ASSESSMENTS.—The program
19 shall—

20 (1) evaluate, based on predictions developed
21 under this Act and the National Climate Program
22 Act (15 U.S.C. 2901 et seq.), regional vulnerability
23 to phenomena associated with climate change and
24 climate variability, including—

25 (A) increases in severe weather events;

1 (B) sea level rise and shifts in the
2 hydrological cycle;

3 (C) natural hazards, including tsunami,
4 drought, flood and fire; and

5 (D) alteration of ecological communities;
6 and

7 (2) build upon predictions and other informa-
8 tion developed in the National Assessments prepared
9 under the Global Change Research Act of 1990 (15
10 U.S.C. 2921 et seq.).

11 (d) PREPAREDNESS RECOMMENDATIONS.—The pro-
12 gram shall submit a report to Congress within 2 years
13 after the date of enactment of this Act that identifies and
14 recommends implementation and funding strategies for
15 short- and long-term actions that may be taken at the na-
16 tional, regional, State, and local level—

17 (1) to minimize threats to human life and prop-
18 erty;

19 (2) to improve resilience to hazards;

20 (3) to minimize economic impacts; and

21 (4) to reduce threats to critical biological and
22 ecological processes.

23 (e) INFORMATION AND TECHNOLOGY.—The Sec-
24 retary shall make available appropriate information and
25 other technologies and products that will assist national,

1 regional, State, and local efforts to reduce loss of life and
2 property, and coordinate dissemination of such tech-
3 nologies and products through the Global Disaster Infor-
4 mation Network.

5 (f) AUTHORIZATION OF APPROPRIATIONS.—There
6 are authorized to be appropriated to the Secretary of Com-
7 merce \$4,500,000 to implement the requirements of this
8 section.

9 **SEC. 1372. COASTAL VULNERABILITY AND ADAPTATION.**

10 (a) COASTAL VULNERABILITY.—Within 2 years after
11 the date of enactment of this Act, the Secretary shall, in
12 consultation with the appropriate Federal, State, and local
13 governmental entities, conduct regional assessments of the
14 vulnerability of coastal areas to hazards associated with
15 climate change, climate variability, sea level rise, and fluc-
16 tuation of Great Lakes water levels. The Secretary may
17 also consult with the governments of Canada and Mexico
18 as appropriate in developing such regional assessments. In
19 preparing the regional assessments, the Secretary shall
20 collect and compile current information on climate change,
21 sea level rise, natural hazards, and coastal erosion and
22 mapping, and specifically address impacts on Arctic re-
23 gions and small island States. The regional assessments
24 shall include an evaluation of—

1 (1) social impacts associated with threats to
2 and potential losses of housing, communities, and in-
3 frastructure;

4 (2) physical impacts such as coastal erosion,
5 flooding and loss of estuarine habitat, saltwater in-
6 trusion of aquifers and saltwater encroachment, and
7 species migration; and

8 (3) economic impact on local, State, and re-
9 gional economies, including the impact on abundance
10 or distribution of economically important living ma-
11 rine resources.

12 (b) COASTAL ADAPTATION PLAN.—The Secretary
13 shall, within 3 years after the date of enactment of this
14 Act, submit to the Congress a national coastal adaptation
15 plan, composed of individual regional adaptation plans
16 that recommend targets and strategies to address coastal
17 impacts associated with climate change, sea level rise, or
18 climate variability. The plan shall be developed with the
19 participation of other Federal, State, and local govern-
20 ment agencies that will be critical in the implementation
21 of the plan at the State and local levels. The regional plans
22 that will make up the national coastal adaptation plan
23 shall be based on the information contained in the regional
24 assessments and shall identify special needs associated
25 with Arctic areas and small island States. The Plan shall

1 recommend both short- and long-term adaptation strate-
2 gies and shall include recommendations regarding—

3 (1) Federal flood insurance program modifica-
4 tions;

5 (2) areas that have been identified as high risk
6 through mapping and assessment;

7 (3) mitigation incentives such as rolling ease-
8 ments, strategic retreat, State or Federal acquisition
9 in fee simple or other interest in land, construction
10 standards, and zoning;

11 (4) land and property owner education;

12 (5) economic planning for small communities
13 dependent upon affected coastal resources, including
14 fisheries; and

15 (6) funding requirements and mechanisms.

16 (c) TECHNICAL PLANNING ASSISTANCE.—The Sec-
17 retary, through the National Ocean Service, shall establish
18 a coordinated program to provide technical planning as-
19 sistance and products to coastal States and local govern-
20 ments as they develop and implement adaptation or miti-
21 gation strategies and plans. Products, information, tools
22 and technical expertise generated from the development of
23 the regional assessments and the regional adaptation
24 plans will be made available to coastal States for the pur-
25 poses of developing their own State and local plans.

1 (d) COASTAL ADAPTATION GRANTS.—The Secretary
2 shall provide grants of financial assistance to coastal
3 States with Federally approved coastal zone management
4 programs to develop and begin implementing coastal adap-
5 tation programs if the State provides a Federal-to-State
6 match of 4 to 1 in the first fiscal year, 2.3 to 1 in the
7 second fiscal year, 2 to 1 in the third fiscal year, and 1
8 to 1 thereafter. Distribution of these funds to coastal
9 states shall be based upon the formula established under
10 section 306(c) of the Coastal Zone Management Act of
11 1972 (16 U.S.C. 1455(c)), adjusted in consultation with
12 the States as necessary to provide assistance to particu-
13 larly vulnerable coastlines.

14 (e) DEFINITIONS.—In this section:

15 (1) CZMA TERMS.—Any term used in this sec-
16 tion that is defined in section 304 of the Coastal
17 Zone Management Act of 1972 (16 U.S.C. 1453)
18 has the meaning given it by that section.

19 (2) SMALL-ISLAND STATE.—The term “small
20 island State” means any jurisdiction to which ref-
21 erence is made in section 3(30) of the Magnuson
22 Stevens Fishery Conservation and Management Act
23 (16 U.S.C. 1802(30)).

1 (f) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated \$3,000,000 annually for
3 coastal adaptation grants under subsection (d).

4 **PART II—FORECASTING AND PLANNING PILOT**
5 **PROGRAMS**

6 **SEC. 1381. REMOTE SENSING PILOT PROJECTS.**

7 (a) IN GENERAL.—The Administrator of the Na-
8 tional Aeronautics and Space Administration shall estab-
9 lish, through the National Oceanic and Atmospheric Ad-
10 ministration’s Coastal Services Center, a program of
11 grants for competitively awarded pilot projects to explore
12 the integrated use of sources of remote sensing and other
13 geospatial information to address State, local, regional,
14 and tribal agency needs to forecast a plan for adaptation
15 to coastal zone and land use changes that may result as
16 a consequence of global climate change or climate varia-
17 bility.

18 (b) PREFERRED PROJECTS.—In awarding grants
19 under this section, the Center shall give preference to
20 projects that—

21 (1) focus on areas that are most sensitive to the
22 consequences of global climate change or climate
23 variability;

24 (2) make use of existing public or commercial
25 data sets;

1 (3) integrate multiple sources of geospatial in-
2 formation, such as geographic information system
3 data, satellite-provided positioning data, and re-
4 motely sensed data, in innovative ways;

5 (4) offer diverse, innovative approaches that
6 may serve as models for establishing a future coordi-
7 nated framework for planning strategies for adapta-
8 tion to coastal zone and land use changes related to
9 global climate change or climate variability;

10 (5) include funds or in-kind contributions from
11 non-Federal sources;

12 (6) involve the participation of commercial enti-
13 ties that process raw or lightly processed data, often
14 merging that data with other geospatial information,
15 to create data products that have significant value
16 added to the original data; and

17 (7) taken together demonstrate as diverse a set
18 of public sector applications as possible.

19 (c) OPPORTUNITIES.—In carrying out this section,
20 the Center shall seek opportunities to assist—

21 (1) in the development of commercial applica-
22 tions potentially available from the remote sensing
23 industry; and

24 (2) State, local, regional, and tribal agencies in
25 applying remote sensing and other geospatial infor-

1 mation technologies for management and adaptation
2 to coastal and land use consequences of global cli-
3 mate change or climate variability.

4 (d) DURATION.—Assistance for a pilot project under
5 subsection (a) shall be provided for a period of not more
6 than 3 years.

7 (e) RESPONSIBILITIES OF GRANTEES.—Within 180
8 days after completion of a grant project, each recipient
9 of a grant under subsection (a) shall transmit a report
10 to the Center on the results of the pilot project and con-
11 duct at least one workshop for potential users to dissemi-
12 nate the lessons learned from the pilot project as widely
13 as feasible.

14 (f) REGULATIONS.—The Center shall issue regula-
15 tions establishing application, selection, and implementa-
16 tion procedures for pilot projects, and guidelines for re-
17 ports and workshops required by this section.

18 **SEC. 1382. DATABASE ESTABLISHMENT.**

19 The Center shall establish and maintain an elec-
20 tronic, Internet-accessible database of the results of each
21 pilot project completed under section 531.

22 **SEC. 1383. DEFINITIONS.**

23 In this subtitle:

1 (1) CENTER.—The term “Center” means the
2 Coastal Services Center of the National Oceanic and
3 Atmospheric Administration.

4 (2) GEOSPATIAL INFORMATION.—The term
5 “geospatial information” means knowledge of the
6 nature and distribution of physical and cultural fea-
7 tures on the landscape based on analysis of data
8 from airborne or spaceborne platforms or other
9 types and sources of data.

10 (3) INSTITUTION OF HIGHER EDUCATION.—The
11 term “institution of higher education” has the
12 meaning given that term in section 101(a) of the
13 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

14 **SEC. 1384. AUTHORIZATION OF APPROPRIATIONS.**

15 There are authorized to be appropriated to the Ad-
16 ministrator to carry out the provisions of this subtitle—

- 17 (1) \$17,500,000 for fiscal year 2003;
18 (2) \$20,000,000 for fiscal year 2004;
19 (3) \$22,500,000 for fiscal year 2005; and
20 (4) \$25,000,000 for fiscal year 2006.

21 **TITLE XIV—MANAGEMENT OF**
22 **DOE SCIENCE AND TECH-**
23 **NOLOGY PROGRAMS**

24 **SEC. 1401. DEFINITIONS.**

25 In this title:

1 (1) APPLICABILITY OF DEFINITIONS.—The
2 definitions in section 1203 shall apply.

3 (2) SINGLE-PURPOSE RESEARCH FACILITY.—
4 The term “single-purpose research facility” means
5 any of the following primarily single purpose entities
6 owned by the Department of Energy—

7 (A) Ames Laboratory;

8 (B) East Tennessee Technology Park;

9 (C) Environmental Measurement Labora-
10 tory;

11 (D) Fernald Environmental Management
12 Project;

13 (E) Fermi National Accelerator Labora-
14 tory;

15 (F) Kansas City Plant;

16 (G) Nevada Test Site;

17 (H) New Brunswick Laboratory;

18 (I) Pantex Weapons Facility;

19 (J) Princeton Plasma Physics Laboratory;

20 (K) Savannah River Technology Center;

21 (L) Stanford Linear Accelerator Center;

22 (M) Thomas Jefferson National Accel-
23 erator Facility;

24 (N) Y-12 facility at Oak Ridge National
25 Laboratory;

1 (O) Waste Isolation Pilot Plant; or

2 (P) other similar organization of the De-
3 partment designated by the Secretary that en-
4 gages in technology transfer, partnering, or li-
5 censing activities.

6 **SEC. 1402. AVAILABILITY OF FUNDS.**

7 Funds authorized to be appropriated to the Depart-
8 ment of Energy under title XII, title XIII, and title XV
9 shall remain available until expended.

10 **SEC. 1403. COST SHARING.**

11 (a) RESEARCH AND DEVELOPMENT.—For research
12 and development projects funded from appropriations au-
13 thorized under subtitles A through D of title XII, the Sec-
14 retary shall require a commitment from non-federal
15 sources of at least 20 percent of the cost of the project.
16 The Secretary may reduce or eliminate the non-Federal
17 requirement under this subsection if the Secretary deter-
18 mines that the research and development is of a basic or
19 fundamental nature.

20 (b) DEMONSTRATION AND DEPLOYMENT.—For dem-
21 onstration and technology deployment activities funded
22 from appropriations authorized under subtitles A through
23 D of title XII, the Secretary shall require a commitment
24 from non-federal sources of at least 50 percent of the costs
25 of the project directly and specifically related to any dem-

1 onstration or technology deployment activity. The Sec-
2 retary may reduce or eliminate the non-federal require-
3 ment under this subsection if the Secretary determines
4 that the reduction is necessary and appropriate consid-
5 ering the technological risks involved in the project and
6 is necessary to meet one or more goals of this title.

7 (c) CALCULATION OF AMOUNT.—In calculating the
8 amount of the non-Federal commitment under subsection
9 (a) or (b), the Secretary shall include cash, personnel,
10 services, equipment, and other resources.

11 **SEC. 1404. MERIT REVIEW OF PROPOSALS.**

12 Awards of funds authorized under title XII, subtitle
13 A of title XIII, and title XV shall be made only after an
14 independent review of the scientific and technical merit of
15 the proposals for such awards has been made by the De-
16 partment of Energy.

17 **SEC. 1405. EXTERNAL TECHNICAL REVIEW OF DEPART-**
18 **MENTAL PROGRAMS.**

19 (a) NATIONAL ENERGY RESEARCH AND DEVELOP-
20 MENT ADVISORY BOARDS.—(1) The Secretary shall estab-
21 lish an advisory board to oversee Department research and
22 development programs in each of the following areas—

- 23 (A) energy efficiency;
24 (B) renewable energy;
25 (C) fossil energy;

1 (D) nuclear energy; and

2 (E) climate change technology, with emphasis
3 on integration, collaboration, and other special fea-
4 tures of the cross-cutting technologies supported by
5 the Office of Climate Change Technology.

6 (2) The Secretary may designate an existing advisory
7 board within the Department to fulfill the responsibilities
8 of an advisory board under this subsection, or may enter
9 into appropriate arrangements with the National Academy
10 of Sciences to establish such an advisory board.

11 (b) UTILIZATION OF EXISTING COMMITTEES.—The
12 Secretary of Energy shall continue to use the scientific
13 program advisory committees chartered under the Federal
14 Advisory Committee Act by the Office of Science to over-
15 see research and development programs under that Office.

16 (c) MEMBERSHIP.—Each advisory board under this
17 section shall consist of experts drawn from industry, aca-
18 demia, federal laboratories, research institutions, or state,
19 local, or tribal governments, as appropriate.

20 (d) MEETINGS AND PURPOSES.—Each advisory
21 board under this section shall meet at least semi-annually
22 to review and advise on the progress made by the respec-
23 tive research, development, demonstration, and technology
24 deployment program. The advisory board shall also review
25 the adequacy and relevance of the goals established for

1 each program by Congress and the President, and may
2 otherwise advise on promising future directions in re-
3 search and development that should be considered by each
4 program.

5 **SEC. 1406. IMPROVED COORDINATION AND MANAGEMENT**
6 **OF CIVILIAN SCIENCE AND TECHNOLOGY**
7 **PROGRAMS.**

8 (a) **EFFECTIVE TOP-LEVEL COORDINATION OF RE-**
9 **SEARCH AND DEVELOPMENT PROGRAMS.**—Section 202(b)
10 of the Department of Energy Organization Act (42 U.S.C.
11 7132(b)) is amended to read as follows:

12 “(b)(1) There shall be in the Department an Under
13 Secretary for Energy and Science, who shall be appointed
14 by the President, by and with the advice and consent of
15 the Senate. The Under Secretary shall be compensated at
16 the rate provided for at level III of the Executive Schedule
17 under section 5314 of title 5, United States Code.

18 “(2) The Under Secretary for Energy and Science
19 shall be appointed from among persons who—

20 “(A) have extensive background in scientific or
21 engineering fields; and

22 “(B) are well qualified to manage the civilian
23 research and development programs of the Depart-
24 ment of Energy.

1 “(3) The Under Secretary for Energy and Science
2 shall—

3 “(A) serve as the Science and Technology Advi-
4 sor to the Secretary;

5 “(B) monitor the Department’s research and
6 development programs in order to advise the Sec-
7 retary with respect to any undesirable duplication or
8 gaps in such programs;

9 “(C) advise the Secretary with respect to the
10 well-being and management of the multipurpose lab-
11 oratories under the jurisdiction of the Department;

12 “(D) advise the Secretary with respect to edu-
13 cation and training activities required for effective
14 short- and long-term basic and applied research ac-
15 tivities of the Department;

16 “(E) advise the Secretary with respect to grants
17 and other forms of financial assistance required for
18 effective short- and long-term basic and applied re-
19 search activities of the Department; and

20 “(F) exercise authority and responsibility over
21 Assistant Secretaries carrying out energy research
22 and development and energy technology functions
23 under sections 203 and 209, as well as other ele-
24 ments of the Department assigned by the Secretary.

1 (b) RECONFIGURATION OF POSITION OF DIRECTOR
2 OF THE OFFICE OF SCIENCE.—Section 209 of the Depart-
3 ment of Energy Organization Act (41 U.S.C. 7139) is
4 amended to read as follows—

5 “(a) There shall be within the Department an Office
6 of Science, to be headed by an Assistant Secretary of
7 Science, who shall be appointed by the President, by and
8 with the advice and consent of the Senate, and who shall
9 be compensated at the rate provided for level IV of the
10 Executive Schedule under section 5315 of title 5, United
11 States Code.

12 “(b) The Assistant Secretary of Science shall be in
13 addition to the Assistant Secretaries provided for under
14 section 203 of this Act.

15 “(c) It shall be the duty and responsibility of the As-
16 sistant Secretary of Science to carry out the fundamental
17 science and engineering research functions of the Depart-
18 ment, including the responsibility for policy and manage-
19 ment of such research, as well as other functions vested
20 in the Secretary which he may assign to the Assistant Sec-
21 retary.”.

22 (c) ADDITIONAL ASSISTANT SECRETARY POSITION
23 TO ENABLE IMPROVED MANAGEMENT OF NUCLEAR EN-
24 ERGY ISSUES.—

1 (1) Section 203(a) of the Department of En-
2 ergy Organization Act (42 U.S.C. 7133(a)) is
3 amended by striking “There shall be in the Depart-
4 ment six Assistant Secretaries” and inserting “Ex-
5 cept as provided in section 209, there shall be in the
6 Department seven Assistant Secretaries”.

7 (2) It is the Sense of the Senate that the lead-
8 ership for departmental missions in nuclear energy
9 should be at the Assistant Secretary level.

10 (d) TECHNICAL AND CONFORMING AMENDMENTS.—

11 (1) Section 202 of the Department of Energy
12 Organization Act (42 U.S.C. 7132) is further
13 amended by adding the following at the end:

14 “(d) There shall be in the Department an Under Sec-
15 retary, who shall be appointed by the President, by and
16 with the advice and consent of the Senate, and who shall
17 perform such functions and duties as the Secretary shall
18 prescribe, consistent with this section. The Under Sec-
19 retary shall be compensated at the rate provided for level
20 III of the Executive Schedule under section 5314 of title
21 5, United States Code.

22 “(e) There shall be in the Department a General
23 Counsel, who shall be appointed by the President, by and
24 with the advice and consent of the Senate. The General
25 Counsel shall be compensated at the rate provided for level

1 IV of the Executive Schedule under section 5315 of title
2 5, United States Code.”.

3 (2) Section 5314 of title 5, United States Code,
4 is amended by striking “Under Secretaries of En-
5 ergy (2)” and inserting “Under Secretaries of En-
6 ergy (3)”.

7 (3) Section 5315 of title 5, United States Code,
8 is amended by—

9 (A) striking “Director, Office of Science,
10 Department of Energy.”; and

11 (B) striking “Assistant Secretaries of En-
12 ergy (6)” and inserting “Assistant Secretaries
13 of Energy (8)”.

14 (4) The table of contents for the Depart-
15 ment of Energy Organization Act (42 U.S.C.
16 7101 note) is amended—

17 (A) by striking “Section 209” and insert-
18 ing “Sec. 209”;

19 (B) by striking “213.” and inserting “Sec.
20 213”;

21 (C) by striking “214.” and inserting “Sec.
22 214.”;

23 (D) by striking “215.” and inserting “Sec.
24 215.”; and

1 (E) by striking “216.” and inserting “Sec.
2 216.”.

3 **SEC. 1407. IMPROVED COORDINATION OF TECHNOLOGY**
4 **TRANSFER ACTIVITIES.**

5 (a) TECHNOLOGY TRANSFER COORDINATOR.—The
6 Secretary shall appoint a Technology Transfer Coordi-
7 nator to perform oversight of and policy development for
8 technology transfer activities at the Department. The
9 Technology Transfer Coordinator shall coordinate the ac-
10 tivities of the Technology Partnerships Working Group,
11 and shall oversee the expenditure of funds allocated to the
12 Technology Partnership Working Group.

13 (b) TECHNOLOGY PARTNERSHIP WORKING
14 GROUP.—The Secretary shall establish a Technology
15 Partnership Working Group, which shall consist of rep-
16 resentatives of the National Laboratories and single-pur-
17 pose research facilities, to—

18 (1) coordinate technology transfer activities oc-
19 ccurring at National Laboratories and single-purpose
20 research facilities;

21 (2) exchange information about technology
22 transfer practices; and

23 (3) develop and disseminate to the public and
24 prospective technology partners information about

1 opportunities and procedures for technology transfer
2 with the Department.

3 **SEC 1408. TECHNOLOGY INFRASTRUCTURE PROGRAM.**

4 (a) ESTABLISHMENT.—The Secretary shall establish
5 a Technology Infrastructure Program in accordance with
6 this section.

7 (b) PURPOSE.—The purpose of the Technology Infra-
8 structure Program shall be to improve the ability of Na-
9 tional Laboratories or single-purpose research facilities to
10 support departmental missions by—

11 (1) stimulating the development of technology
12 clusters that can support departmental missions at
13 the National Laboratories or single-purpose research
14 facilities;

15 (2) improving the ability of National Labora-
16 tories or single-purpose research facilities to leverage
17 and benefit from commercial research, technology,
18 products, processes, and services; and

19 (3) encouraging the exchange of scientific and
20 technological expertise between National Labora-
21 tories or single-purpose research facilities and—

22 (A) institutions of higher education,

23 (B) technology-related business concerns,

24 (C) nonprofit institutions, and

1 (D) agencies of State, tribal, or local gov-
2 ernments,
3 that can support departmental missions at the Na-
4 tional Laboratories and single-purpose research fa-
5 cilities.

6 (c) PROJECTS.—The Secretary shall authorize the
7 Director of each National Laboratory or facility to imple-
8 ment the Technology Infrastructure Program at such Na-
9 tional Laboratory or single-purpose research facility
10 through projects that meet the requirements of sub-
11 sections (d) and (e).

12 (d) PROGRAM REQUIREMENTS.—Each project funded
13 under this section shall meet the following requirements:

14 (1) MINIMUM PARTICIPANTS.—Each project
15 shall at a minimum include—

16 (A) a National Laboratory or single-pur-
17 pose research facility; and

18 (B) one of the following entities—

19 (i) a business,

20 (ii) an institution of higher education,

21 (iii) a nonprofit institution, or

22 (iv) an agency of a State, local, or
23 tribal government.

24 (2) COST SHARING.—

1 (A) MINIMUM AMOUNT.—Not less than 50
2 percent of the costs of each project funded
3 under this section shall be provided from non-
4 Federal sources.

5 (B) QUALIFIED FUNDING AND RE-
6 SOURCES.—

7 (i) The calculation of costs paid by
8 the non-Federal sources to a project shall
9 include cash, personnel, services, equip-
10 ment, and other resources expended on the
11 project.

12 (ii) Independent research and develop-
13 ment expenses of government contractors
14 that qualify for reimbursement under sec-
15 tion 31–205–18(e) of the Federal Acquisi-
16 tion Regulations issued pursuant to section
17 25(c)(1) of the Office of Federal Procure-
18 ment Policy Act (41 U.S.C. 421(c)(1))
19 may be credited towards costs paid by non-
20 Federal sources to a project, if the ex-
21 penses meet the other requirements of this
22 section.

23 (iii) No funds or other resources ex-
24 pended either before the start of a project
25 under this section or outside the project's

1 scope of work shall be credited toward the
2 costs paid by the non-Federal sources to
3 the project.

4 (3) COMPETITIVE SELECTION.—All projects in
5 which a party other than the Department, a Na-
6 tional Laboratory, or a single-purpose research facil-
7 ity receives funding under this section shall, to the
8 extent practicable, be competitively selected by the
9 National Laboratory or facility using procedures de-
10 termined to be appropriate by the Secretary.

11 (4) ACCOUNTING STANDARDS.—Any participant
12 that receives funds under this section, other than a
13 National Laboratory or single-purpose research facil-
14 ity, may use generally accepted accounting principles
15 for maintaining accounts, books, and records relat-
16 ing to the project.

17 (5) LIMITATIONS.—No Federal funds shall be
18 made available under this section for—

19 (A) construction; or

20 (B) any project for more than five years.

21 (e) SELECTION CRITERIA.—

22 (1) THRESHOLD FUNDING CRITERIA.—The Sec-
23 retary shall allocate funds under this section only if
24 the Director of the National Laboratory or single-
25 purpose research facility managing the project deter-

1 mines that the project is likely to improve the ability
2 of the National Laboratory or single-purpose re-
3 search facility to achieve technical success in meet-
4 ing departmental missions.

5 (2) ADDITIONAL CRITERIA.—The Secretary
6 shall require the Director of the National Labora-
7 tory or single-purpose research facility managing a
8 project under this section to consider the following
9 criteria in selecting a project to receive Federal
10 funds—

11 (A) the potential of the project to succeed,
12 based on its technical merit, team members,
13 management approach, resources, and project
14 plan;

15 (B) the potential of the project to promote
16 the development of a commercially sustainable
17 technology cluster, which will derive most of the
18 demand for its products or services from the
19 private sector, and which will support depart-
20 mental missions at the participating National
21 Laboratory or single-purpose research facility;

22 (C) the potential of the project to promote
23 the use of commercial research, technology,
24 products, processes, and services by the partici-
25 pating National Laboratory or single-purpose

1 research facility to achieve its departmental
2 mission or the commercial development of tech-
3 nological innovations made at the participating
4 National Laboratory or single-purpose research
5 facility;

6 (D) the commitment shown by non-Federal
7 organizations to the project, based primarily on
8 the nature and amount of the financial and
9 other resources they will risk on the project;

10 (E) the extent to which the project involves
11 a wide variety and number of institutions of
12 higher education, nonprofit institutions, and
13 technology-related business concerns that can
14 support the missions of the participating Na-
15 tional Laboratory or single-purpose research fa-
16 cility and that will make substantive contribu-
17 tions to achieving the goals of the project;

18 (F) the extent of participation in the
19 project by agencies of State, tribal, or local gov-
20 ernments that will make substantive contribu-
21 tions to achieving the goals of the project;

22 (G) the extent to which the project focuses
23 on promoting the development of technology-re-
24 lated business concerns that are small business

1 concerns or involves such small business con-
2 cerns substantively in the project; and

3 (H) such other criteria as the Secretary
4 determines to be appropriate.

5 (f) REPORT TO CONGRESS.—Not later than January
6 1, 2004, the Secretary shall report to Congress on whether
7 the Technology Infrastructure Program should be contin-
8 ued and, if so, how the program should be managed.

9 (g) DEFINITIONS.—In this section:

10 (1) TECHNOLOGY CLUSTER.—The term “tech-
11 nology cluster” means a concentration of—

12 (A) technology-related business concerns;

13 (B) institutions of higher education; or

14 (C) other nonprofit institutions,

15 that reinforce each other’s performance in the areas
16 of technology development through formal or infor-
17 mal relationships.

18 (2) TECHNOLOGY-RELATED BUSINESS CON-
19 CERN.—The term “technology-related business con-
20 cern” means a for-profit corporation, company, asso-
21 ciation, firm, partnership, or small business concern
22 that—

23 (A) conducts scientific or engineering re-
24 search,

25 (B) develops new technologies,

1 (C) manufacturers products based on new
2 technologies, or

3 (D) performs technological services.

4 (h) AUTHORIZATION OF APPROPRIATIONS.—There
5 are authorized to be appropriated to the Secretary for ac-
6 tivities under this section \$10,000,000 for each of fiscal
7 years 2003 and 2004.

8 **SEC. 1409. SMALL BUSINESS ADVOCACY AND ASSISTANCE.**

9 (a) SMALL BUSINESS ADVOCATE.—The Secretary
10 shall require the Director of each National Laboratory,
11 and may require the Director of a single-purpose research
12 facility, to appoint a small business advocate to—

13 (1) increase the participation of small business
14 concerns, including socially and economically dis-
15 advantaged small business concerns, in procurement,
16 collaborative research, technology licensing, and
17 technology transfer activities conducted by the Na-
18 tional Laboratory or single-purpose research facility;

19 (2) report to the Director of the National Lab-
20 oratory or single-purpose research facility on the ac-
21 tual participation of small business concerns in pro-
22 curement and collaborative research along with rec-
23 ommendations, if appropriate, on how to improve
24 participation;

1 (3) make available to small business concerns
2 training, mentoring, and clear, up-to-date informa-
3 tion on how to participate in the procurement and
4 collaborative research, including how to submit effec-
5 tive proposals;

6 (4) increase the awareness inside the National
7 Laboratory or single-purpose research facility of the
8 capabilities and opportunities presented by small
9 business concerns; and

10 (5) establish guidelines for the program under
11 subsection (b) and report on the effectiveness of
12 such program to the Director of the National Lab-
13 oratory or single-purpose research facility.

14 (b) ESTABLISHMENT OF SMALL BUSINESS ASSIST-
15 ANCE PROGRAM.—The Secretary shall require the Direc-
16 tor of each National Laboratory, and may require the di-
17 rector of a single-purpose research facility, to establish a
18 program to provide small business concerns—

19 (1) assistance directed at making them more ef-
20 fective and efficient subcontractors or suppliers to
21 the National Laboratory or single-purpose research
22 facility; or

23 (2) general technical assistance, the cost of
24 which shall not exceed \$10,000 per instance of as-

1 sistance, to improve the small business concern's
2 products or services.

3 (c) USE OF FUNDS.—None of the funds expended
4 under subsection (b) may be used for direct grants to the
5 small business concerns.

6 (d) DEFINITIONS.—In this section:

7 (1) SMALL BUSINESS CONCERN.—The term
8 “small business concern” has the meaning given
9 such term in section 3 of the Small Business Act
10 (15 U.S.C. 632).

11 (2) SOCIALLY AND ECONOMICALLY DISADVAN-
12 TAGED SMALL BUSINESS CONCERNS.—The term “so-
13 cially and economically disadvantaged small business
14 concerns” has the meaning given such term in sec-
15 tion 8(a)(4) of the Small Business Act (15 U.S.C.
16 637(a)(4)).

17 **SEC. 1410. OTHER TRANSACTIONS.**

18 (a) IN GENERAL.—Section 646 of the Department of
19 Energy Organization Act (42 U.S.C. 7256) is amended
20 by adding at the end the following:

21 “(g) OTHER TRANSACTIONS AUTHORITY.—(1) In ad-
22 dition to other authorities granted to the Secretary to
23 enter into procurement contracts, leases, cooperative
24 agreements, grants, and other similar arrangements, the
25 Secretary may enter into other transactions with public

1 agencies, private organizations, or persons on such terms
2 as the Secretary may deem appropriate in furtherance of
3 basic, applied, and advanced research functions now or
4 hereafter vested in the Secretary. Such other transactions
5 shall not be subject to the provisions of section 9 of the
6 Federal Nonnuclear Energy Research and Development
7 Act of 1974 (42 U.S.C. 5908).

8 “(2)(A) The Secretary of Energy shall ensure that—

9 “(i) to the maximum extent practicable, no
10 transaction entered into under paragraph (1) pro-
11 vides for research that duplicates research being
12 conducted under existing programs carried out by
13 the Department of Energy; and

14 “(ii) to the extent that the Secretary determines
15 practicable, the funds provided by the Government
16 under a transaction authorized by paragraph (1) do
17 not exceed the total amount provided by other par-
18 ties to the transaction.

19 “(B) A transaction authorized by paragraph (1) may
20 be used for a research project when the use of a standard
21 contract, grant, or cooperative agreement for such project
22 is not feasible or appropriate.

23 “(3)(A) The Secretary shall not disclose any trade
24 secret or commercial or financial information submitted

1 by a non-Federal entity under paragraph (1) that is privi-
2 leged and confidential.

3 “(B) The Secretary shall not disclose, for five years
4 after the date the information is received, any other infor-
5 mation submitted by a non-Federal entity under para-
6 graph (1), including any proposal, proposal abstract, docu-
7 ment supporting a proposal, business plan, or technical
8 information that is privileged and confidential.

9 “(C) The Secretary may protect from disclosure, for
10 up to five years, any information developed pursuant to
11 a transaction under paragraph (1) that would be protected
12 from disclosure under section 552(b)(4) of title 5, United
13 States Code, if obtained from a person other than a Fed-
14 eral agency.”.

15 (b) IMPLEMENTATION.—Not later than six months
16 after the date of enactment of this section, the Depart-
17 ment shall establish guidelines for the use of other trans-
18 actions.

19 **SEC. 1411. MOBILITY OF SCIENTIFIC AND TECHNICAL PER-**
20 **SONNEL.**

21 Not later than two years after the enactment of this
22 section, the Secretary, acting through the Technology
23 Transfer Coordinator under section 1407, shall determine
24 whether each contractor operating a National Laboratory
25 or single-purpose research facility has policies and proce-

1 dures that do not create disincentives to the transfer of
2 scientific and technical personnel among the contractor-
3 operated National Laboratories or contractor-operated
4 single-purpose research facilities.

5 **SEC. 1412. NATIONAL ACADEMY OF SCIENCES REPORT.**

6 Within 90 days after the date of enactment of this
7 Act, the Secretary shall contract with the National Acad-
8 emy of Sciences to—

9 (1) conduct a study on the obstacles to accel-
10 erating the innovation cycle for energy technology,
11 and

12 (2) report to the Congress recommendations for
13 shortening the cycle of research, development, and
14 deployment.

15 **SEC. 1413. REPORT ON TECHNOLOGY READINESS AND BAR-**
16 **RIERS TO TECHNOLOGY TRANSFER.**

17 (a) IN GENERAL.—The Secretary, acting through the
18 Technology Partnership Working Group and in consulta-
19 tion with representatives of affected industries, univer-
20 sities, and small business concerns, shall—

21 (1) assess the readiness for technology transfer
22 of energy technologies developed through projects
23 funded from appropriations authorized under sub-
24 titles A through D of title XIV, and

1 technology industries, including renewable energy in-
2 dustries, companies developing and commercializing
3 devices to increase energy-efficiency, the oil and gas
4 industry, nuclear power industry, the coal industry,
5 and other industrial sectors as the Secretary may
6 deem appropriate.

7 (2) ANNUAL REPORTS.—The Administrator of
8 the Energy Information Administration shall include
9 statistics on energy industry workforce trends in the
10 annual reports of the Energy Information Adminis-
11 tration.

12 (3) SPECIAL REPORTS.—The Secretary shall re-
13 port to the appropriate committees of Congress
14 whenever the Secretary determines that significant
15 shortfalls of technical personnel in one or more en-
16 ergy industry segments are forecast or have oc-
17 curred.

18 (b) TRAINEESHIP GRANTS FOR TECHNICALLY
19 SKILLED PERSONNEL.—

20 (1) GRANT PROGRAMS.—The Secretary shall es-
21 tablish grant programs in the appropriate offices of
22 the Department to enhance training of technically
23 skilled personnel for which a shortfall is determined
24 under subsection (a).

1 (2) ELIGIBLE INSTITUTIONS.—As determined
2 by the Secretary to be appropriate to the particular
3 workforce shortfall, the Secretary shall make grants
4 under paragraph (1) to—

5 (A) an institution of higher education;

6 (B) a postsecondary educational institution
7 providing vocational and technical education
8 (within the meaning given those terms in sec-
9 tion 3 of the Carl D. Perkins Vocational and
10 Technical Education Act of 1998 (20 U.S.C.
11 2302));

12 (C) appropriate agencies of State, local, or
13 tribal governments; or

14 (D) joint labor and management training
15 organizations with state or federally recognized
16 apprenticeship programs and other employe-
17 based training organizations as the Secretary
18 considers appropriate.

19 (c) DEFINITION.—For purposes of this section, the
20 term “skilled technical personnel” means journey and ap-
21 prentice level workers who are enrolled in or have com-
22 pleted a state or federally recognized apprenticeship pro-
23 gram and other skilled workers in energy technology in-
24 dustries.

1 (d) AUTHORIZATION OF APPROPRIATIONS.—From
2 amounts authorized under section 1241(c), there are au-
3 thorized to be appropriated to the Secretary for activities
4 under this section such sums as may be necessary for each
5 fiscal year.

6 **SEC. 1502. POSTDOCTORAL AND SENIOR RESEARCH FEL-**
7 **LOWSHIPS IN ENERGY RESEARCH.**

8 (a) POSTDOCTORAL FELLOWSHIPS.—The Secretary
9 shall establish a program of fellowships to encourage out-
10 standing young scientists and engineers to pursue
11 postdoctoral research appointments in energy research
12 and development at institutions of higher education of
13 their choice. In establishing a program under this sub-
14 section, the Secretary may enter into appropriate arrange-
15 ments with the National Academy of Sciences to help ad-
16 minister the program.

17 (b) DISTINGUISHED SENIOR RESEARCH FELLOW-
18 SHIPS.—The Secretary shall establish a program of fellow-
19 ships to allow outstanding senior researchers in energy re-
20 search and development and their research groups to ex-
21 plore research and development topics of their choosing
22 for a fixed period of time. Awards under this program
23 shall be made on the basis of past scientific or technical
24 accomplishment and promise for continued accomplish-

1 ment during the period of support, which shall not be less
2 than 3 years.

3 (c) AUTHORIZATION OF APPROPRIATIONS.—From
4 amounts authorized under section 1241(c), there are au-
5 thorized to be appropriated to the Secretary for activities
6 under this section such sums as may be necessary for each
7 fiscal year.

8 **SEC. 1503. TRAINING GUIDELINES FOR ELECTRIC ENERGY**
9 **INDUSTRY PERSONNEL.**

10 (a) MODEL GUIDELINES.—The Secretary shall, in co-
11 operation with electric generation, transmission, and dis-
12 tribution companies and recognized representatives of em-
13 ployees of those entities, develop model employee training
14 guidelines to support electric supply system reliability and
15 safety.

16 (b) CONTENT OF GUIDELINES.—The guidelines
17 under this section shall include—

18 (1) requirements for worker training, com-
19 petency, and certification, developed using criteria
20 set forth by the Utility Industry Group recognized
21 by the National Skill Standards Board; and

22 (2) consolidation of existing guidelines on the
23 construction, operation, maintenance, and inspection
24 of electric supply generation, transmission and dis-
25 tribution facilities such as those established by the

1 National Electric Safety Code and other industry
2 consensus standards.

3 **SEC. 1504. NATIONAL CENTER ON ENERGY MANAGEMENT**
4 **AND BUILDING TECHNOLOGIES.**

5 The Secretary shall establish a National Center on
6 Energy Management and Building Technologies, to carry
7 out research, education, and training activities to facilitate
8 the improvement of energy efficiency and indoor air qual-
9 ity in industrial, commercial and residential buildings. The
10 National Center shall be established in cooperation with—

11 (1) recognized representatives of employees in
12 the heating, ventilation, and air-conditioning indus-
13 try;

14 (2) contractors that install and maintain heat-
15 ing, ventilation and air-conditioning systems and
16 equipment;

17 (3) manufacturers of heating, ventilation and
18 air-conditioning systems and equipment;

19 (4) representatives of the advanced building en-
20 velope industry, including design, windows, lighting,
21 and insulation industries; and

22 (5) other entities as appropriate.

1 **SEC. 1505. IMPROVED ACCESS TO ENERGY-RELATED SCI-**
2 **ENTIFIC AND TECHNICAL CAREERS.**

3 (a) DEPARTMENT OF ENERGY SCIENCE EDUCATION
4 PROGRAMS.—Section 3164 of the Department of Energy
5 Science Education Enhancement Act (42 U.S.C. 7381a)
6 is amended by adding at the end the following:

7 “(c) PROGRAMS FOR WOMEN AND MINORITY STU-
8 DENTS.—In carrying out a program under subsection (a),
9 the Secretary shall give priority to activities that are de-
10 signed to encourage women and minority students to pur-
11 sue scientific and technical careers.”.

12 (b) PARTNERSHIPS WITH HISTORICALLY BLACK
13 COLLEGES AND UNIVERSITIES, HISPANIC-SERVICING IN-
14 STITUTIONS, AND TRIBAL COLLEGES.—The Department
15 of Energy Science Education Enhancement Act (42
16 U.S.C. 7381 et seq.) is amended—

17 (1) by redesignating sections 3167 and 3168 as
18 sections 3168 and 3169, respectively; and

19 (2) by inserting after section 3166 the fol-
20 lowing:

21 **SEC. 3167. PARTNERSHIPS WITH HISTORICALLY BLACK**
22 **COLLEGES AND UNIVERSITIES, HISPANIC-**
23 **SERVING INSTITUTIONS, AND TRIBAL COL-**
24 **LEGES.**

25 “(a) DEFINITIONS.—In this section:

1 “(1) HISPANIC-SERVING INSTITUTION.—The
2 term ‘Hispanic-serving institution’ has the meaning
3 given the term in section 502(a) of the Higher Edu-
4 cation Act of 1965 (20 U.S.C. 1101a(a)).

5 “(2) HISTORICALLY BLACK COLLEGE OR UNI-
6 VERSITY.—The term ‘historically Black college or
7 university’ has the meaning given the term ‘part B
8 institution’ in section 322 of the Higher Education
9 Act of 1965 (20 U.S.C. 1061).

10 “(3) NATIONAL LABORATORY.—The term ‘Na-
11 tional Laboratory’ has the meaning given the term
12 in section 1203 of the Energy Science and Tech-
13 nology Enhancement Act of 2002.

14 “(4) SCIENCE FACILITY.—The term ‘science fa-
15 cility’ has the meaning given the term ‘single-pur-
16 pose research facility’ in section 1401 of the Energy
17 Science and Technology Enhancement Act of 2002.

18 “(5) TRIBAL COLLEGE.—The term ‘tribal col-
19 lege’ has the meaning given the term ‘tribally con-
20 trolled college or university’ in section 2(a) of the
21 Tribally Controlled College or University Assistance
22 Act of 1978 (25 U.S.C. 1801(a)).

23 “(b) EDUCATION PARTNERSHIP.—

24 “(1) IN GENERAL.—The Secretary shall direct
25 the Director of each National Laboratory, and may

1 direct the head of any science facility, to increase
2 the participation of historically Black colleges or uni-
3 versities, Hispanic-serving institutions, or tribal col-
4 leges in activities that increase the capacity of the
5 historically Black colleges or universities, Hispanic-
6 serving institutions, or tribal colleges to train per-
7 sonnel in science or engineering.

8 “(2) ACTIVITIES.—An activity under paragraph
9 (1) may include—

10 “(A) collaborative research;

11 “(B) a transfer of equipment;

12 “(C) training of personnel at a National
13 Laboratory or science facility; and

14 “(D) a mentoring activity by personnel at
15 a National Laboratory or science facility.

16 “(c) REPORT.—Not later than 2 years after the date
17 of enactment of this section, the Secretary shall submit
18 to the Committee on Science of the House of Representa-
19 tives and the Committee on Energy and Natural Re-
20 sources of the Senate a report on the activities carried
21 out under this section.”.

1 **DIVISION F—TECHNOLOGY**
2 **ASSESSMENT AND STUDIES**
3 **TITLE XVI—TECHNOLOGY**
4 **ASSESSMENT**

5 **SEC. 1601. NATIONAL SCIENCE AND TECHNOLOGY ASSESS-**
6 **MENT SERVICE.**

7 The National Science and Technology Policy, Organi-
8 zation, and Priorities Act of 1976 (42 U.S.C. 6601 et seq.)
9 is amended by adding at the end the following:

10 **“TITLE VII—NATIONAL SCIENCE**
11 **AND TECHNOLOGY ASSESS-**
12 **MENT SERVICE**

13 **“SEC. 701. ESTABLISHMENT.**

14 “There is hereby created a Science and Technology
15 Assessment Service (hereinafter referred to as the ‘Serv-
16 ice’), which shall be within and responsible to the legisla-
17 tive branch of the Government.

18 **“SEC. 702. COMPOSITION.**

19 “The Service shall consist of a Science and Tech-
20 nology Board (hereinafter referred to as the ‘Board’)
21 which shall formulate and promulgate the policies of the
22 Service, and a Director who shall carry out such policies
23 and administer the operations of the Service.

1 **“SEC. 703. FUNCTIONS AND DUTIES.**

2 “The Service shall coordinate and develop informa-
3 tion for Congress relating to the uses and application of
4 technology to address current national science and tech-
5 nology policy issues. In developing such technical assess-
6 ments for Congress, the Service shall utilize, to the extent
7 practicable, experts selected in coordination with the Na-
8 tional Research Council.

9 **“SEC. 704. INITIATION OF ACTIVITIES.**

10 “Science and technology assessment activities under-
11 taken by the Service may be initiated upon the request
12 of—

13 “(1) the Chairman of any standing, special, or
14 select committee of either House of the Congress, or
15 of any joint committee of the Congress, acting for
16 himself or at the request of the ranking minority
17 member or a majority of the committee members;

18 “(2) the Board; or

19 “(3) the Director.

20 **“SEC. 705. ADMINISTRATION AND SUPPORT.**

21 “The Director of the Science and Technology Assess-
22 ment Service shall be appointed by the Board and shall
23 serve for a term of 6 years unless sooner removed by the
24 Board. The Director shall receive basic pay at the rate
25 provided for level III of the Executive Schedule under sec-
26 tion 5314 of title 5, United States Code. The Director

1 shall contract for administrative support from the Library
2 of Congress.

3 **“SEC. 706. AUTHORITY.**

4 “The Service shall have the authority, within the lim-
5 its of available appropriations, to do all things necessary
6 to carry out the provisions of this section, including, but
7 without being limited to, the authority to—

8 “(1) make full use of competent personnel and
9 organizations outside the Office, public or private,
10 and form special ad hoc task forces or make other
11 arrangements when appropriate;

12 “(2) enter into contracts or other arrangements
13 as may be necessary for the conduct of the work of
14 the Office with any agency or instrumentality of the
15 United States, with any State, territory, or posses-
16 sion or any political subdivision thereof, or with any
17 person, firm, association, corporation, or educational
18 institution, with or without reimbursement, without
19 performance or other bonds, and without regard to
20 section 3709 of the Revised Statutes (41 U.S.C. 51);

21 “(3) accept and utilize the services of voluntary
22 and uncompensated personnel necessary for the con-
23 duct of the work of the Service and provide trans-
24 portation and subsistence as authorized by section

1 5703 of title 5, United States Code, for persons
2 serving without compensation; and

3 “(4) prescribe such rules and regulations as it
4 deems necessary governing the operation and organi-
5 zation of the Service.

6 **“SEC. 707. BOARD.**

7 “The Board shall consist of 13 members as follows—

8 “(1) 6 Members of the Senate, appointed by the
9 President pro tempore of the Senate, 3 from the ma-
10 jority party and 3 from the minority party;

11 “(2) 6 Members of the House or Representa-
12 tives appointed by the Speaker of the House of Rep-
13 resentatives, 3 from the majority party and 3 from
14 the minority party; and

15 “(3) the Director, who shall not be a voting
16 member.

17 **“SEC. 708. REPORT TO CONGRESS.**

18 “The Service shall submit to the Congress an annual
19 report which shall include, but not be limited to, an eval-
20 uation of technology assessment techniques and identifica-
21 tion, insofar as may be feasible, of technological areas and
22 programs requiring future analysis. The annual report
23 shall be submitted not later than March 15 of each year.

1 **“SEC. 709. AUTHORIZATION OF APPROPRIATIONS.**

2 “There are authorized to be appropriated to the Serv-
 3 ice such sums as are necessary to fulfill the requirements
 4 of this title.”.

5 **TITLE XVII—STUDIES**6 **SEC. 1701. REGULATORY REVIEWS.**

7 (a) REGULATORY REVIEWS.—Not later than one year
 8 after the date of enactment of this section and every five
 9 years thereafter, each Federal agency shall review relevant
 10 regulations and standards to identify—

11 (1) existing regulations and standards that act
 12 as barriers to—

13 (A) market entry for emerging energy
 14 technologies (including fuel cells, combined heat
 15 and power, distributed power generation, and
 16 small-scale renewable energy), and

17 (B) market development and expansion for
 18 existing energy technologies (including com-
 19 bined heat and power, small-scale renewable en-
 20 ergy, and energy recovery in industrial proc-
 21 esses), and

22 (2) actions the agency is taking or could take
 23 to—

24 (A) remove barriers to market entry for
 25 emerging energy technologies and to market ex-
 26 pansion for existing technologies,

1 (B) increase energy efficiency and con-
2 servation, or

3 (C) encourage the use of new and existing
4 processes to meet energy and environmental
5 goals.

6 (b) REPORT TO CONGRESS.—Not later than 18
7 months after the date of enactment of this section, and
8 every five years thereafter, the Director of the Office of
9 Science and Technology Policy shall report to the Con-
10 gress on the results of the agency reviews conducted under
11 subsection (a).

12 (c) CONTENTS OF THE REPORT.—The report shall—

13 (1) identify all regulatory barriers to—

14 (A) the development and commercialization
15 of emerging energy technologies and processes,
16 and

17 (B) the further development and expansion
18 of existing energy conservation technologies and
19 processes,

20 (2) actions taken, or proposed to be taken, to
21 remove such barriers, and

22 (3) recommendations for changes in laws or
23 regulations that may be needed to—

24 (A) expedite the siting and development of
25 energy production and distribution facilities,

1 (B) encourage the adoption of energy effi-
2 ciency and process improvements,

3 (C) facilitate the expanded use of existing
4 energy conservation technologies, and

5 (D) reduce the environmental impacts of
6 energy facilities and processes through trans-
7 parent and flexible compliance methods.

8 **SEC. 1702. ASSESSMENT OF DEPENDENCE OF HAWAII ON**
9 **OIL.**

10 (a) **STUDY.**—Not later than 60 days after the enact-
11 ment of this Act, the Secretary of Energy shall initiate
12 a study that assesses the economic risk posed by the de-
13 pendence of Hawaii on oil as the principal source of en-
14 ergy.

15 (b) **SCOPE OF THE STUDY.**—The Secretary shall
16 assess—

17 (1) the short- and long-term threats to the
18 economy of Hawaii posed by insecure supply and
19 volatile prices;

20 (2) the impact on availability and cost of re-
21 fined petroleum products if oil-fired electric genera-
22 tion is displaced by other sources;

23 (3) the feasibility of increasing the contribution
24 of renewable sources to the overall energy require-
25 ments of Hawaii; and

1 (4) the feasibility of using liquid natural gas as
2 a source of energy to supplement oil.

3 (c) REPORT.—Not later than 300 days after the date
4 of enactment of this section, the Secretary shall prepare,
5 in consultation with appropriate agencies of the State of
6 Hawaii, industry representatives, and citizen groups, and
7 shall submit to Congress a report detailing the Secretary’s
8 findings, conclusions, and recommendations. The report
9 shall include—

10 (1) a detailed analysis of the availability, eco-
11 nomics, infrastructure needs, and recommendations
12 to increase the contribution of renewable energy
13 sources to the overall energy requirements of Ha-
14 waii; and

15 (2) a detailed analysis of the use of liquid nat-
16 ural gas, including—

17 (A) the availability of supply,

18 (B) economics,

19 (C) environmental and safety consider-
20 ations,

21 (D) technical limitations,

22 (E) infrastructure and transportation re-
23 quirements,

24 (F) siting and facility configurations,
25 including—

- 1 (i) onshore and offshore alternatives,
2 and
3 (ii) environmental and safety consider-
4 ations of both onshore and offshore alter-
5 natives.

6 (c) AUTHORIZATION OF APPROPRIATIONS.—There
7 are authorized to be appropriated to the Secretary of En-
8 ergy such sums as may be necessary to carry out the pur-
9 poses of this section.

10 **SEC. 1703. STUDY OF SITING AN ELECTRIC TRANSMISSION**
11 **SYSTEM ON AMTRAK RIGHT-OF-WAY.**

12 (a) STUDY.—The Secretary of Energy shall contract
13 with Amtrak to conduct a study of the feasibility of build-
14 ing and operating a new electric transmission system on
15 the Amtrak right-of-way in the Northeast Corridor.

16 (b) SCOPE OF THE STUDY.—The study shall focus
17 on siting the new system on the Amtrak right-of-way with-
18 in the Northeastern Corridor between Washington, D.C.,
19 and New Rochelle, New York, including the Amtrak right-
20 of-way between Philadelphia, Pennsylvania and Harris-
21 burg, Pennsylvania.

22 (c) CONTENTS OF THE STUDY.—The study shall
23 consider—

1 (1) alternative geographic configuration of a
2 new electronic transmission system on the Amtrak
3 right-of-way;

4 (2) alternative technologies for the system;

5 (3) the estimated costs of building and oper-
6 ating each alternative;

7 (4) alternative means of financing the system;

8 (5) the environmental risks and benefits of
9 building and operating each alternative as well as
10 environmental risks and benefits of building and op-
11 erating the system on the Northeast Corridor rather
12 than at other locations;

13 (6) engineering and technological obstacles to
14 building and operating each alternative; and

15 (7) the extent to which each alternative would
16 enhance the reliability of the electric transmission
17 grid and enhance competition in the sale of electric
18 energy at wholesale within the Northeast Corridor.

19 (d) RECOMMENDATIONS.—The study shall rec-
20 ommend the optimal geographic configuration, the optimal
21 technology, the optimal engineering design, and the opti-
22 mal means of financing for the new system from among
23 the alternatives considered.

24 (e) REPORT.—The Secretary of Energy shall submit
25 the completed study to the Committee on Energy and Nat-

1 ural Resources of the United States Senate and the Com-
 2 mittee on Energy and Commerce of the House of Rep-
 3 resentatives not later than 270 days after the date of en-
 4 actment of this section.

5 (f) DEFINITIONS.—For purposes of this section—

6 (1) the term “Amtrak” means the National
 7 Railroad Passenger Corporation established under
 8 chapter 243 of title 49, United States Code; and

9 (2) the term “Northeast Corridor” shall have
 10 the meaning given such term under section 24102(7)
 11 of title 49, United States Code.

12 **DIVISION G—ENERGY**
 13 **INFRASTRUCTURE SECURITY**
 14 **TITLE XVIII—CRITICAL ENERGY**
 15 **INFRASTRUCTURE**
 16 **Subtitle A—Department of Energy**
 17 **Programs**

18 **SEC. 1801. DEFINITIONS.**

19 In this title:

20 (1) **CRITICAL ENERGY INFRASTRUCTURE.**—

21 (A) **IN GENERAL.**—The term “critical en-
 22 ergy infrastructure” means a physical or cyber-
 23 based system or service for—

24 (i) the generation, transmission or
 25 distribution of electric energy; or

1 (ii) the production, refining, or stor-
2 age of petroleum, natural gas, or petro-
3 leum product—

4 the incapacity or destruction of which would
5 have a debilitating impact on the defense or
6 economic security of the United States.

7 (B) EXCLUSION.—The term shall not in-
8 clude a facility that is licensed by the Nuclear
9 Regulatory Commission under section 103 or
10 104 b. of the Atomic Energy Act of 1954 (42
11 U.S.C. 2133 and 2134(b)).

12 (2) DEPARTMENT; NATIONAL LABORATORY;
13 SECRETARY.—The terms “Department”, “National
14 Laboratory”, and “Secretary” have the meaning
15 given such terms in section 1203.

16 **SEC. 1802. ROLE OF THE DEPARTMENT OF ENERGY.**

17 Section 102 of the Department of Energy Organiza-
18 tion Act (42 U.S.C. 7112) is amended by adding at the
19 end the following:

20 “(20) To ensure the safety, reliability, and se-
21 curity of the nation’s energy infrastructure, and to
22 respond to any threat to or disruption of such infra-
23 structure, through activities including—

24 “(A) research and development;

1 “(B) financial assistance, technical assist-
2 ance, and cooperative activities with States, in-
3 dustry, and other interested parties; and

4 “(C) education and public outreach activi-
5 ties.”.

6 **SEC. 1803. CRITICAL ENERGY INFRASTRUCTURE PRO-**
7 **GRAMS.**

8 (a) PROGRAMS.—In addition to the authorities other-
9 wise provided by law (including section 1261), the Sec-
10 retary is authorized to establish programs of financial,
11 technical, or administrative assistance to—

12 (1) enhance the security of critical energy infra-
13 structure in the United States;

14 (2) develop and disseminate, in cooperation
15 with industry, best practices for critical energy infra-
16 structure assurance; and

17 (3) protect against, mitigate the effect of, and
18 improve the ability to recover from disruptive inci-
19 dents affecting critical energy infrastructure.

20 (b) REQUIREMENTS.—A program established under
21 this section shall—

22 (1) be undertaken in consultation with the advi-
23 sory committee established under section 1804;

1 (7) such other interests as the Secretary may
2 deem appropriate.

3 (c) **EXPENSES.**—Members of the advisory committee
4 established or utilized under subsection (a) shall serve
5 without compensation, and shall be allowed travel ex-
6 penses, including per diem in lieu of subsistence, at rates
7 authorized for an employee of an agency under subchapter
8 I of chapter 57 of title 5, United States Code, while away
9 from the home or regular place of business of the member
10 in the performance of the duties of the committee.

11 **SEC. 1805. BEST PRACTICES AND STANDARDS FOR ENERGY**
12 **INFRASTRUCTURE SECURITY.**

13 The Secretary, in consultation with the advisory com-
14 mittee under section 1804, shall enter into appropriate ar-
15 rangements with one or more standard-setting organiza-
16 tions, or similar organizations, to assist the development
17 of industry best practices and standards for security re-
18 lated to protecting critical energy infrastructure.

19 **Subtitle B—Department of the**
20 **Interior Programs**

21 **SEC. 1811. OUTER CONTINENTAL SHELF ENERGY INFRA-**
22 **STRUCTURE SECURITY.**

23 (a) **DEFINITIONS.**—In this section:

1 (1) APPROVED STATE PLAN.—The term “ap-
2 proved State plan” means a State plan approved by
3 the Secretary under subsection (c)(3).

4 (2) COASTLINE.—The term “coastline” has the
5 same meaning as the term “coast line” as defined
6 in subsection 2(c) of the Submerged Lands Act (43
7 U.S.C. 1301(c)).

8 (3) CRITICAL OCS ENERGY INFRASTRUCTURE
9 FACILITY.—The term “OCS critical energy infra-
10 structure facility” means—

11 (A) a facility related to the production of
12 oil or gas on the Outer Continental Shelf; and

13 (B) a related facility that carries out a
14 public service, transportation, or infrastructure
15 activity critical to the operation of an energy in-
16 frastructure facility, as determined by the Sec-
17 retary.

18 (4) DISTANCE.—The term “distance” means
19 the minimum great circle distance, measured in stat-
20 ute miles.

21 (5) LEASED TRACT.—

22 (A) IN GENERAL.—The term “leased
23 tract” means a tract that—

24 (i) is subject to a lease under section
25 6 or 8 of the Outer Continental Shelf

1 Lands Act (43 U.S.C. 1335, 1337) for the
2 purpose of drilling for, developing, and
3 producing oil or natural gas resources; and

4 (ii) consists of a block, a portion of a
5 block, a combination of blocks or portions
6 of blocks, or a combination of portions of
7 blocks, as—

8 (I) specified in the lease; and

9 (II) depicted on an outer Conti-
10 nental Shelf official protraction dia-
11 gram.

12 (B) EXCLUSION.—The term “leased tract”
13 does not include a tract described in subpara-
14 graph (A) that is located in a geographic area
15 subject to a leasing moratorium on January 1,
16 2001, unless the lease was in production on
17 that date.

18 (6) OCS POLITICAL SUBDIVISION.—The term
19 “OCS political subdivision” means a county, parish,
20 borough or any equivalent subdivision of an OCS
21 Production State all or part of which subdivision lies
22 within the coastal zone (as defined in section 304(1)
23 of the Coastal Zone Management Act of 1972 (16
24 U.S.C. 1453(1)).

1 (7) OCS PRODUCTION STATE.—The term “OCS
2 Production State” means the State of—

3 (A) Alaska;

4 (B) Alabama;

5 (C) California;

6 (D) Florida;

7 (F) Louisiana;

8 (G) Mississippi; or

9 (H) Texas.

10 (8) PRODUCTION.—The term “production” has
11 the meaning given the term in section 2 of the Outer
12 Continental Shelf Lands Act (43 U.S.C. 1331).

13 (9) PROGRAM.—The term “program” means
14 the Outer Continental Shelf Energy Infrastructure
15 Security Program established under subsection (b).

16 (10) QUALIFIED OUTER CONTINENTAL SHELF
17 REVENUES.—The term “qualified Outer Continental
18 Shelf revenues” means all amounts received by the
19 United States from each leased tract or portion of
20 a leased tract lying seaward of the zone defined and
21 governed by section 8(g) of the Outer Continental
22 Shelf Lands Act (43 U.S.C. 1331, *et seq.*), or lying
23 within such zone but to which section 8(g) does not
24 apply, the geographic center of which lies within a
25 distance of 200 miles from any part of the coastline

1 of any State, including bonus bids, rents, royalties
2 (including payments for royalties taken in kind and
3 sold), net profit share payments, and related late
4 payment interest. Such term does not include any
5 revenues from a leased tract or portion of a leased
6 tract that is included within any area of the Outer
7 Continental Shelf where a moratorium on new leas-
8 ing was in effect as of January 1, 2001, unless the
9 lease was issued prior to the establishment of the
10 moratorium and was in production on January 1,
11 2001.

12 (11) SECRETARY.—The term “Secretary”
13 means the Secretary of the Interior.

14 (12) STATE PLAN.—The term “State plan”
15 means a State plan described in subsection (b).

16 (b) ESTABLISHMENT.—The Secretary shall establish
17 a program, to be known as the “Outer Continental Shelf
18 Energy Infrastructure Security Program,” under which
19 the Secretary shall provide funds to OCS Production
20 States to implement approved State plans to provide secu-
21 rity against hostile and natural threats to critical OCS en-
22 ergy infrastructure facilities and support of any necessary
23 public service or transportation activities that are needed
24 to maintain the safety and operation of critical energy in-
25 frastructure activities. For purposes of this program, res-

1 toration of any coastal wetland shall be considered to be
2 an activity that secures critical OCS energy infrastructure
3 facilities from a natural threat.

4 (c) STATE PLANS.—

5 (1) INITIAL PLAN.—Not later than 180 days
6 after the date of enactment of this Act, to be eligible
7 to receive funds under the program, the Governor of
8 an OCS Production State shall submit to the Sec-
9 retary a plan to provide security against hostile and
10 natural threats to critical energy infrastructure fa-
11 cilities in the OCS Production State and to support
12 any of the necessary public service or transportation
13 activities that are needed to maintain the safety and
14 operation of critical energy infrastructure facilities.
15 Such plan shall include—

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

20 (B) a program for the implementation of
21 the plan which describes how the amounts pro-
22 vided under this section will be used;

23 (C) a contact for each OCS political sub-
24 division and description of how such political
25 subdivisions will use amounts provided under

1 this section, including a certification by the
2 Governor that such uses are consistent with the
3 requirements of this section;

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

8 (E) Measures for taking into account other
9 relevant Federal resources and programs.

10 (2) REVISED PLANS.—

11 (A) FIRST REVISED PLAN.—Not later than
12 18 months after the date of enactment of this
13 Act, the Governor of a State shall submit to the
14 Secretary a revised State plan.

15 (B) ANNUAL REVIEWS.—Not later than 1
16 year after the date of submission of the revised
17 plan under subparagraph (A) and annually
18 thereafter, the Governor of an OCS Production
19 State shall—

20 (i) review the approved State plan;

21 and

22 (ii) submit to the Secretary any re-
23 vised State plan resulting from the review.

24 (3) APPROVAL OF PLANS.—

1 (A) IN GENERAL.—In consultation with
2 appropriate Federal security officials and the
3 Secretaries of Commerce and Energy, the Sec-
4 retary shall—

5 (i) approve each State plan; or

6 (ii) recommend changes to the State
7 plan.

8 (B) RESUBMISSION OF STATE PLANS.—If
9 the Secretary recommends changes to a State
10 plan under subparagraph (A)(ii), the Governor
11 of the OCS Production State may resubmit a
12 revised State plan to the Secretary for approval.

13 (4) AVAILABILITY OF PLANS.—

14 (A) AVAILABILITY TO THE PUBLIC.—The
15 Secretary, in consultation with the Governor of
16 an OCS Production State, shall determine
17 whether and to what extent the approved State
18 plan shall be made public.

19 (B) AVAILABILITY TO CONGRESS.—The
20 Secretary shall provide to Congress, on a con-
21 fidential basis, a copy of each approved State
22 plan.

23 (5) CONSULTATION AND PUBLIC COMMENT.—

24 (A) CONSULTATION.—The Governor of an
25 OCS Production State shall develop the State

1 plan in consultation with Federal, State, and
2 local law enforcement and public safety offi-
3 cials, industry, Indian tribes, the scientific com-
4 munity, and other persons as appropriate.

5 (B) PUBLIC COMMENT.—The Governor of
6 an OCS Production State may solicit public
7 comments on the State plan to the extent that
8 the Governor determines to be appropriate.

9 (d) ALLOCATION OF AMOUNTS BY THE SEC-
10 RETARY.—The Secretary shall allocate the amounts made
11 available for the purposes of carrying out the program
12 provided for by this section among OCS Production States
13 as follows:

14 (1) 25 percent of the amounts shall be divided
15 equally among OCS Production States; and

16 (2) 75 percent of the amounts shall be divided
17 among OCS Production States on the basis of the
18 proximity of each OCS Production State to offshore
19 locations at which oil and gas are being produced.

20 (e) CALCULATION.—The amount for each OCS Pro-
21 duction State under paragraph (d)(2) shall be calculated
22 based on the ratio of qualified OCS revenues generated
23 off the coastline of the OCS Production State to the quali-
24 fied OCS revenues generated off the coastlines of all OCS
25 Production States for the prior five-year period. Where

1 there is more than one OCS Production State within 200
2 miles of a leased tract, the amount of each OCS Produc-
3 tion State's payment under paragraph (d)(2) for such
4 leased tract shall be inversely proportional to the distance
5 between the nearest point on the coastline of such State
6 and the geographic center of each leased tract or portion
7 of the leased tract (to the nearest whole mile) that is with-
8 in 200 miles of that coastline, as determined by the Sec-
9 retary. A leased tract or portion of a leased tract shall
10 be excluded if the tract or portion is located in a geo-
11 graphic area where a moratorium on new leasing was in
12 effect on January 1, 2001, unless the lease was issued
13 prior to the establishment of the moratorium and was in
14 production on January 1, 2001.

15 (f) PAYMENTS TO OCS POLITICAL SUBDIVISIONS.—
16 Thirty-five percent of each OCS Production State's allo-
17 cable share as determined under subsection (e) shall be
18 paid directly to the OCS political subdivisions by the Sec-
19 retary based on the following formula, except that a polit-
20 ical subdivision in the State of California that has a coast-
21 al shoreline that is not within 200 miles of the geographic
22 center of a leased tract or portion of a leased tract and
23 in which there is located one or more oil refineries shall
24 be eligible for that portion of the allocation described in
25 paragraph (3) in the same manner as if that political sub-

1 division were located within a distance of 50 miles from
2 the geographic center of the closest leased tract with quali-
3 fied Outer Continental Shelf revenues:

4 (1) 25 percent shall be allocated based on the
5 ratio of such OCS political subdivision's coastal pop-
6 ulation to the coastal population of all OCS political
7 subdivisions in the OCS Production State.

8 (2) 25 percent shall be allocated based on the
9 ratio of such OCS political subdivision's coastline
10 miles to the coastline miles of all OCS political sub-
11 divisions in the OCS Production State. For purposes
12 of this subsection, those OCS political subdivisions
13 without coastlines shall be considered to have a
14 coastline that is the average length of the coastlines
15 of all political subdivisions in the state.

16 (3) 50 percent shall be allocated based on the
17 relative distance of such OCS political subdivision
18 from any leased tract used to calculate that OCS
19 Production State's allocation using ratios that are
20 inversely proportional to the distance between the
21 point in the coastal political subdivision closest to
22 the geographic center of each leased tract or portion,
23 as determined by the Secretary. For purposes of the
24 calculations under this subparagraph, a leased tract
25 or portion of a leased tract shall be excluded if the

1 leased tract or portion is located in a geographic
2 area where a moratorium on new leasing was in ef-
3 fect on January 1, 2001, unless the lease was issued
4 prior to the establishment of the moratorium and
5 was in production on January 1, 2001.

6 (g) FAILURE TO HAVE PLAN APPROVED.—Any
7 amount allocated to an OCS Production State or OCS po-
8 litical subdivision but not disbursed because of a failure
9 to have an approved Plan under this section shall be allo-
10 cated equally by the Secretary among all other OCS Pro-
11 duction States in a manner consistent with this subsection
12 except that the Secretary shall hold in escrow such amount
13 until the final resolution of any appeal regarding the dis-
14 approval of a plan submitted under this section. The Sec-
15 retary may waive the provisions of this paragraph and
16 hold an OCS Production State's allocable share in escrow
17 if the Secretary determines that such State is making a
18 good faith effort to develop and submit, or update, a Plan.

19 (h) USE OF AMOUNTS ALLOCATED BY THE SEC-
20 RETARY.—

21 (1) IN GENERAL.—Amounts allocated by the
22 Secretary under subsection (d) may be used only in
23 accordance with a plan approved pursuant to sub-
24 section (c) for—

1 (A) activities to secure critical OCS energy
2 infrastructure facilities from human or natural
3 threats; and

4 (B) support of any necessary public service
5 or transportation activities that are needed to
6 maintain the safety and operation of critical
7 OCS energy infrastructure facilities.

8 (2) RESTORATION OF COASTAL WETLAND.—For
9 the purpose of subparagraph (1)(A), restoration of
10 any coastal wetland shall be considered to be an ac-
11 tivity that secures critical OCS energy infrastructure
12 facilities from a natural threat.

13 (i) AUTHORIZATION OF APPROPRIATIONS.—There are
14 hereby authorized to be appropriated \$450,000,000 for
15 each of the fiscal years 2003 through 2008 to carry out
16 the purposes of this section.

17 **Subtitle C—Commercial Nuclear**
18 **Facility Security**

19 **SEC. 1811. RESERVED.**

Calendar No. 259

107TH CONGRESS
1ST SESSION

S. 1766

A BILL

To provide for the energy security of the Nation,
and for other purposes.

DECEMBER 6, 2001

Read the second time and placed on the calendar